

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. R2-2008-00XX

WASTE DISCHARGE REQUIREMENTS FOR:

**SPIRIT ROCK MEDITATION CENTER
5000 SIR FRANCIS DRAKE BOULEVARD, WOODACRE, MARIN COUNTY**

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

1. **Discharger.** Spirit Rock Meditation Center (hereinafter called the Discharger) is a non-profit organization offering instruction and opportunities in the practice of insight meditation. The Discharger owns and operates the Spirit Rock Meditation Center (hereinafter called Spirit Rock), a retreat located in the San Geronimo Valley near Woodacre, Marin County. 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 employed by the Discharger.
2. **Purpose of Order.** The purpose of this Order is to update Waste Discharge Requirements (WDRs) to reflect current conditions at the facility, including:
 - a) updated regulatory requirements;
 - b) facility improvements, including the construction of an additional sand filter and leachfield to expand treatment capacity; and
 - c) changes to the groundwater and surface water monitoring programs since WDRs were last issued in 1988.

This Order also rescinds previous Water Board Order No. 88-078.

This Order was initiated in response to Water Board staff's evaluation of eleven permitted wastewater treatment facilities in the Tomales Bay Watershed. Tomales Bay and its tributaries have been identified as impaired for nutrients, sediment, and pathogens.

3. **Waste Discharge Requirements.** The old wastewater system was regulated by Board Order No. 88-078, Waste Discharge Requirements for Insight Meditation West, Spirit Rock Center, Marin County, adopted on May 1, 1988. This current Order prescribes waste discharge requirements for the upgraded Spirit Rock wastewater system and supercedes Order No. 88-078.

Site Description and Location

4. **Facility Site.** Spirit Rock, occupying six acres of a 412-acre parcel, is located at 5000 Sir Francis Drake Boulevard on the northern outskirts of the town of Woodacre. The property was previously undeveloped and used historically for pasturing and grazing of horses and cattle. For the purposes of this Order, this property comprises the facility site. Attachment A of this Order is a plan view drawing showing the location and boundaries of the facility site.

- 5. Facility Site Characteristics.** The majority of the property consists of steeply sloping grassland and wooded hillsides, with a mixed canopy of oak, madrone, bay, fir, and redwood trees. The lower elevations, near Sir Francis Drake Boulevard, are gently sloping to flat grasslands formed from alluvial deposits and colluviums from the surrounding upland areas. Several intermittent and ephemeral streams dissect the area, running generally north to south, and terminating at Sir Francis Drake Boulevard where they join other drainage flows tributary to San Geronimo Creek. Average annual rainfall in this area is about 40 inches.
- 6. Discharges.** The waste discharges to land addressed by this Order consist of treated wastewater from the Spirit Rock dining and meeting halls, dormitories, and residences. Treated wastewater is discharged to land via subsurface pressure-distribution leaching trenches in constructed grass-covered and wooded dispersal areas on the facility site.
- 7. Discharge Quantity.** The current average daily flow is about 2,700 gallons per day (gpd), based on 2007-2008 data. This Order includes an annual wastewater flow limit of 2,218,000 gallons per year, based on an average daily flow value of 6,060 gpd and 366 days. For reference, wastewater flows for the past 12 months are tabulated below:

Monitoring Month	Wastewater Flows (gallons)	
	Month Total	Avg. Day
Feb-07	94,087	3,360
Mar-07	95,645	3,085
Apr-07	60,492	2,016
May-07	73,932	2,385
Jun-07	77,036	2,568
Jul-07	77,041	2,485
Aug-07	79,105	2,551
Sep-07	65,663	2,189
Oct-07	79,625	2,569
Nov-07	77,547	2,585
Dec-07	70,832	2,285
Jan-08	107,025	3,452
Feb-08	91,511	3,155

- 8. Discharge Quality.** The current Order does not require sampling of the sand filter wastewater effluent prior to discharge. Mean results from previous, limited sampling are given below:

<u>Parameter</u>	<u>Concentration</u>	
BOD:	14.8 mg/L	(BOD = 5-day Biochemical Oxygen Demand at 20°C)
TSS:	16.6 mg/L	(TSS = Total Suspended Solids)
N:	56.3 mg/L	(N = Nitrogen)

Wastewater System Design, Construction, and Operation

- 9. Wastewater System.** The wastewater system includes collection in septic tanks and grease traps and some treatment by an intermittent sand filter. Discharge to land is via a subsurface pressure-distribution dispersal system. Additional treatment occurs by natural attenuation processes in the soil. 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 Spirit Rock facility.

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.

- 10. Wastewater Sources and Flows.** Wastewater is generated from the Spirit Rock dining hall as kitchen wastewater from food preparation and service, and sanitary wastewater from employee, resident, and visitor restroom uses. On rare occasions (e.g., 3 times in the past 5 years) during special events, portable toilets are brought onsite as an added sanitary convenience for visitors in certain areas of the site. The design flow capacity of the treated wastewater dispersal system, and maximum discharge rate authorized by this Order, is 9,000 gpd.

- 11. Septic Tanks and Grease Traps.** Wastewater receives primary treatment in several septic and grease trap tanks (total tank capacity of 13,500 gallons) with a portion of the wastewater receiving additional treatment by sand filters. Septic tank effluent is collected in a 3,000-gallon septic tank located in the Meadow area, and then alternately pumped to either the North or South Meadow leach fields, or to the North or South sand filters via a duplex pumping system in the Main Lift Station. Wastewater treated by the sand filters is collected in the Central Field lift station tanks and then alternately discharged to the East and West leach fields.

Attachment B of this Order is a flow diagram illustrating the wastewater treatment and discharge processes and flows.

- 12. Sand Filter.** Two intermittent (slow) sand filters are used to treat wastewater prior to discharge to the Central Field leachfield areas. The sand filters provide treatment through physical, chemical and biological processes. Design criteria are based on recommendations by US Environmental Protection Agency and the Oregon Department of Environmental Quality. Each sand filter has a design capacity of 2,250 gpd.

- 13. Dispersal Area.** Treated wastewater is discharged to land in dedicated dispersal areas located on the facility site: the North and South Meadow leach fields, and the East and West Central Field leach fields.

The Meadow leach fields are located in an open meadow and adjoining wooded hillside area on the west side of the main entrance road into the property. The Meadow leachfields are irregularly shaped and contain approximately 1164 linear feet of trenching with a total design capacity of about 4,500 gpd.

The Central Field leach fields are located in the north-south trending ridges in the central part of the property. Each Central leachfield covers approximately 16,800 square feet and has a design capacity of 2,250 gpd.

- 14. Dispersal System Operation.** The dispersal system is designed to accommodate effluent dispersal year-round. The design soil application rate is 1.2 gallons per square foot per day for the Central Leachfields, and 1.14 to 1.17 gallons per square foot per day for the Meadow Leachfields. Effluent is dispersed alternatively to each of the four separate leach fields (dosing cycle), with the balance of the day affording time for effluent dispersal by plant uptake, evapotranspiration and infiltration into underlying soil. Dosing cycles to each leach field is controlled automatically.

Wastewater Solids

- 15. 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.

Monitoring

- 16. Wastewater Monitoring.** Wastewater flows are currently only monitored for Total Flow from the Spirit Rock facility into the system. This Order contains a Self Monitoring Program that will require wastewater quantity and quality monitoring at various points throughout the wastewater system in order to insure proper operation and performance of the system and document compliance with these requirements.

- 17. Ground Water Monitoring.** The subject wastewater system involves discharges of waste to land. 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.

The Self-Monitoring Program for this Order includes requirements for groundwater monitoring and reporting. There are currently 16 ground water monitoring wells in the general vicinity of the wastewater dispersal areas: Monitoring wells C1, C2, D1, and D2 are located in the Meadow dispersal areas. Monitoring wells A1 – A6 and B4 – B9 are located in the Central dispersal areas. 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 wastewater system dispersal areas. 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

- 18. Operation and Maintenance.** The wastewater system is managed by operators employed by 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.
- 19. 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.

Basis of Requirements

20. Basin Plan. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board, U.S. EPA, and the Office of Administrative Law where required. The latest version was effective as of December 22, 2006.

21. 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.

22. Beneficial Uses. Basin Plan Identifies the following beneficial uses of San Geronimo Creek:

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. Agricultural supply

23. Shellfish Protection Act. San Geronimo Creek is a tributary to Lagunitas Creek and Tomales Bay. In Resolution No. 94-018, the Water Board, as a result of the 1993 Shellfish Protection Act, identified Tomales Bay as an area where the commercial shellfishery is threatened. The Water Board also authorized the formation of a technical advisory committee (TAC) to advise and assist the Water Board in developing an investigation and remediation strategy.

24 Tomales Bay TMDL. Tomales Bay and its tributaries have been identified as impaired for nutrients, sediment, and pathogens. The Tomales Bay watershed has been placed on the Clean Water Act 303(d) list; a Total Maximum Daily Load (TMDL) priority list for pathogens was adopted by the Board on September 21, 2005, and subsequently approved by US EPA on January 10, 2007. The basis for the TMDL pathogen listing includes exceedances of the numeric standard for shellfish and recreational uses. Tomales Bay supports the third largest shellfish harvesting area in the State. The waste material at this facility could potentially be a source of nutrients and pathogens to the watershed.

California Environmental Quality Act (CEQA)

25. CEQA - The issuance of waste discharge requirements for the subject discharges is exempt from the provisions of Chapter 3 (CEQA), Division 6, Title 14 of the California Code of Regulations, pursuant to Section 15301 (existing facilities) of that Chapter.

Notification and Public Meeting

26. 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.

27. 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. Wastewater shall not be allowed to flow from the disposal field via surface flow, airborne spray, or surfacing after percolation.
6. Discharge of treated wastewater to any land other than the designated irrigated disposal field is prohibited unless authorized in writing by the Executive Officer in accordance with provisions of this Order.
7. Migration of pollutants through subsurface transport to waters of the State is prohibited.
8. Discharges of wastewater to the wastewater system in excess of the system operating hydraulic capacity or organic loading treatment capacity are prohibited.
9. 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 restrooms use by visitors, residents, and employees at the Spirit Rock facility.
2. **Authorized Wastewater Flows**
 - a. **Wastewater System.** Discharges of wastewater from the Spirit Rock facility into the wastewater system shall not exceed an average flow of 6,060 gallons per day (annual basis) or a peak flow of 9,000 gallons per day (weekly basis).
 - b. **Sand Filter.** Discharges into either the North or South sand filters shall not exceed a peak flow of 2,250 gallons per day (weekly basis).

- c. **Meadow Leach Field.** Discharges into either the North or South Meadow leach fields shall not exceed a peak flow of 2,250 gallons per day (weekly basis).
- d. **Dispersal System.** Discharges to the dispersal areas shall not:
 - (i) cause the groundwater nitrate-nitrogen concentration to exceed 10 mg/l (as N) at the nearest existing or potential point of groundwater withdrawal,
 - (ii) allow discharged wastewater to surface in the dispersal fields, and
 - (iii) occur when the water table (the combined level of effluent and groundwater) at the respective treatment and dispersal units reaches the following depths (measured from the surface):

Meadow leach fields:	16"
Central leach fields:	10"
Sand Filters:	16"

- 3. **Discharge Discontinuation.** Discharges of effluent to the dispersal area shall be discontinued during any period when the limits specified in B.2 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.

4. Wastewater System Operation and Maintenance.

- a. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of 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.

5. 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.

6. 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.
7. **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.
8. **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. 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 immediately, or as prescribed by the time schedule below, with all Prohibitions, Specifications and Provisions of this Order. All required submittals must be acceptable to the Executive Officer. The Discharger must also comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Water Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Water Board [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, and 13350].
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. **Availability.** A copy of these waste discharge requirements shall be maintained by the Discharger and shall be made available by the Discharger to all employees or contractors performing work (maintenance, monitoring, repair, construction, etc.) at the facility.
4. **Vested Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the Discharger from liability under Federal, State or local laws, nor do they create a vested right for the Discharger to continue the waste discharge. [CWC Section 13263(g)]
5. **Severability.** Provisions of these waste discharge requirements are severable. If any provisions of these requirements are found invalid, the remainder of these requirements shall not be affected. [CWC 9213]
6. **Requests for Technical Reports.** All technical and monitoring reports required by this Order are requested pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or failure to submit a report of sufficient technical quality acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.
7. **Electronic Reporting Format.** In addition to print submittals, all reports submitted pursuant to this Order must be submitted as electronic files in PDF format. The Water Board has implemented a document imaging system, which is ultimately intended to reduce the need for printed report storage space and streamline the public file review process. Documents in the imaging system may be viewed, and print copies made, by the public, during file reviews conducted at the Water Board's office. PDF files can be created by converting the original electronic file format (e.g., Microsoft Word) and/or by

scanning printed text, figures & tables. Upon request by Water Board staff, monitoring results, including water level measurements, sample analytical results, coordinates, elevations, etc., shall be provided electronically in Microsoft Excel[®] or similar spreadsheet format. This format facilitates data computations and/or plotting that Water Board staff may undertake during their review. Data tables submitted in electronic spreadsheet format will not be included in the case file for public. All electronic files, whether in PDF or spreadsheet format, shall be submitted via the Water Board's file transfer protocol (FTP) site, email (only if the file size is less than 3 MB) or on CD. CD submittals may be included with the print report. Email notification should be provided to Water Board staff whenever a file is uploaded to the Water Board's FTP site.

- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.

12. 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 areas.
- 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 areas.
- 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 (existing and/or proposed) 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.

13. 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.

14. Endangerment of Health or the Environment. The Discharger shall report any noncompliance that may endanger health or the environment. Any such information shall be provided orally to the Executive Officer, or an authorized representative, and the California Department of Public Health (CDPH), Environmental Management Branch, PreHarvest Shellfish Unit, within 24 hours from the time the Discharger becomes aware of the circumstances. In addition, the Discharger shall notify the property owners of the adjacent residential properties and commercial facilities (i.e., oyster farmers) by telephone as soon as the Discharger or Discharger's agents have knowledge of the incident. A written submission to the Water Board and CDPH shall be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

15. 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. [CWC Section 13267]

16. 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. [CWC Sections 13267 and 13263]

- 17. 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.
- 18. 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 Board's Basin Plan; or changes in the discharge characteristics.
- 19. Order Termination.** After notice and public meeting, this Order may be terminated or modified by the Board for any reason.
- 20. Rescission of Previous Order.** The waste discharge requirements prescribed by this Order supercede those prescribed by this Board's Order No. 88-078 for Spirit Rock. Order No. 88-078 is hereby rescinded for Spirit Rock.

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 XXXXXXXX, 2008.

BRUCE H. WOLFE
Executive Officer

Attachments:

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

[File No. 2159.5132]

[Prepared by RAD]

[Reviewed by SFG, WKB]