

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## SAN FRANCISCO BAY REGION

ORDER NO. R2-2006-0071

WASTE DISCHARGE REQUIREMENTS FOR:

### MUSTARDS GRILL, CYNTHIA PAWLCCYN, and MUSTARDS GRILL WASTEWATER TREATMENT SYSTEM, 7399 ST. HELENA HIGHWAY, NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. **Purpose of Order.** Mustards Grill is an existing commercial restaurant facility located in an unincorporated area of Napa County north of the town of Yountville. The area is not served by municipal sewerage systems. All development in the area is served by individual on-site wastewater treatment and dispersal systems. Mustards Grill and the adjacent Cosentino Winery were previously served by a single, jointly owned ("old") wastewater system located on the properties of the two facilities. New wastewater systems are now under construction to provide separate systems for each facility on their own respective properties. These systems include discharges of waste to land that are subject to regulation by the Board. The purpose of this Order is to prescribe waste discharge requirements for the new wastewater system serving Mustards Grill. The new wastewater system serving Cosentino Winery will be regulated under waste discharge requirements in a separate Board Order.
2. **Discharger.** Mustards Grill and the property on which Mustards Grill is located are owned by Cynthia Pawlcyn. Mustards Grill and Cynthia Pawlcyn are collectively called the Discharger. The Discharger is legally responsible for the wastewater system and the discharges of waste to land regulated by this Order, and for compliance with this Order. The wastewater system is managed and operated by wastewater treatment operators under contract with the Discharger.
3. **Report of Waste Discharge.** A Report of Waste Discharge (ROWD) in application for waste discharge requirements for the subject wastewater system was submitted on behalf of the Discharger, by the Discharger's agent, Riechers Spence and Associates, Inc. (RSA). The ROWD consists of the following information:
  - a. **Application Form.** A completed Application/ Report of Waste Discharge General Information Form (Form 200), signed by Ken Deibert, Civil Engineer, of RSA, signature dated February 15, 2005, 3 pages, received March 4, 2005 (as Appendix A in the report of item b below);
  - b. **Technical Report:** A bound report titled, *Application /Report of Waste Discharge, Proposed Wastewater Treatment & Disposal System, Mustards Grill*, by Kenneth C. Deibert, Jr., P.E. of RSA, dated March 2, 2005, received March 4, 2005;
  - c. **Design Drawings.** A set of eight design drawings, 24" x 36" each, prepared by RSA, all dated 3 March 2005, received March 4, 2005, with the following titles:

Sheet No.	Title
C-1	Mustards Grill Cover Sheet
C-2	Mustards Grill Existing Site Plan
C-3	Mustards Grill Existing Process and Instrumentation Diagram
C-4	Mustards Grill Utility Plan
C-5	Mustards Grill Proposed Process & Instrumentation Diagram
C-6	Mustards Grill Building Floor Plan
C-7	Mustards Grill Geoflow System Detail
C-8	Mustards Grill Grading Plan;

- d. Transmittal Letter. A transmittal letter for all of the above, with subject line, *Application /Report of Waste Discharge, Proposed Wastewater Treatment and Disposal System, Mustard Grill, 7399 St. Helena Highway, Yountville, California 94558*, from Kenneth C. Deibert Jr., P.E., Civil Engineer of RSA, 3 pages, dated March 3, 2005, received March 4, 2005; and
  - e. Transition Plan. A plan of actions with anticipated time schedule for transition from the existing wastewater system to the new systems, titled, *Modified Transition Plan for Converting the Combined Wastewater Treatment System to Separate Wastewater Treatment Systems, Mustards Grill and Cosentino Winery, 7399 and 7415 St. Helena Highway, Yountville, California*, submitted with cover letter from Peter Riechers of RSA, also signed by Robert S. Chrobak of Kennedy/Jenks Consultants, Inc. on behalf of Cosentino Winery, dated 17 March 2005, received March 17, 2005.
  - f. ROWD Addenda. (1) A letter describing proposed change to the soil material to be used for the constructed bed for the treated effluent subsurface drip dispersal system; letter subject line, *Mustards SDS Addendum to the 2/15/05 Application / Report of Waste Discharge*, from Peter Riechers, P.E., of RSA, dated September 15, 2005, received by fax on September 15, 2005, and by printed copy on September 19, 2005. (2) A letter describing updated quantification of treatment unit sludge generation, reduced sludge storage capacity needs, and proposing to use three of four planned sludge storage tanks for emergency wastewater storage; letter subject line, *Wastewater Sampling Results at Mustards Grill*, from Ernest Erskine, Wastewater Consultant for RSA, dated February 27, 2006.
4. **Report of Waste Discharge Complete.** Board staff reviewed the ROWD, found the ROWD to be complete, and notified the Discharger of that by letter dated March 24, 2005. Regarding the ROWD Addenda, staff notified Discharger's agent, Steve Koldis, Engineer, of RSA, that the proposed soil change was acceptable, by email dated September 15, 2005, and notified Discharger's agent, John Stewart, consultant for RSA, that the proposed sludge and wastewater storage tank change was acceptable, by phone on March 28, 2006.
  5. **Waste Discharge Requirements.** The old wastewater system was regulated by Board Order No. 89-072, Water Reclamation Requirements for Mustards Grill and Crystal Valley Cellars, in Napa Valley, Napa County, adopted on May 17, 1989. This current Order prescribes waste discharge requirements for the new Mustards Grill wastewater system and supercedes Order No. 89-072. This Order rescinds Order No. 89-072 with respect to Mustards Grill.
  6. **Facility Site.** Mustards Grill is located on a 6.4 acre parcel on the west side of State Highway 29, also known as St. Helena Highway, about one and one half miles northwest of the town of Yountville, and 1000 feet south of Yount Mill Road. The street address is 7399 St. Helena Highway. The property parcel is identified as Napa County Assessors Parcel Number (APN) 27-500-14. For purposes of this Order, this property comprises the facility site. Attachment A of this Order is a plan view drawing of the facility site showing the location and boundaries of the facility site.
  7. **Facility Site Characteristics.** The facility site is located in the Napa River watershed, in the generally level floor of the Napa Valley. The elevation of the site is 160 to 165 feet above mean sea level. Foundation soil material consists of older alluvial fan deposits overlain by Class II clays and clay loams of the Clear Lake and Bale soil series. The natural ground slope at the site is about one percent. The natural surface water drainage is to the northeast. Runoff is slow to very slow and the erosion hazard is slight to none. Storm water runoff drains through various constructed storm water drainage ditches and unnamed tributaries to the Napa River. The Napa River is located about three quarters to one mile to the east of the site. Average annual rainfall in this area is about 27 inches.

- 8. Facility Uses and Napa County Use Permits.** Mustards Grill is a commercial business facility with uses regulated by Napa County Use Permit. The permitted use is a 60-seat commercial restaurant. The facility is currently regulated under Use Permit # U-418384, approved by the Napa County Conservation, Development and Planning Commission on March 21, 1984, and two subsequent modifications approved by the Napa County Zoning Administrator: # 94261-MOD approved on April 21, 1995 and # 95092-MOD approved on October 20, 1995. The old wastewater system was permitted under Use Permit No. U-128889. The new Mustards Grill wastewater system is permitted under Use Permit # 03460-UP, approved by the Napa County Planning Commission on May 4, 2005 and effective as of May 18, 2005.
- 9. Discharges.** The waste discharges to land addressed by this Order consist of treated wastewater from the Mustards Grill restaurant kitchen, and restrooms. Treated wastewater is discharged to land by a subsurface drip dispersal system in a constructed grass-covered dispersal area on the facility site.
- 10. Discharge Quantity.** The wastewater flow from Mustards Grill is identified in the ROWD as an average daily flow of approximately 3,106 gallons per day (gpd), based on flow data from April 2002 through December 2004. Current average daily flow is about 3,177 gpd, based on 2005-2006 data, which includes data for the new wastewater system completed in November 2005. This Order includes an annual wastewater flow limit of 1,171,000 gallons per year, based on a rounded out average daily flow value of 3,200 gpd and 366 days. For reference, wastewater flows from the restaurant for the past six monitoring years are tabulated below (monitoring year = April 1, to March 31 of subsequent year).

Monitoring Year (April 1, 200X to March 31, 200X+1)	Wastewater Flows (gallons)		
	Annual Total	Avg. Month	Avg. Day
2000-2001	1,136,967	94,747	3,115
2001-2002	993,080	82,757	2,721
2002-2003	1,044,681	87,057	2,862
2003-2004	1,271,152	105,929	3,473
2004-2005	1,142,532	95,211	3,130
2005-2006	1,161,619	96,802	3,177

- 11. Discharge Quality.** The subject wastewater system includes new treatment processes and therefore monitoring data characterizing actual effluent quality were not included in the ROWD. Projected effluent quality, based on the treatment system design criteria reported in the ROWD, are given below:

Parameter	Concentration	
BOD:	< 5 mg/L	(BOD = 5-day Biochemical Oxygen Demand at 20°C)
TSS:	< 5 mg/L	(TSS = Total Suspended Solids).

- 12. Wastewater System.** The wastewater system includes treatment by septic tanks, grease traps and a Membrane Bioreactor (MBR) unit, and discharges to land by a subsurface drip dispersal system discharging effluent from the MBR unit into soil. Additional treatment occurs by natural attenuation processes in the soil. The system also includes below-ground tanks for temporary storage of MBR unit waste sludge, and for wastewater as necessary when the MBR unit is out of service such as for maintenance or repair. For purposes of this Order, the wastewater system is comprised of all equipment, control and monitoring systems located on the facility site that provide collection, conveyance, treatment, storage and dispersal of wastewater from the Mustards Grill facility. Descriptions of the new wastewater system are given below, based on information contained in the ROWD.

Attachment A of this Order is a plan view drawing of the facility site showing facility site boundaries and the major components of the wastewater system. Attachment B of this Order is a flow diagram illustrating the wastewater treatment and discharge processes and flows.

- 13. Wastewater Sources and Flows.** Wastewater is generated from the Mustards Grill restaurant as kitchen wastewater from food preparation and service, and sanitary wastewater from employee and customer restroom uses. Current and anticipated wastewater flow is on the order of 3,200 gallons per day as a daily average. The design flow of the MBR treatment system is 4,000 gpd average flow, and 5,023 gpd peak flow, with a peak hydraulic flow capacity of 25,000 gpd. The design flow capacity of the treated wastewater dispersal system, and maximum discharge rate authorized by this Order, is 4,000 gpd.
- 14. Septic Tanks and Grease Traps.** Wastewater receives primary treatment in septic tanks, grease trap tanks and a cool-down tank prior to treatment by the MBR unit. Sanitary wastewater flows by gravity to a two-compartment 5,000 gallon septic tank (Tank 1, Sanitary Vault), and then to a 1,500 gallon tank (Tank 5, Grease Trap 4). Tank 5 was a pump tank in the old system, but with the new system the pumps will be removed and relocated to Tank 6 (Lift Station Wet Well), and Tank 5 will be only a treatment tank. Kitchen wastewater flows by gravity first to a baffled 1,500 gallon grease trap tank (Tank 2, Grease Trap 1), then to a 1,500 gallon grease trap tank (Tank 3, Grease Trap 2), then to a 1,500 gallon tank for cooling (Tank 4, Grease Trap 3), and then to Tank 5 where the kitchen wastewater combines with the sanitary wastewater. The combined wastewater flows by gravity from Tank 5 to a 5,000 gallon tank equipped with pumps (Tank 6, Lift Station Wet Well). All tanks are concrete and will be tested and verified to be water-tight as part of the new system construction. Tank characteristics are tabulated below:

Tank #	Reference Name or Function	Capacity (gallons)		Dimensions (feet, inches)			Age * (years)	Compartments
		Total	Operating	Length	Width	Depth		
1	Septic Tank 1	nr	5000	not reported (nr)			New	2; 1/3 & 2/3 vols.
2	Grease Trap 1	nr	1500	not reported			New	2; equal vol, baffle
3	Grease Trap 2	1800	1500	not reported			New	2; equal vol, baffle
4	Grease Trap 3	1800	1500	9'1"	5'7"	4'10"	4	1
5	Grease Trap 4	1800	1500	9'1"	5'7"	4'10"	4	2; equal vol., baffle
6	Lift Station Wet Well	nr	5,000	not reported			New	1

\* Tanks 4 & 5 are from the old wastewater system, and were originally installed May 2002 (age ~ 4 years). All other tanks were installed with new system construction, autumn 2005 (age = "new").

- 15. Lift Station.** The Lift Station is equipped with two 1-horsepower (hp) submersible sewage pumps (Goulds Model 3887 BHF; 230 volt, 3-phase, 13 amp maximum, with 2-inch diameter discharge). Each pump has a capacity of about 50 feet of head at the anticipated maximum flow rate of 12 gallons per minute (gpm), which is sufficient to accommodate the system design head loss of about 35 feet (25 feet elevation loss and 10 feet of friction loss). The pump control system provides alternating and duplex operation and high water alarm, using three float switches at different water levels that perform the following functions:

Float 1 (low water)	Controls the Lead Pump
Float 2 (medium water)	Controls the Lag Pump
Float 3 (high water):	Activates audible alarm and automated telephone dialer to send alarm message to on-call operator(s).

Effluent from the New Lift Station flows under pressure to the MBR unit via a 2-inch diameter PVC pipe installed two feet below grade, about 500 feet in length, extending around the northeast and southeast edges of the dispersal area, and equipped with cleanout access fittings at intervals of about 50 feet.

**16. Membrane Biological Reactor (MBR) Treatment Unit.** The MBR unit is a pre-designed and manufacturer-assembled treatment unit (FastPac™ 25,000 gallon per day Membrane Biological Reactor, manufactured by USFilter Corporation). The unit provides treatment by pre-screening for removal of coarse solids (solids greater than 2 mm), biological treatment by both aerobic and anaerobic processes, and filtration through continuously submerged hollow fiber micro-filtration membranes by low pressure vacuum extraction. The extracted filtrate is the final treated wastewater effluent from the MBR unit. The MBR unit also includes capability for installation of three systems for injection of chemicals to support the treatment process - sodium hydroxide for influent pH control, and supplemental nutrients for bioreactor microorganisms (urea for nitrogen; phosphoric acid for phosphorous). Each of these systems includes a 55-gallon drum of source material, injector pump, and control equipment. At present, these systems have not been installed, but could be installed in the future as needed. Accumulated treatment-process biomass solids (sludge) are periodically removed from the MBR unit, temporarily stored on-site and ultimately disposed off-site. The MBR treatment processes are driven by electrically-powered equipment including blowers to provide aeration for the aerobic treatment process and membrane scouring, pumps to circulate wastewater within the unit and to provide vacuum for the filtration process, and control equipment. Design characteristics of the MBR unit are given below:

MBR Treatment Unit Design Criteria

<u>Parameter</u>	<u>Units</u>	<u>Average</u>	<u>Peak</u>
Treatment Flow:	gallons per day	4,000	5,023
Influent BOD:	milligrams per liter (mg/L)	2,600	
Influent TSS:	mg/L	1,200	
BOD Treatment Load:	pounds per day	87	109
Effluent BOD:	mg/L	< 5	
Effluent TSS:	mg/L	< 5	

- 17. MBR Unit Location and Treatment System Building.** The MBR unit is located on a concrete slab near the southwest corner of the dispersal area, adjacent to the Treatment System Building (TSB). The TSB is a new single-story 10-foot by 10-foot building on a concrete slab foundation. The TSB houses the electrical supply panel, control equipment, and office space. Vehicle access to the TSB area is by a gravel-paved drive extending along the southerly edge of the effluent dispersal system area.
- 18. MBR Storage Tanks.** Four new 5,000-gallon capacity concrete tanks are installed below-ground, adjacent to the MBR unit. These tanks are used for temporary storage of sludge removed from the MBR unit, and for temporary storage of wastewater if the MBR unit is out of service. These tanks were originally identified in the ROWD as sludge storage tanks. Subsequent evaluations identified the benefit of having emergency wastewater storage capacity available, and that one 5,000 gallon tank can provide adequate sludge storage capacity. At present, all four tanks remain hydraulically connected, at both influent and effluent ends of the tanks, and all wastewater or sludge discharged into the tanks is subsequently removed from the tanks for offsite disposal at an authorized disposal facility. Any changes to this equipment configuration or waste handling procedure shall be preceded by written notification to the Board in accordance with Provision C.12. of this Order.
- 19. Dispersal Area.** Treated wastewater is discharged to land in a dedicated dispersal area located on the facility site, behind, southwest of, the restaurant building and associated adjacent vehicle parking area. The dispersal area is about 45,000 square feet in gross area and encompasses the area previously used as the old wastewater systems' spray disposal field. Due to various uses, fills and grading over the years, this area had evolved to a confined basin with pumping required to remove accumulated water. For the new system, the area was completely re-graded to create an elevated constant-shallow-slope area for the dispersal system. After initial grading, a bed of uncompacted imported loam soil of 18 to 36 inches deep

was placed over native soil. The dispersal system pipe network was laid out within the imported soil. The area was seeded and mulched after construction. The finished area is a grass-vegetated field of constant shallow slope (1/2 %), sloping from the southwest to the northeast, with associated steeper sloping edges.

- 20. Dispersal System.** The effluent dispersal system is comprised of a subsurface pressurized pipe network of proprietary manufactured tubing with built-in 'drip' emitters (Geoflow™ Subsurface Dripline), installed within 40,000 square feet of the dispersal area. A 5,000-gallon concrete tank with duplex pumps serves as the clear well pump tank for the dispersal system. At present, due to required water depth for the pumps, the actual operating capacity of this tank is about 2,500 gallons. The control unit includes a remote-control valve assembly, pressure regulator, in-line filter, and pipe connection and check valve assembly for periodic pipe network flushing. The network has a total of 20,000 linear feet of dispersal line and 10,000 emitters, configured in four separately operable zones of 5,000 linear feet and 2,500 emitters each. Dispersal lines are installed with two foot spacing between adjacent lines and six inches below the finished surface grade. Emitters are located at two-foot intervals along each line. The design soil application hydraulic loading rate is 0.1 gallons per day per square foot. The design flow of the dispersal system is 4,000 gallons per day.

A fifth dispersal system zone may be installed in the future within the unused 5,000 square feet of the created dispersal area, to provide operational flexibility and increased reliability of the system. As with any future changes to the wastewater system, such installation will be preceded by a Report of Waste Discharge providing a complete description of the proposal.

- 21. Dispersal System Operation.** The dispersal system is designed to accommodate effluent dispersal year-round. The design soil application rate is 0.1 to 0.2 gallons per square foot per day. Effluent is dispersed for only a small portion of each day, typically 2 hours per day, with the balance of the day affording time for effluent dispersal by plant uptake, evapotranspiration and infiltration into underlying soil.
- 22. System Construction and Start-Up.** The new wastewater system was constructed in the summer and autumn of 2005. The dispersal area and subsurface drip dispersal system were completed in October 2005, and the MBR unit was completed in November 2005. The new system was put into operation November 10, 2005, wastewater flows to the old pond system were discontinued as of that date and henceforth all wastewater flows from Mustards Grill are being managed by the new wastewater system.

#### Wastewater Solids

- 23. Grease Trap and Septic Tank Solids Management.** Grease trap tanks and septic tanks are periodically serviced by removal of accumulated solids by licensed waste haulers. Solids are removed by pump truck and hauled away for off-site disposal at an authorized disposal facility.
- 24. MBR Unit Sludge Management.** Sludge removed from the MBR unit flows by gravity to a sludge storage tank, one of the four new 5,000-gallon capacity concrete tanks located adjacent to the MBR unit. Accumulated stored sludge is periodically removed by a licensed waste hauler, by pump truck and hauled away for off-site disposal at an authorized disposal facility. The outlet pipe of the sludge storage tank is connected to a buried "off-haul pipe" that extends from the tanks to a gravel-paved truck turn-around area located about 50 feet east of the east corner of the discharge area. The off haul pipe extends, underground, along the easterly side of the gravel-paved treatment unit access driveway. The end of the off-haul pipe is equipped with a threaded pipe connection for attachment of pump truck pipes, and a lockable gate valve with a combination lock, and a watertight end cap.

Sludge generation was originally projected to be 611 gallons per day, with storage provided by all four 5,000 gallon tanks, equivalent to about 33 days of sludge generation, and that removal by pump truck would be done once every two weeks. Subsequent evaluation has identified that one 5,000 gallon tank can provide adequate sludge storage, leaving the other three tanks available for emergency wastewater storage, which is a desirable operations feature. The subsequent evaluation, based on actual operation of the MBR unit and laboratory analyses of wastewater characteristics, identified a sludge generation rate of 126 gallons per day. At this rate, one 5,000-gallon tank can provide at least 40 days of storage. Sludge will be removed before the tank is full, which would be on the order of once per month. The sludge storage tank will be equipped with a float device capable of indicating tank fill level, and an alarm for pump-out condition.

At present, all four tanks remain hydraulically connected, at both influent and effluent ends of the tanks, and all wastewater or sludge discharged into the tanks is subsequently removed from the tanks for offsite disposal at an authorized disposal facility.

Sludge will be removed and hauled by a licensed hauling company and disposed at an authorized disposal facility with adequate capacity to receive and process the sludge. The Discharger has identified Phillips Transportation and Remediation as the licensed hauler and the East Bay Municipal Utility District wastewater treatment plant, located in Oakland, as the disposal facility. The Discharger has also identified, for contingency plan purposes, Dependable Septic of Napa for hauling and Vallejo Sanitation and Flood Control District's wastewater plant for disposal.

## Monitoring

25. **Wastewater Monitoring.** Wastewater quantity and quality are monitored at various points throughout the wastewater system, in order to assure proper operation and performance of the system and document compliance with these requirements. Wastewater flows are monitored for the following: Total flow from the Mustards Grill facility into the system; Flows into and out of the MBR treatment unit; Treated wastewater discharged to the dispersal area; Wastewater solids (sludge) from the MBR unit to the sludge storage tank; and Volume of all wastewater and solids removed from the system by pump truck for offsite disposal (e.g., grease trap, septic tank, and sludge storage tank servicing). Wastewater quality is monitored by sampling and analyses of MBR unit influent and effluent. MBR unit effluent quality is the quality of the treated wastewater discharged to land in the dispersal system.
26. **Ground Water Monitoring.** The subject wastewater system involves discharges of waste to land. Ground water in the vicinity of the discharges is actively used for domestic and commercial water supply. In order to ensure that the discharges do not result in adverse impacts to beneficial uses of groundwater resources, this Order requires the Discharger to implement a program of groundwater monitoring.
  - a. Previous Monitoring. Requirements for development and implementation of groundwater monitoring were included in the September 28, 2001 Revised Self-Monitoring Program (RSMP) authorized by the Executive Officer for the old wastewater system. The discharge area of the old system was in the same vicinity as the discharge area (dispersal area) of the new system. In November 2001, four monitoring wells were installed and sampling initiated. In February 2002, the Discharger submitted a technical report providing description of the monitoring program, the installed wells, well permits, boring logs, site soils, and initial characterization of ground water quality and dynamics, based on analyses available to date (Groundwater Monitoring Program Implementation Report for Cosentino Winery and Mustards Grill, February 13, 2002, by LFR Levine Fricke).

- b. Monitoring Wells - Past and Current. In November 2001, four groundwater monitoring wells were installed and sampling initiated. The wells were constructed of 1-inch diameter Schedule 40 PVC casings screened with 0.01 inch slots at depths of 15 to 30 feet below ground surface (fbgs) with a two-foot bentonite seal and remaining annular space filled with cement slurry to surface, and well depths as follows: GW-1, 19.7 fbgs; GW-2, 32 fbgs; GW-3, 32.4 fbgs; and GW-4, 20 fbgs. In October and November 2002, respectively, wells GW-4 and GW-2 were found damaged by vehicles and unusable, and both wells were replaced in January 2003, by wells GW-4A and GW-2A respectively, and the old damaged wells were destroyed. GW-2A was installed in the same area as GW-2, about 25 feet apart. GW-4A was installed at a new location, away from vineyard vehicles, near the pond berms, about 200 feet from GW-4. The new wells were constructed of 2-inch diameter PVC casings, screened and sealed as were the original wells, with total depths of: GW-2A, 29 fbgs; and GW-4A, 30 fbgs. Wells GW-1, -2A, -3 and -4A are the wells currently in use. In order to provide a common reference elevation for all wells, and reporting of ground water levels as elevation above sea level (in addition to depth below ground surface), the top of the well casings have been surveyed relative to survey benchmark NGVD-29 (the same benchmark used for topographic surveys of site land surface elevations). As reported by the Discharger in November 2005, the current top of well casing elevations are: GW-1, 162.39; GW-2A, 166.62; GW-3, 167.65; and GW-4A, 170.97.
- c. Monitoring Program - Future. The Self-Monitoring Program for this Order includes requirements for groundwater monitoring and reporting. As described above, there are currently four ground water monitoring wells in the general vicinity of the subject wastewater dispersal area. The wells were installed for purposes of groundwater monitoring for the old wastewater system. Whether these wells remain adequate for ground water monitoring for the new wastewater system is uncertain. Three of the four wells are located on Mustards Grill property. The fourth, GW-4A, is located on Cosentino Winery property. All wells need to be under adequate control of the Discharger in order to assure well integrity and access as needed. Also, wells need to be adequately located to provide up-gradient and down-gradient monitoring with respect to the new wastewater system dispersal area. This Order requires the Discharger to prepare and submit a technical report to address these issues and provide a summary review of groundwater data obtained to date, and evaluate the adequacy of the existing groundwater monitoring well network and propose revisions as necessary. .

### **Operation and Maintenance**

27. **Operation and Maintenance.** The wastewater system is managed by operators under contract to the Discharger. This Order requires the wastewater system to be operated and maintained by certified wastewater treatment plant operators that are experienced and knowledgeable of the wastewater system design and proper operation, or other similarly qualified and licensed persons. This Order requires the Discharger to establish and maintain a valid contract with a qualified service provider for operation and maintenance of the wastewater system.
28. **Operation and Maintenance Program.** An Operation and Maintenance (O&M) Program is needed in order to ensure that all aspects of the wastewater system are properly operated and maintained. The O&M Program must include descriptions of all wastewater system components and equipment, accurately dimensioned site plans identifying the locations of all components and relevant site features (buildings, wells, drainage ways, roads, etc.), recommended strategies and procedures for system operations in accordance with system designs and discharge requirements, procedures and criteria for process control monitoring, maintenance activities necessary to ensure continuous proper operation of the wastewater system, and identification of persons responsible for operation and maintenance of the wastewater system and how these person can be contacted. This Order requires development and

implementation of an O&M Program acceptable to the Executive Officer and preparation and submittal of an O&M Manual that fully describes the O&M Program.

### Storm Water

- 29. Storm Water Runoff.** The dispersal area will have a finished contour of a constant shallow slope (1/2 %), sloping from the southwest to the northeast. Storm water falling onto the dispersal area in excess of soil absorption capacity will runoff by natural means toward the northeast. A rock-lined drainage V-ditch will be constructed extending northeasterly from near the east corner of the graded dispersal area to the northeast edge of the facility site, and there connects with the public-domain storm water drainage way located along the westerly edge of St. Helena Highway (State Highway 29). The V-ditch will be about 20 inches deep at the center, six to seven feet wide at the top and underlain with a geotextile fabric, compacted soil and four to six inches of smooth rock. Storm water runoff from the dispersal area and surrounding land on the facility site will drain by gravity flow through this V-ditch to the existing drainage system along St. Helena Highway.
- 30. Storm Water Permit Coverage for Wastewater System Area Storm Water Discharges.** The Discharger has obtained permit coverage for the discharges of storm water from the wastewater system area under NPDES General Permit No. CAS000001 (*National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, State Water Resources Control Board (State Water Board) Water Quality Order No. 97-03-DWQ*; Industrial Storm Water Permit). The Discharger submitted a Notice of Intent (NOI) dated November 20, 2000. The State Water Board assigned the case the Waste Discharger Identification (WDID) number 2\_28I016259. The Discharger has developed and submitted a plan for storm water pollution prevention and monitoring for storm water discharges from the wastewater system area (*Storm Water Pollution Prevention Management and Monitoring Plan, February 2005, Prepared for Mustards Grill*, submitted as Appendix D of the ROWD technical report cited in Finding 3.b of this Order; SWPPMMP). The Board has reviewed the SWPPMMP and found it to be acceptable and in accordance with the requirements and objectives of the Industrial Storm Water Permit. This Order requires implementation of the SWPPMMP, as well as periodic review and updating as necessary.

### Other Information

- 31. Solid Waste.** Solid waste produced at the restaurant is temporarily stored on-site in approved waste containment bins, and periodically removed by an authorized solid waste hauler and taken to a sanitary landfill for disposal. Disposal of solid waste on the property is not authorized by this Order.
- 32. Old Wastewater Pond.** The old wastewater system included a pond located on the facility site. The pond will not be used in the new wastewater system. As part of the new system construction, the old pond was drained, sludge was dried and treated in situ with lime, inlet and outlet pipes were removed, and the entire pond containment was backfilled with soil and graded to allow ordinary storm water runoff.
- 33. Residential House.** A three bedroom residential house, with detached garage and swimming pool, is located near the southeast edge of the Mustards Grill property. This house is located about 100 feet southeast of the southeast edge of the dispersal area. This house is served by a separate individual on-site wastewater system, an Evapotranspiration-Infiltration system, located southeast of the old pond. This system is permitted and regulated by Napa County Department of Environmental Management. Domestic water for this house is supplied by the local public water supply system.

- 34. Railroad.** A railroad right-of-way and tracks are located along the southwest edge of the Discharger's property boundary. The railroad is currently used by the Napa Valley Wine Train as a tourist excursion train through the Napa Valley, which makes several trips per day.
- 35. Adjacent Land Uses - Southwest.** A residential home and barn are located southwest of the Discharger's property, beyond the railroad. This residence is served by two actively used domestic water supply wells located near the house and barn. The wells are about 250 to 300 feet from the ponds and about 400 feet from the wastewater disposal area. The property between the residence and the railroad is planted with actively producing wine-grape vineyards that are owned and managed by the homeowner.
- 36. Adjacent Land Uses - North.** Cosentino Winery is to the north of Mustards Grill. There is an active domestic water supply well on the Cosentino Winery property, about 200 feet from the dispersal area.

#### **Basis of Requirements**

- 37. Basin Plan.** The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on January 21, 2004. This updated and consolidated plan is the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board (State Board) and the Office of Administrative Law on July 22 and October 4, 2004, respectively, and approved by the U.S. Environmental Protection Agency, Region IX on January 5, 2005.
- 38. Basin Plan Implementation.** The Basin Plan contains water quality objectives and beneficial uses for waters of the State within the San Francisco Bay Region, and an Implementation Plan. This Order implements the objectives and provisions of the Basin Plan. This Order includes effluent limits and discharge requirements intended to protect existing and potential beneficial uses of waters of the State, as well as to protect public health and the environment.
- 39. Beneficial Uses.** The beneficial uses of waters of the State identified in the Basin Plan for waters in the vicinity of the subject wastewater system include the following:
- a. Surface Water.** Beneficial uses of surface water in the Napa River and tributaries include:
    1. Navigation
    2. Water contact and non-contact recreation
    3. Warm and cold fresh water habitat
    4. Wildlife habitat
    5. Preservation of rare and endangered species
    6. Fish migration and spawning
    7. Municipal, agricultural, and domestic supply
  - b. Ground Water.** Beneficial uses of ground water in the Napa Valley include:
    1. Domestic water supply
    2. Agricultural water supply

#### **California Environmental Quality Act (CEQA)**

- 40. CEQA - Past Actions.** On June 3, 1987 the Napa County Conservation, Development and Planning Commission (NCCDPC) adopted a Negative Declaration for the proposed Crystal Valley Cellars (now Cosentino Winery) winery facility and the associated proposed wastewater pond system. The Negative Declaration found that the proposed project would not have a significant effect on the environment.

The project was subsequently modified to include the Mustards Grill restaurant and wastewater facilities for both the winery and the restaurant. On March 22, 1989, the NCCDPC approved a Use Permit for the modified wastewater system project, and a finding that the project is categorically exempt from the California Environmental Quality Act, pursuant to Section 15302 of the California Code of Regulations (Class 2 Categorical Exemption - Replacement or Reconstruction of Existing Facilities).

41. **CEQA - Recent Actions.** On May 4, 2005, the NCCDPC approved a Negative Declaration for the proposed project to dismantle parts of the existing joint wastewater system used by Mustards Gill and Cosentino Winery, and establish a new wastewater system for Mustard Grill (*Mustards Grill Use Permit (#03460-UP) Negative Declaration*). The Negative Declaration includes mitigation measures and determinations that, with incorporation of those measures, environmental impacts of the project will be less than significant. A Notice of Determination, dated May 26, 2005, was filed by NCCDP Department (State Clearinghouse Number 2005042012). The Board has reviewed the Negative Declaration and found it to be acceptable.
42. **Public Notice.** The Board has notified the Discharger and interested persons of its intent to prescribe waste discharge requirements for the subject wastewater system and discharges and has provided them with an opportunity for a public hearing and to submit written views and recommendations.
43. **Public Hearing.** The Board, in a properly noticed public hearing, heard and considered all comments pertaining to these waste discharge requirements.

**IT IS HEREBY ORDERED**, that the Discharger, pursuant to the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

**A. PROHIBITIONS**

1. The treatment, storage, or discharge of wastes shall not create a nuisance or pollution as defined in the California Water Code.
2. Discharges of waste into or from the wastewater system other than as described in and authorized by this Order are prohibited.
3. There shall be no bypass or overflow of waste to waters of the State from the Discharger's wastewater collection, treatment, storage or disposal facilities.
4. The discharge of waste shall not degrade the quality of any groundwater used for domestic purposes or cause an increase in any quality parameter that would make groundwater unsuitable for irrigation use.
5. Discharges of wastewater to the wastewater system in excess of the system operating hydraulic capacity or organic loading treatment capacity are prohibited.
6. For discharges of storm water from the facility site, discharges of any material other than uncontaminated storm water to waters of the State are prohibited.

**B. DISCHARGE SPECIFICATIONS**

1. **Source Wastewaters.** Wastewater authorized by this Order to be discharged into the wastewater system consists of wastewater from food preparation and service and other kitchen uses, and wastewater from restroom use by patrons and employees, at the Mustards Grill restaurant facility.
2. **Authorized Wastewater Flows**
  - a. **Wastewater System.** Discharges of wastewater from the Mustards Grill restaurant into the wastewater system shall not exceed an annual total of 1,171,000 gallons per year.
  - b. **MBR Unit.** Discharges into the MBR unit shall not exceed a peak flow of 5,500 gallons per day.
  - c. **Dispersal System.** Discharges to the dispersal system shall not exceed:
    - (i) the design soil application rate of 0.1 gallons per square foot per day, and
    - (ii) a total daily flow volume in gallons equal to the soil application rate of 0.1 gallons per square foot per day multiplied by the approved installed dispersal area in square feet. As of Order adoption, the approved installed dispersal area is 40,000 square feet and therefore the allowed daily flow volume is 4,000 gallons per day.
3. **MBR Treatment Unit Organic Loading.** Discharges into the MBR treatment unit shall not exceed a peak organic loading level of 109 pounds per day of BOD.
4. **Discharge Effluent Limits.** Treated wastewater discharged to the dispersal system shall comply with the following quality limits:
  - a. Biochemical Oxidation Demand      10.0 mg/L, maximum;
  - b. Total Suspended Solids                10.0 mg/L, maximum; and
  - c. Total Nitrogen                            17.0 mg/L as N, maximum
5. **Discharge Discontinuation.** Discharges of effluent to the dispersal area shall be discontinued during any period when the limits specified in B.4 above are not being met. The discharges shall not be resumed until all conditions which caused the specified limits to be violated have been corrected.
6. **Wastewater System Operation and Maintenance.**
  - a. The Discharger shall operate and maintain the wastewater system as efficiently as possible, and shall maintain in good working order all wastewater system components, equipment and control systems installed to achieve compliance with this Order.
  - b. The wastewater system shall be operated and maintained in accordance with the procedures identified in the Operations and Maintenance (O & M) Manual required by this Order.
7. **Pump Stations.**

- a. All pump stations shall be designed, constructed, operated and maintained to prevent the occurrence of sewage spill resulting from mechanical breakdown or power failure.
  - b. All pump stations shall be equipped with reserve hydraulic capacity sufficient to provide storage of wastewater during a pump failure condition for at least 24 hours, and water level monitoring and alarm system(s) to provide notification of high water level conditions. The alarm system shall include audible and visual alarms sufficient to notify operating personnel of an alarm condition. If operating personnel are not present at the facility site, the alarm system shall include an automated telephone dialer system capable of notifying on-call operating personnel of the alarm condition.
  - c. The power supply for alarm systems shall be independent of the normal power supply for the wastewater system.
- 8. Pipe Separations.**
- a. There shall be no cross-connection between potable domestic water supply pipes and pipes containing treated wastewater.
  - b. There shall be at least a 10 foot horizontal and a one foot vertical separation between all pipes transporting wastewater and pipes transporting potable domestic water, with the potable domestic water pipes above the wastewater pipes.
- 9. Dispersal Area Separation from Wells.** The dispersal area shall be designed, constructed and maintained such that a horizontal separation distance of at least 100 feet is maintained between all domestic water supply wells and the nearest point of the dispersal area.
- 10. Storm Water Discharges**
- a. All storm water flows from the treatment and dispersal system areas are conveyed by gravity flow from the site via a rock-lined drainage V-ditch extending northeasterly from near the southeast corner of the graded dispersal area to the existing off-site storm water drainage ditch running parallel to and alongside of State Highway 29.
  - b. All storm water discharges shall be managed in compliance with the requirements of the Industrial Storm Water Permit (NPDES Permit No. CAS000001), and in accordance with the Storm Water Pollution Prevention Management and Monitoring Plan developed for this facility (described in Finding 30 of this Order), and requirements included in the Self-Monitoring Program for this Order.
- 11. Wastewater Solids.** All solid materials removed from the liquid waste stream of the wastewater system, shall be disposed of at a legal point of disposal, and in accordance with the provisions of Title 27 of the California Code of Regulations. This includes solids accumulated in septic tanks, grease traps or pump tanks, and solids removed from the MBR treatment unit. For the purpose of this requirement, a legal point of disposal is defined as a facility for which waste discharge requirements have been prescribed or waived by a Regional Water Board and which facility is in full compliance therewith. This Order does not authorize disposal of wastewater solids, anywhere on the facility site.

## C. PROVISIONS

1. **Order Compliance.** The Discharger shall comply with all sections of this Order immediately upon adoption.
2. **Self-Monitoring Program.** The Discharger shall comply with the Self-Monitoring Program for this Order as adopted by the Board and as may be amended by the Executive Officer.

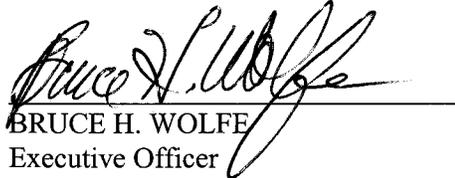
3. **As-Built Plans - Current System.** The Discharger shall submit to the Board a technical report, acceptable to the Executive Officer, no later than 30 calendar days from the date of adoption of this Order, comprised of as-built plan drawings, and narrative descriptions as appropriate, of the completed-to-date wastewater treatment and dispersal system. This shall include, for all tanks, complete tank specification (e.g., location, material, total and operating capacities, dimensions, date of installation, number of compartments, access openings, risers and riser lids), and results of watertight verification tests. If the wastewater system is not yet completed, and further construction or modifications are in progress or planned, then (1) the report shall be comprised of as-built plans for those components completed, and a complete description of construction or modifications in progress or planned, and a time schedule for completion of those actions; and (2) a complete set of plans for the entire completed system shall be submitted within 30 days of system completion. All plan drawings shall be of a scale of at least one inch equals 40 feet, properly labeled and clearly legible.
4. **As-Built Plans - Future Changes.** In the event of any changes to wastewater system components in the future, updated as-built plans of the portion of the system affected by such changes shall be submitted to the Board within 30 days of completion of those changes.
5. **Operation and Maintenance Providers.**
  - a. The wastewater systems shall be operated and maintained by persons that are experienced in, and knowledgeable of, proper wastewater treatment and disposal practices. Such persons shall be wastewater treatment plant operators possessing a current and valid certification from the State of California, or other persons with similar knowledge and experience and valid professional registration or license.
  - b. The Discharger shall establish and maintain a valid contract, or contracts, with a qualified service provider, or qualified service providers, for operation and maintenance of the wastewater systems.
  - c. The Discharger shall submit to the Board, within 10 days of adoption of this Order, copies of completed service contracts with qualified service providers for operation and maintenance of the wastewater systems.
  - d. In the event of any changes in contracted service providers, the Discharger shall notify the Board in writing of such changes prior to the effective date of such changes, and submit copies of the new or revised contracts within ten working days from the effective date of those changes.
6. **Operation and Maintenance Program.** The Discharger shall develop and implement an Operations and Maintenance (O & M) Program for the wastewater system, in accordance with the following:
  - a. **O & M Program.** The O & M Program shall include all procedures necessary to properly operate the wastewater system in accordance with design parameters, to achieve compliance with waste discharge requirements, and to maintain the system in good working condition.
  - b. **O & M Manual.** The O & M Program shall include an O & M Manual documenting all aspects of the program. The O&M Manual shall include, but not be limited to, the following:
    - 1) Description of the overall wastewater system;
    - 2) Scaled plan drawings of the wastewater system, including pipes, valves and control equipment;
    - 3) Description of the wastewater flow through the system, from sources to final disposal;
    - 4) Descriptions and specifications of all system components and equipment;
    - 5) Routine procedures for operation of the wastewater system including grease traps, septic tanks, pumps, and the subsurface drip dispersal system;
    - 6) Routine procedures for management and disposal of wastewater solids removed from the wastewater streams;
    - 7) Procedures for maintenance of all system components;

- 8) Procedures for operation of the wastewater system during emergency conditions such as power outage, major equipment failure, extreme wet weather conditions or other emergencies; and
  - 9) Copies of all applicable regulatory permits for the wastewater system, or specific references of those permits and identification of a location at the facility where those permits are available for review and reference by operating personnel, other service providers, or regulatory agency staff.
- c. **O & M Manual Submittal.** The Discharger shall submit to the Board a technical report, acceptable to the Executive Officer, no later than 30 calendar days from the date of adoption of this Order, comprised of a complete copy of the O & M Manual, identification of person(s) responsible for implementation of the O & M Program, and contact information for those persons.
  - d. **O & M Manual Review and Updates.** The Discharger shall periodically review and update as necessary the O & M Manual in order to ensure that the manual remains current and applicable to the wastewater system and its proper operation.
  - e. **O & M Manual Review and Update Reports.** Annually, the Discharger shall submit a report to the Board containing any revisions or updates of the O & M Manual that have been made, or a letter stating that the O & M Manual remains adequate and no revisions are necessary. This report shall be submitted as part of the Annual Monitoring Report.
7. **Ground Water Monitoring Program.**
- a. **Ground Water Monitoring Program.** In order to ensure compliance with Discharge Prohibition A.4 of this Order, the Discharger shall implement a program of ground water monitoring in the vicinity of the discharges, i.e., in the vicinity of the wastewater dispersal area.
  - b. **Program Components.** This program shall include characterization of discharge area soils, ground water levels, movement and quality, and evaluation of any changes in ground water characteristics that may be attributable to the wastewater discharges. Potential changes to be addressed and evaluated include localized increase in ground water level (ground water mounding effects), increase in the concentration of constituents of concern in the ground water, and migration of nitrate or other wastewater constituents into the ground water or offsite to existing or potential points of use. This program shall include measurement of groundwater levels and sampling of ground water for analytical characterization by means of constructed ground water monitoring wells located both up-gradient and down-gradient of the wastewater dispersal area.
  - c. **Monitoring Program Report.** The Discharger shall submit to the Board a technical report, acceptable to the Executive Officer, no later than 30 calendar days from the date of adoption of this Order, comprised of the following: identification and description of the groundwater monitoring wells to be used for monitoring groundwater in accordance with this Order; evaluation of the adequacy of those wells to provide up-gradient and down-gradient monitoring of ground water relative to the subject discharges and discharge area; the means by which access to, and integrity of, the wells will be assured; and a summary review of ground water data obtained to date.
  - d. **Ground Water Monitoring and Reporting.** The Self-Monitoring Program of this Order includes requirements for ground water monitoring and reporting. The Discharger shall comply with those monitoring and reporting requirements, and any modifications to those requirements specified in writing by the Executive Officer, such as may be necessary in response to the technical report required above, or other new information about groundwater or groundwater monitoring related to the subject wastewater system and discharges.
8. **Non-Compliance Reporting.** In the event the Discharger is unable to comply with any of the conditions of this Order due to:

- a. Breakdown of wastewater transport or treatment equipment;
  - b. Accidents caused by human error or negligence; or
  - c. Other causes such as acts of nature,
- the Discharger shall notify the Board by telephone as soon as the Discharger or the Discharger's agents have knowledge of the incident. Written confirmation of this notification shall be submitted within five working days of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.
- 9. Entry, Access and Inspection.** The Discharger shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:
- a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
  - b. Access to and copy of, at reasonable times, any records required by conditions of this Order;
  - c. Inspection, at reasonable times, of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; or
  - d. To photograph, sample or monitor, at reasonable times, for the purpose of assuring compliance with this Order.
- 10. Annual Fees.** The Discharger must pay annual fees in accordance with the fee schedule given in California Code of Regulations Title 23, Division 3, Chapter 9, Article 1, Section 2200 and annual fee invoices issued by the State Board. Annual fees for Waste Discharge Requirements are based on Threat to Water Quality and Complexity ratings. The current rating for this Order is 2 B. The current fee is \$5,720, plus a 9% Ambient Water Monitoring surcharge, for a total annual fee of \$6,235. This fee is subject to change, if the fee schedule of Title 23 Section 2200 is changed. Annual Fee invoices are issued each year by the State Board, for the state fiscal year (July 1 though June 30).
- 11. Change in Control or Ownership.** In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board. The succeeding owner or operator, in order to obtain authorization for discharges regulated by this Order, must apply in writing to the Executive Officer, requesting transfer of the Order. This request must include complete identification of the new owner or operator, the reasons for the change, and effective date of the change. Discharges conducted without submittal of this request will be considered discharges without waste discharge requirements, violations of the California Water Code.
- 12. Report of Waste Discharge.** The Discharger shall file with the Board a Report of Waste Discharge at least 180 days before making any material change in the character, location, or volume of the discharges or discharge facilities, or any changes to the wastewater system equipment as described in this Order, except for emergency conditions. In the event of changes implemented in response to emergency conditions, the Board shall be notified immediately by telephone, and in writing or by facsimile transmission within five calendar days of such changes.
- 13. Order Review and Update.** The Board will review this Order periodically and may revise the requirements as necessary to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in this Regional Board's Basin Plan; or changes in the discharge characteristics.
- 14. Order Termination.** After notice and public meeting, this Order may be terminated or modified by the Board for any reason.

**15. Rescission of Previous Orders.** The waste discharge requirements prescribed by this Order supercede those prescribed by this Board's Order No. 89-072, for Mustards Grill. Order No. 89-072 is hereby rescinded, for Mustards Grill.

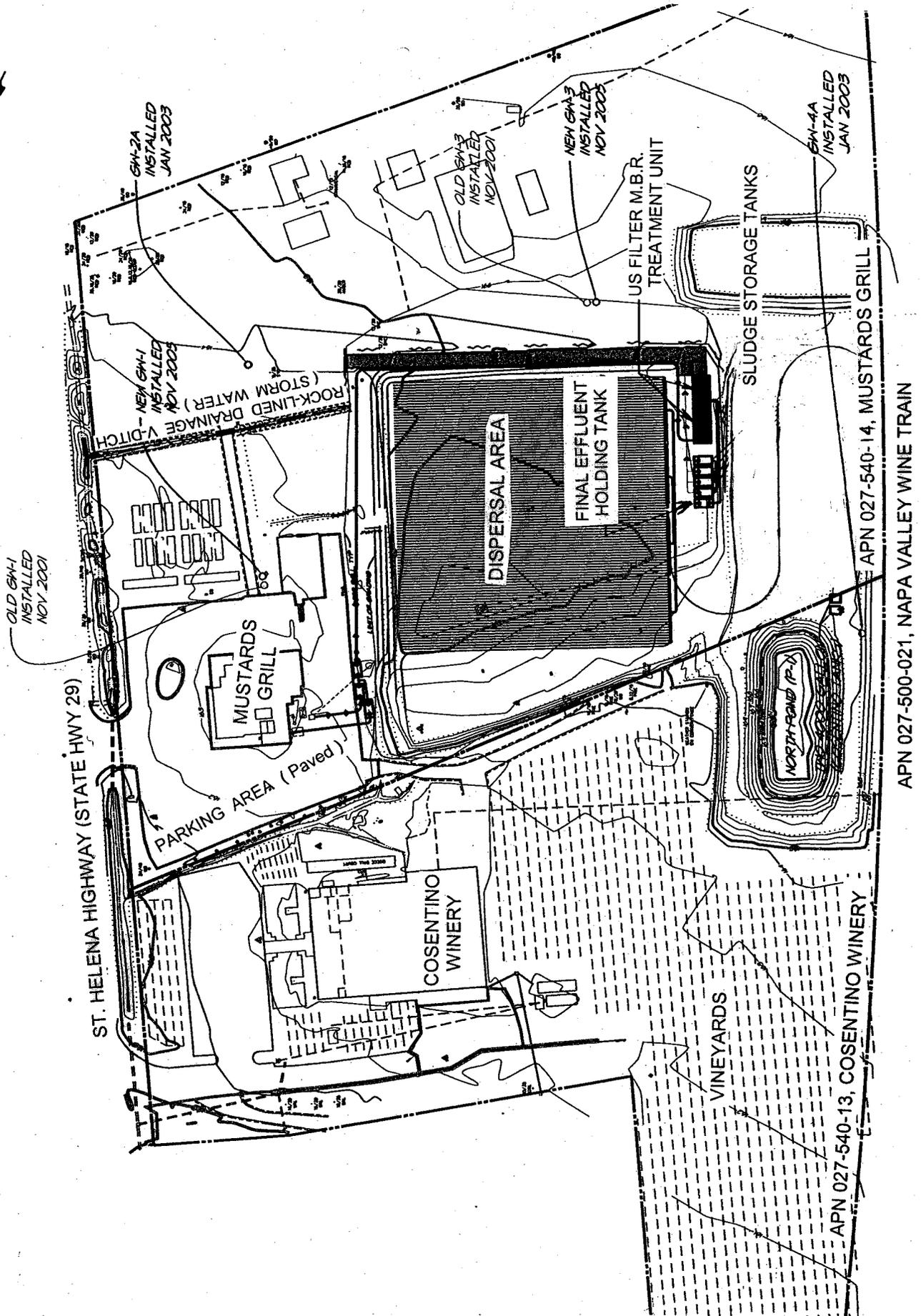
I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on October 11, 2006.

  
BRUCE H. WOLFE  
Executive Officer

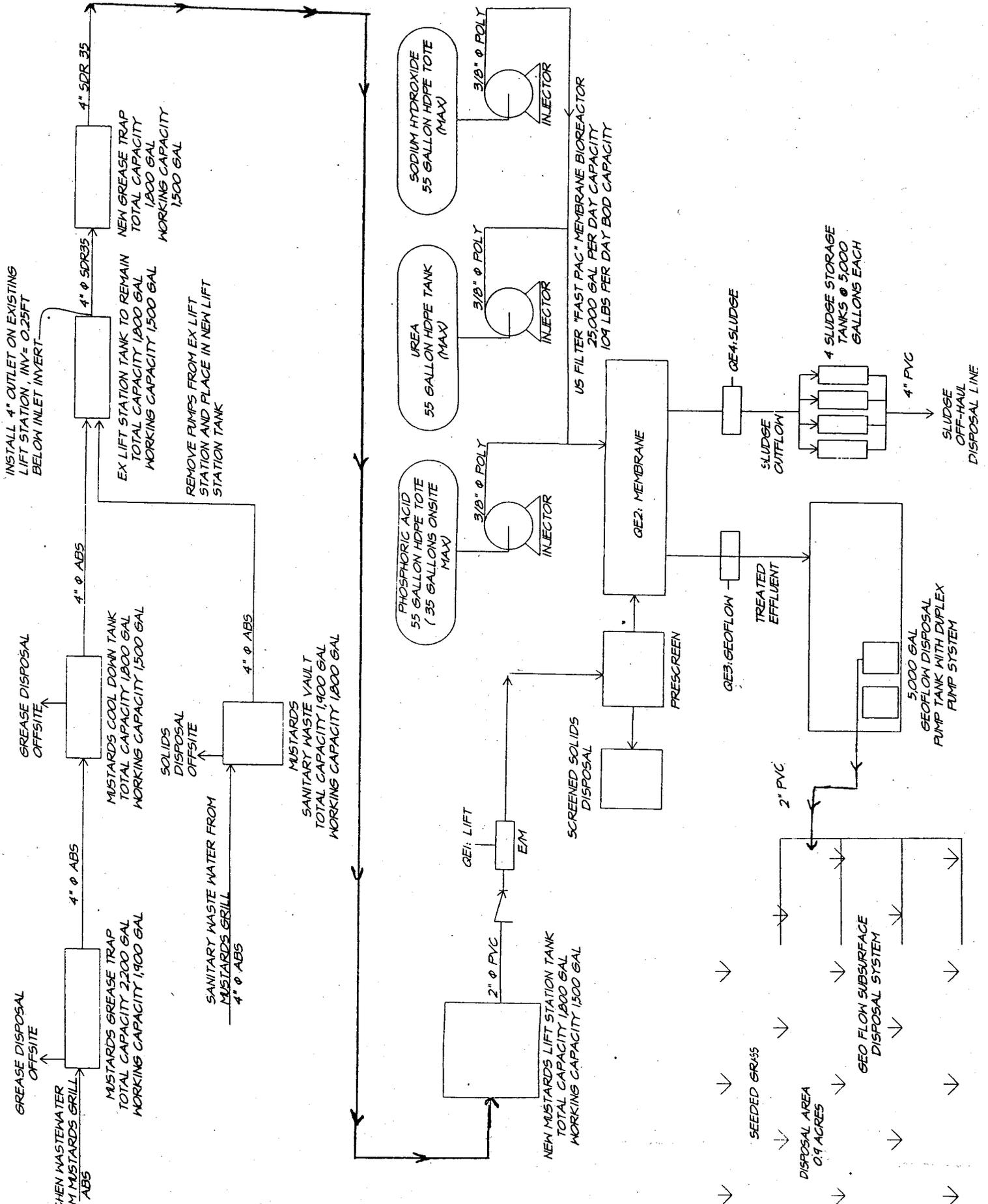
Attachments:

- A. Facility Site Plan
- B. Wastewater System Flow Schematic  
Self-Monitoring Program

[File No. 2139.3102]  
[WDID No. 2\_283102001]  
[Prepared by BDA]  
[Reviewed by WBH, WKB]



ATTACHMENT A - MUSTARDS GRILL, FACILITY SITE PLAN



**ATTACHMENT B -  
MUSTARDS GRILL, WASTEWATER SYSTEM FLOW SCHEMATIC**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM**

**for**

**MUSTARDS GRILL, CYNTHIA PAWLKYN, and  
MUSTARDS GRILL WASTEWATER TREATMENT SYSTEM  
7399 ST. HELENA HIGHWAY, NAPA COUNTY**

**for**

**ORDER NO. R2-2006-0071**

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## **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: Additional descriptions of the following are given in the findings of this Order.

1. **Facility Site.** The facility site is the land parcel on which the Mustards Grill facility is located, Napa County Assessors Parcel Number 27-500-14.
2. **Wastewater System.** The wastewater system is comprised of all constructed mechanical apparatus located on the facility site that provide collection, conveyance, treatment, storage, dispersal and management of wastewater and wastewater solids from the Mustards Grill facility. This includes, but is not limited to, septic tanks, grease trap tanks, pipes, pumps, pump tanks, valves, wastewater treatment units, sludge storage tanks, the subsurface dispersal system, and all devices and equipment used to control and monitor the wastewater and the wastewater system.
3. **Dispersal Area.** The dispersal area is a graded, vegetated land area located on the facility site behind, southwest of, the restaurant building and adjacent (rear) vehicle parking area, where the subsurface dispersal system pipe network is installed.
4. **Dispersal System.** The dispersal system is the portion of the wastewater system used for conveyance and discharge of treated wastewater to land in the dispersal area. This includes, but is not limited to, pumps, pipes, subsurface dispersal tubing and all equipment used to control and monitor the dispersal operations.

#### **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 calibrated and documented 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 daily or 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. **Ground water levels.** Ground water level is the water surface of observed ground water. For reporting, ground water levels shall be reported as both (a) depth below ground surface - the vertical distance between the ground water level and the overlying ground surface, and (b) ground water elevation - the elevation of the ground water level with respect to a single common reference elevation for which there is an identified fixed stable elevation reference station at the facility site.
4. **Ground water samples.** Ground water samples are samples of ground water obtained from monitoring wells for analytical characterization. Sampling of ground water shall be conducted in accordance with current accepted standard practices for ground water sampling.
5. **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 day to the next, for all monitoring and reporting.
- 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.

### 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<sub>5</sub> 20°C = Biochemical Oxygen Demand, 5-day, at 20 °C  
TSS = Total Suspended Solids  
Nitrogens = Ammonia Nitrogen, Nitrate Nitrogen and Total Kjeldahl Nitrogen.

#### 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.

- |   |             |       |   |
|---|-------------|-------|---|
| A | = Annual    | Cont  | = Continuous                              |
| D | = Daily     | EE    | = Event = Each service or discharge event |
| W | = Weekly    | D & M | = Daily and Monthly                       |
| M | = Monthly   | W & M | = Weekly and Monthly                      |
| Q | = Quarterly | 2/M   | = Twice per Month                         |

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

Cont: M&A = Continuous monitoring; Record and Report Monthly & Annual Totals

2X = Two times (per wet weather season) Further specifications are given at Section V.B.8, below.

## F. STANDARD OBSERVATIONS

### 1. Dispersal area.

- (a) Check dispersal area for odors.
- (b) Check dispersal area for evidence of wastewater surfacing or ponding.
- (c) Check dispersal 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 dispersal system distribution pipes for structural and hydraulic integrity.
- (e) Check dispersal area grass for proper maintenance (mowing). Record approximate height of grass.

## 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.B, 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 all major components of the wastewater system and the locations of all monitoring stations identified in this SMP. A copy of this drawing shall be included with all reports submitted in response to this SMP.

### B. WASTEWATER

#### 1. Mustards Grill wastewater.

- a. Station Code: A-1
- b. Station Description: Wastewater at a point, or combination of multiple points, in the wastewater collection system suitable for measuring the total flow of all wastewater from the Mustards Grill facility.
- c. Purpose. The purpose of this station is for measurement of total volume of wastewater flow from the Mustards Grill facility, and documentation of compliance with the Authorized Wastewater Flow (annual total flow) limit given in Discharge Specification B.2.a. of this Order.
- d. Alternative: Flow monitoring at station M-1 may be used for this purpose. If station M-1 data is used, then that shall be so noted in the monitoring reports.

#### 2. MBR Influent.

- a. Station Code: M-1
- b. Station Description: Wastewater influent to the MBR treatment unit.
- c. Purpose. The purpose of this station is for measurement of wastewater flow into the MBR unit, and for sampling of the wastewater for analytical characterization of the MBR unit influent.

**3. MBR Effluent.**

- a. Station Code: M-2
- b. Station Description: Treated wastewater at a point after the MBR treatment unit, prior to discharge to the dispersal system.
- c. Purpose. The purpose of this station is for measurement of flows of final treated wastewater from the MBR unit, and for analytical characterization of the MBR unit effluent in order to document water quality, treatment process performance and compliance with discharge effluent limit requirements.

**4. Discharges to the Dispersal System.**

- a. Station Code: E-1
- b. Station Description: Effluent from the dispersal system pump tank at a point where all wastewater discharged into the dispersal system is present.
- c. Purpose. The purpose of this station is for measurement of flows discharged to the subsurface dispersal system, and documentation of compliance with the Authorized Wastewater Flow limits given in Discharge Specification B.2.c. of this Order.
- d. Alternative: Flow monitoring at station M-2 may be used for this purpose, if the Discharger's wastewater system operator documents that the flows monitored at station M-2 accurately represent the flows at station E-1, for the monitoring period being reported.

**5. Temporary Storage Tanks - Wastewater.**

- a. Station Code: TS-1, TS-2, and TS-3, respectively
- b. Station Description: At each of three 5,000-gallon tanks adjacent to the MBR unit used for temporary storage of wastewater, wastewater discharged into or removed from out of these tanks.
- c. Purpose. The purpose of these stations is for monitoring flows into or out of these storage tanks.

**C. MBR SLUDGE**

**1. MBR Waste Sludge.**

- a. Station Code: M-3
- b. Station Description: Sludge discharged from the MBR unit.
- c. Purpose. The purpose of this station is for measurement of the total volume of sludge solids discharged from the MBR unit (into the MBR sludge storage tank).

**2. Sludge Storage Tank.**

- a. Station Code: SS
- b. Station Description: At the 5,000-gallon tank adjacent to the MBR unit used for temporary storage of MBR waste sludge, sludge removed from this tank for haul-away and off-site disposal.
- c. Purpose. The purpose of this station is for measurement of the total volume of MBR sludge solids removed from the MBR sludge storage tank, for pump-truck haul-away for offsite disposal.

**D. TREATMENT TANKS (Septic Tank, Grease Trap Tanks, and Lift Station Tank)**

**1. Septic Tank 1**

- a. Station Code: ST-1
- b. Station Description: Tank that receives sanitary wastewater from the Mustards Grill facility.

**2. Grease Trap 1**

- a. Station Code: GT- 1
- b. Station Description: Grease trap tank that receives kitchen wastewater from Mustards Grill.

**3. Grease Trap 2**

- a. Station Code: GT-2
- b. Station Description: Grease trap tank that receives wastewater from Grease Trap 1.

**4. Grease Trap 3**

- a. Station Code: GT- 3
- b. Station Description: Grease trap tank that receives wastewater from Grease Trap 2.

**5. Grease Trap 4**

- a. Station Code: GT- 4
- b. Station Description: Grease trap tank that receives sanitary wastewater from Septic Tank 1 (ST-1 ) and kitchen wastewater from Grease Trap 3 (GT3) and the two wastewater streams become mixed.

**6. Lift Station Wet Well**

- a. Station Code: WW-1
- b. Station Description: Pump tank.

- 7. Purpose.** The primary purpose of these stations is for measurement of the total volume of material removed from the respective tanks, for haul-away and disposal to an off-site location.

**E. DISPERSAL AREA OBSERVATION STATIONS**

- a. Station Code: D - n
- b. Station Description: Points within and around the perimeter of the dispersal area suitable for observation of dispersal area conditions.
- c. Purpose. The purpose of these stations is for conducting standard observations of the wastewater dispersal area.

**F. GROUND WATER**

**1. Up-gradient Well.**

- a. Station Code: GW-1
- b. Station Description: Ground water at a monitoring well located up-gradient from the dispersal area, and representative of background ground water conditions.

**2. Down-gradient Wells.**

- a. Station Code: GW-2A, GW-3 and GW-4A
- b. Station Description: Ground water at each of three monitoring wells located down-gradient from the dispersal area, and representative of ground water conditions down-gradient of that area.

- 3. Purpose.** The purpose of these stations is for observation and measurement of ground water levels and for obtaining samples of ground water for analytical characterization of the ground water there.

- 4. Locations.** The locations of these wells are shown on the Facility Site Plan, Attachment B of this Order.

**G. DISPERSAL AREA STORM WATER DISCHARGES**

**1. Storm Water Near MBR Unit**

- a. Station Code: SW-1
- b. Station Description: Water which originated as rainfall, has fallen on the dispersal area and has run off to the on-site storm water drainage channel adjacent to the MBR treatment unit, at a point where a water sample representative of the runoff from this area can be obtained.

**2. Storm Water at Northeast Drainage Ditch**

- a. Station Code: SW-2
- b. Station Description: Water which originated as rainfall, has fallen on the dispersal area and has run off to the on-site storm water drainage channel northeast of the dispersal area, at a point where a sample representative of the water being discharged to the off-site storm water drainage system can be obtained.

- 3. Purpose.** The primary purpose of these stations is for sampling for analytical characterization of storm water discharges from the MBR unit area and dispersal area to the off-site storm water drainage system.

## **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 given below 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 identified as "Notes", numbered, e.g., [1], [2], etc., which are associated with particular monitoring parameters or monitoring stations. These references correspond to further monitoring specifications given in Section V.B., Monitoring Specifications, below.

### **B. MONITORING SPECIFICATIONS**

#### **1. Flow Monitoring and Reporting.**

- a. For station A-1, total wastewater flow from the Mustards Grill facility into the wastewater system, flows shall be monitored continuously and reported as Monthly and Annual total flow, in gallons.
- b. For station M-1, influent to the MBR unit, flows shall be monitored continuously and reported as Daily Flow and Monthly Total Flow, in gallons.
- c. For station M-2, effluent from the MBR unit, flows shall be monitored continuously and reported as Daily Flow and Monthly Total Flow, in gallons.
- d. For station E-1, discharges to the dispersal area, flows shall be monitored continuously and reported as Daily Flow and Monthly Total Flow, in gallons.
- e. For stations TS-1, TS-2 and TS-3, the temporary wastewater storage tanks, for each station, flows shall be monitored for each event - discharges into or out of the tanks - and reported as Daily Flow in and/or Daily Flow out, respectively, for each day when such flows occur, in gallons.
- f. For station M-3, waste sludge from the MBR unit into the sludge storage tank, flows shall be monitored continuously and reported as Daily Flow and Monthly Total Flow, in gallons. Determination of waste sludge volume by measuring changes in water surface elevation in the MBR Unit aeration tank and calculation of corresponding volume removed is acceptable, provided the method is completed described in the O&M Manual, and recorded logs of measurements and calculations are maintained.
- g. For station SS, sludge removed from the sludge storage tank, flows shall be monitored for each service event when sludge is removed, and reported as total volume removed, in gallons.
- h. For stations ST-1, GT-1 through GT-5, and WW-1 (the septic tank, the grease trap tanks, and pump station tank, respectively) flows shall be monitored for each service event when water or sludge is removed, and reported as total volume removed, in gallons. If multiple tanks are serviced in a single service event, the total volume removed from all tanks serviced may be reported as single daily total volume, in gallons, and all tanks serviced noted and reported.

#### **2. 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 (17 mg/L as N) shall use the sum of the analytical results for Nitrate Nitrogen, and Total Kjeldahl Nitrogen (TKN).

3. **Ground Water Level.** For all groundwater monitoring wells, stations GW-n, ground water levels shall be measured, recorded and reported for each station, twice per month, in feet and decimals of feet; Units of measure used shall be clearly stated in each monitoring report where the data is reported.
4. **Precipitation.** Precipitation (rainfall) monitoring shall be continuous, and recorded and reported as the total rainfall for each calendar day and for each calendar month. Precipitation monitoring shall be representative of precipitation falling on the dispersal area. For purposes of this monitoring, data from the State of California CIMAS station designated as "Oakville-North Coast Valleys-Station 77" is acceptable.
5. **Transfer Event Data.**
  - a. For all transfers of wastewater INTO the temporary storage tanks (stations TS-1, TS-2 or TS-3), in addition to flow volume, the following shall be reported:
    - (1) Calendar date of each transfer event,
    - (2) Times of day when event started and stopped; and
    - (3) Wastewater source.
  - b. For all transfers of wastewater OUT OF the temporary storage tanks (stations TS-1, TS-2 or TS-3), in addition to flow volume, the following shall be reported:
    - (1) Calendar date of each transfer event
    - (2) Times of day when event started and stopped; and
    - (3) Wastewater destination.
6. **Service Event Data.**

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

  - (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).
7. **Standard Observations.** Standard Observations are defined in SMP Section III.
8. **Storm Water Monitoring (Stations SW-n).**

Storm water from the dispersal area discharged to the off-site storm water drainage system shall be characterized by sampling and analysis for the parameters identified in Table 1, in the column labeled 'All SW', and in accordance with the following:

  - a. **2X.** For parameters identified by the frequency code '2X', sampling and analyses shall be conducted for the identified parameters in each of two separate sampling events conducted on separate days during the first two significant rainfall events of each December that generate storm water runoff from the dispersal area into the on-site storm water drainage ditch, and thence offsite.
  - b. **Flows.** Storm water flow rate and/or event total flow volume shall be estimated and reported.
  - c. **Spills or Overflows.** For any event involving discharges of wastewater to storm water, the resultant storm water shall be sampled and analyzed for the parameters identified by the frequency code "EE". Such events include spills, overflows or leaks, to standing or flowing storm water. Sample sets shall be obtained both upon knowledge of such event, and following any corrective actions taken.

**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. GROUND WATER MONITORING PROGRAM**

The Discharger is required to implement a program of ground water monitoring in the vicinity of the wastewater dispersal area, in accordance with Provision 7 of this Order. This SMP includes monitoring and reporting requirements for this program, based on the existing ground water monitoring wells. Revisions to these requirements may be made in writing, by the Executive Officer, in response to the technical report required by Provision 7 or other new information about groundwater or groundwater monitoring related to the discharges.

**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's office 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's office 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 or grease traps; repair or replacement of wastewater 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 corrective actions was previously submitted to the Board, then reference to that report is satisfactory. Report references 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, including both the relevant numeric value(s) and the relevant unit(s) of measurement.

- 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 relevant 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 language, is not acceptable; the actual numeric value of the detection limit must also be reported. For purposes of data tabulation, notation of non-detection - "ND" or similar notation - is acceptable, **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, i.e., any changes to existing equipment or land forms, or any installations of new equipment, the monitoring report shall include a complete description of work that has occurred during the monitoring period, any impacts to the wastewater system or its operations and, if work was not completed, 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 any reason, including acts of humans or 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 shall indicate 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 its current address; As of Order adoption, its 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 Discharger's 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: October 11, 2006.

  
BRUCE H. WOLFE  
Executive Officer

[File No. 2139.3102]  
[WDID No. 2 283102001]  
[Prepared by BDA]  
[Reviewed by WBH, WKB]

**TABLE 1 - SCHEDULE for MONITORING**

Monitoring Station:	A-1	M-1	M-2	E-1	All TS	M-3	SS	ST, GT & WW	D	All GW	All SW
Type of Sample:	MG wastewater	MBR Influent	MBR Effluent	Discharges	Temp. Storage Tanks	MBR Sludge	Sludge Storage Tank	Treatment Tanks	Dispersal Area	Ground Water	Storm-water
Parameter (units) [Notes]	F	F, G	F, G	F, G	F	F	F	F	O	G, L	F, G
Flow Volume (gallons) [1]	Cont: M & A	Cont: D&M	Cont: D&M	Cont: D&M	Event	Cont: D&M	Event	Event			2X, EE
BOD <sub>5</sub> 20°C (mg/L)		Q	2/M								2X, EE
TSS (mg/L)		Q	2/M								2X, EE
Oil & Grease (mg/L)											
Turbidity (NTU)											2X, EE
Temperature (degrees F or C)			2/M								
pH (pH units)			2/M							M	2X, EE
Dissolved Oxygen (mg/L)			2/M								2X, EE
Nitrogens (mg/L as N) [2]		Q	2/M							M	2X, EE
Conductivity (micromhos/cm)			2/M							M	2X, EE
Total and Fecal Coliform MPN/100 ml											EE
Ground Water Level (feet) [3]										M	
Precipitation (inches) [4]									D&M		2X, EE
Transfer Event Data (Date, Time etc.) [5]					EE						
Service Event Data (Date, Time, etc.) [6]					EE		EE	EE			
Standard Observations [7]									W		