ORDER NO. R1-2014-0014
NPDES NO. CA0024481
WDID NO. 1B82022OSON

WASTE DISCHARGE REQUIREMENTS

FOR THE

OCEAN FARMS, INC.
BODEGA FARMS
SONOMA COUNTY

The following Permittee is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Permittee Information

Permittee	Ocean Farms, Inc.
Name of Facility	Bodega Farms
Facility Address	2000 Estero Lane
	Bodega Bay, CA 94923
	Sonoma County
Maximum Anticipated Flow	0.45 million gallons per day (mgd)
Type of Facility	Concentrated Aquatic Animal Production Facility

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Abalone rearing tank wastewater	38° 17' 49"	123° 00' 16"	Pacific Ocean (Bodega Bay)

Table 3. Administrative Information

This Order was adopted on:	**May 8, 2014**
This Order shall become effective on:	**July 1, 2014**
This Order shall expire on:	**June 30, 2019**
The Permittee shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**January 1, 2019**
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, North Coast Region have classified this discharge as follows:	Minor

IT IS HEREBY ORDERED, that Waste Discharge Requirements (WDR) Order No. R1-2008-0063 and Monitoring and Reporting Program (MRP) No. R1-2008-0063, are rescinded upon the effective date of this Order except for enforcement purposes, and in order to meet the provisions contained in division 7 of the California Water Code (Water Code) (commencing with section 13000) and regulations and guidelines adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Permittee shall comply with the requirements of this Order. This action in no way prevents the North Coast Regional Water Quality Control Board (Regional Water Board) from taking enforcement action for past violations of the previous permit.

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, North Coast Region, on **May 8, 2014.**

Original Signed By

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Matthias St. John, Executive Officer

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I. FACILITY INFORMATION

Information describing the Ocean Farms, Inc. (Permittee), Bodega Farms (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board), finds:

A. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. Basis and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittee's application, monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this Order, and is hereby incorporated into this Order and constitutes Findings for this Order. Attachments A through E and G are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsection V.B. of this Order and sections VI, VII, and VIII.B of the Monitoring and Reporting Program are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

D. Notification of Interested Parties. The Regional Water Board has notified the Permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

E. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

III. DISCHARGE PROHIBITIONS

A. The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.

B. Creation of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code is prohibited.

C. The discharge of waste at any point not described in section II.B of the Fact Sheet or regulated by a permit issued by the State Water Resources Control Board (State Water Board) or another Regional Water Board is prohibited.

D. The discharge of waste to land that is not under the control of the Permittee is prohibited, except as authorized under Section VI.C.6.a (Solids Disposal).

E. The discharge of detectable levels of chemicals used for the treatment and control of disease is prohibited.

F. The discharge of processing wastes and wastewater is prohibited.

G. The discharge of waste resulting from cleaning activities is prohibited.

H. The rate of discharge shall not exceed 450,000 gallons per day (gpd).

I. The discharge of exotic organisms (non-endemic, non-naturalized plants, animals and microorganisms, including gametes, spores, larvae, and parts of such organisms) is prohibited.

J. The discharge of any radiological or biological warfare agent into waters of the state is prohibited under Water Code section 13375.

K. The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table2 to the Ocean Plan (2012) is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The discharge of abalone rearing tank wastewater, as defined by the numerical limitations below, shall maintain compliance with the following effluent limitations at Discharge Point 001, during periods of discharge, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations				
		30-Day Average	Average Weekly (7-Day Average)	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	--	75
Settleable Solids[1]	mL/L	1.0	--	3.0	--	--

Parameter	Units	Effluent Limitations				
		30-Day Average	Average Weekly (7-Day Average)	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Suspended Solids (TSS)[1]	mg/L	8	--	15	--	--
Turbidity	NTU	75	100	--	--	225
pH	standard units	--	--	--	6.0	8.5

Table Notes:

1. This limitation represents an allowable incremental increase above the concentration present in the influent water at Monitoring Location INF-001. The concentration of constituents in the influent shall be subtracted from the final concentration for the purpose of applying this effluent limitation.

2. Interim Effluent Limitations –Discharge Point 001 – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

D. Other Requirements

1. Storm Water Specifications

If notified by the Regional Water Board that coverage is necessary, the Permittee shall seek coverage under the NPDES General Permit for Discharges Associated with Industrial Activities Excluding Construction Activities (General Permit No. CAS000001).

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and Ocean Plan, and are a required part of this Order. In situations where water quality objectives from the Basin Plan and Ocean Plan may both be applicable, the more stringent water quality objective shall apply. Receiving water conditions not in conformance with the limitation are not necessarily a violation of this Order. The Regional Water Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred.

Discharges from the Facility shall not cause the following in the receiving water upon completion of initial dilution:

1. Ocean Plan

a. Bacterial Characteristics

i. Water-Contact Standards. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone designated for water contact recreation use by the Regional Water Board, but including all kelp beds, the following bacteriological objectives shall be maintained throughout the water column.

(a) 30-Day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each receiving water monitoring location.

1) Total coliform density shall not exceed 1,000 per 100 mL;

2) Fecal coliform density shall not exceed 200 per 100 mL; and

3) Enterococcus density shall not exceed 35 per 100 mL.

(b) Single Sample Maximum:

1) Total coliform density shall not exceed 10,000 per 100 mL;

2) Fecal coliform density shall not exceed 400 per 100 mL;

3) Enterococcus density shall not exceed 104 per 100 mL; and

4) Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1.

ii. Shellfish Harvesting Standards. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacterial objectives shall be maintained throughout the water column:

(a) The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

iii. Physical Characteristics

(a) Floating particulates and oil and grease shall not be visible.

(b) The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

(c) Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.

(d) The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

iv. Chemical Characteristics

(a) The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.

(b) The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

(c) The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

(d) The concentration of substances set forth in Chapter II, Table 1 of the Ocean Plan shall not be increased in marine sediments to levels which would degrade indigenous biota.

(e) The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.

(f) Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

(g) Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Chapter II, Table 1 of the Ocean Plan.

(h) Discharge of radioactive waste shall not degrade marine life.

v. Biological Characteristics

(a) Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.

(b) The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

(c) The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

vi. General Standards

(a) The discharge shall not cause a violation of any applicable water quality standard for the receiving waters adopted by the Regional Water Board or the State Water Board as required by the CWA and regulations adopted thereunder.

(b) Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

(c) Waste discharged to the ocean must be essentially free of:

1) Material that is floatable or will become floatable upon discharge.

2) Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

3) Substances which will accumulate to toxic levels in marine waters, sediments or biota.

4) Substances that significantly decrease the natural light to benthic communities and other marine life.

5) Materials that result in aesthetically undesirable discoloration of the ocean surface.

(d) Waste effluents shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

(e) Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:

1) Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports.

2) Natural water quality conditions are not altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.

3) Maximum protection is provided to the marine environment.

4) The discharge does not adversely affect recreational beneficial uses such as surfing and beach walking.

b. Basin Plan

i. The discharge shall not cause the dissolved oxygen concentration of the receiving waters to violate the following objectives established by Table 3-1 of the Basin Plan:

(a) 6.0 mg/L, minimum in any sample;

(b) 6.2 mg/L, 90 percent lower limit (90 percent or more of the monthly mean dissolved oxygen concentrations in a calendar year shall be greater than or equal to 6.2 mg/L); and

(c) 7.0 mg/L, 50 percent lower limit (50 percent or more of the monthly mean dissolved oxygen concentrations in a calendar year shall be greater than or equal to 7.0 mg/L).

ii. The discharge shall not cause the pH of the receiving waters to be depressed below natural background levels nor raised above 8.5.

iii. The discharge shall not cause the turbidity of the receiving waters to be increased more than 20 percent above naturally occurring background levels.

iv. The discharge shall not cause receiving waters to contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

v. The discharge shall not cause the receiving waters to contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

vi. The discharge shall not cause the receiving waters to contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.

vii. The discharge shall not cause coloration of the receiving waters that causes nuisance or adversely affects beneficial uses.

viii. The discharge shall not cause bottom deposits in the receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.

ix. The discharge shall not cause or contribute to the receiving waters concentrations of biostimulants that promote objectionable aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.

x. The discharge shall not cause the receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the Regional Water Board.

xi. The discharge shall not alter the natural temperature of the receiving water.

xii. The discharge shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses. There shall be no bioaccumulation of pesticide concentrations found in bottom sediments or aquatic life as a result of the discharge.

xiii. The discharge shall not cause the receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.

xiv. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the CWA, and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the C WA, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Permittee shall comply with all Standard Provisions included in Attachment D of this Order.

2. **Regional Water Board Standard Provisions.** The Permittee shall comply with the following Regional Water Board standard provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:

   a. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Permittee to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Permittee to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

   b. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, final effluent limitation, receiving water limitation, or provision of this Order that may result in a significant threat to human health or the environment, such as breach of pond containment, , etc., that results in a discharge to a drainage channel or a surface water, the Permittee shall notify Regional Water Board staff within 24 hours and report orally and in writing to the Regional Water Board staff of having knowledge of such noncompliance. The written notification shall state the nature, time, duration, and cause of the noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation.

B. Monitoring and Reporting Program (MRP) Requirements

The Permittee shall comply with the MRP, included as Attachment E of this Order, and future revisions thereto.

C. Special Provisions

1. **Reopener Provisions**

   a. Standard Revisions. If applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.

   b. Reasonable Potential. This Order may be reopened for modification to include an effluent limitation, if monitoring establishes that the discharge causes, or has the reasonable potential to cause or contribute to, an excursion above a water quality criterion or objective applicable to the receiving water.

   c. Whole Effluent Toxicity. As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.

d. 303(d)-Listed Pollutants. If an applicable total maximum daily load (TMDL) (see Fact Sheet, section III.D) program is adopted, this Order may be reopened and effluent limitations for the pollutant(s) that are the subject of the TMDL modified or imposed to conform this Order to the TMDL requirements.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

i. Whole Effluent Toxicity. The MRP of this Order requires routine monitoring for whole effluent toxicity of Discharge Point 001 at Monitoring Location EFF-001 as described in section V of the MRP. As established by the MRP, if a reported median monthly summary result for chronic toxicity is exceeded, the Permittee shall conduct accelerated monitoring as specified in section V of the MRP.

Chronic toxicity is expressed as a null hypothesis (H_0) and regulatory management decision (*b* value) of 0.75 for the chronic toxicity methods in the MRP. The null hypothesis for this discharge is:

H_0: Mean response (100% effluent) ≤ 0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test shall be analyzed and reported using the Test of Significant Toxicity hypothesis testing approach (EPA 833-R-10-003, 2010) in the MRP.

Results of accelerated toxicity monitoring will indicate a need to conduct a TRE if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because toxicity has not been identified by accelerated monitoring. TREs shall be conducted in accordance with the TRE Work Plan prepared by the Permittee pursuant to section VI.C.2.a.ii. of this Order and section V.A.9 of the MRP.

ii. Preparation of Initial Investigation TRE Work Plan. The Permittee's TRE Work Plan shall be reviewed and updated as necessary in order to remain current and applicable to the discharge and discharge facilities.

The Permittee shall notify the Regional Water Board of this review and submit any revisions of the TRE Work Plan within 90 days of the notification, to be ready to respond to toxicity events. The TRE Work Plan shall describe the steps the Permittee intends to follow if toxicity is detected, and should include at least the following items:

(a) A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

(b) A description of the facility's methods of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in the operation of this Facility.

(c) If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program (PMP)

i. The Permittee shall, as required by the Executive Officer, develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as detected, but not quantified (DNQ) when the effluent limitation is less than the method detection limit (MDL), sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

(a) The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the RL;

(b) A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

ii. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

(a) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

(b) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

(c) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

(d) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

(e) An annual status report that shall be submitted as part of the Annual Facility Report due March 1st to the Regional Water Board and shall include:

1) All PMP monitoring results for the previous year;

2) A list of potential sources of the reportable pollutant(s);

3) A summary of all actions undertaken pursuant to the control strategy; and

4) A description of actions to be taken in the following year.

b. Best Management Practices (BMP) Plan

i. The Permittee shall maintain a BMP Plan which describes how they will meet the goals and requirements established below. The BMP Plan shall ensure that the following objectives are met:

(a) The number and quantity of pollutants discharged or potentially discharged from the Facility shall be minimized to the extent feasible by appropriately managing each waste stream.

(b) Each Facility system shall be examined for its potential to cause a release of pollutants and opportunities to minimize waste. The examination shall include all normal Facility operations, including, but not limited to: structural maintenance, cleaning, feed management, transfer and importation of species, removal of mortalities, storage and handling of raw material, disposal of solid waste, employee training, and recordkeeping.

ii. The BMP Plan shall establish and document specific BMPs and operating procedures to attain the objectives specified above and shall follow the general guidance contained in the *Guidance Manual for Developing Best Management Practices* (U.S. EPA, 1993). The BMP Plan shall include a statement of BMP policy and describe, at a minimum, feeding procedures, cleaning and maintenance procedures, schedules of activities, prohibited practices, treatment methods, and employee training.

iii. The Permittee shall amend the BMP Plan whenever there is a change in the Facility or in its operation which increases the generation of pollutants or their discharge to receiving waters. Revision dates and summaries of revisions shall be documented in the BMP Plan.

iv. The Permittee shall maintain a copy of the BMP Plan at the Facility and shall make the Plan available to the Executive Officer or representatives thereof upon request.

v. The Permittee shall include in the BMP Plan and implement the applicable BMPs below:

(a) Solids Control

1) The Permittee shall employ efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth to minimize potential discharges of uneaten feed and waste products to waters of the United States.

2) The Permittee shall identify and implement procedures for routine cleaning of rearing units and off-line settling basins, and procedures to minimize discharges of accumulated solids during inventorying, grading, and harvesting in the production system.

3) The Permittee shall remove and dispose of mortalities properly on a regular basis to prevent discharge to waters of the United States, except where the Regional Water Board authorizes such discharge.

(b) Material Storage

1) The Permittee shall ensure proper storage of drugs, pesticides, and feed to prevent spills that may result in discharges to waters of the United States.

2) The Permittee shall implement procedures for properly containing, cleaning, and disposing of any spilled material.

(c) Structural Maintenance

1) The Permittee shall inspect abalone production and wastewater treatment systems on a routine basis to identify and promptly repair damage.

2) The Permittee shall conduct regular maintenance of abalone production and wastewater treatment systems to ensure their proper function.

(d) Recordkeeping

1) The Permittee shall maintain records that document feed amounts and the numbers and weight of aquatic animals.

2) The Permittee shall keep records documenting the frequency of cleaning, inspections, maintenance, and repairs.

(e) Training

1) The Permittee shall train Facility personnel in spill prevention and spill response.

2) The Permittee shall train staff regarding proper operation and cleaning of production and wastewater treatment systems, including feeding procedures and equipment use.

4. Construction, Operation and Maintenance Specifications – Not Applicable

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions

a. Solids Disposal. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Title 27, division 2 of the California Code of Regulations.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below.

A. General

Compliance with effluent limitations for priority pollutants, when effluent limitations have been established, shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL). For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed out of compliance with effluent limitations if the concentration of pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported minimum level (ML).

Permittees are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

B. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants, and more than one sample result is available, the Permittee shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Permittee shall compute the median in place of the arithmetic mean in accordance with the following procedure.

The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a

31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Permittee will be considered out of compliance for that calendar month. The Permittee will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Permittee will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Permittee will be considered out of compliance for that calendar week. The Permittee will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection B, above, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Permittee will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

F. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Permittee will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

ATTACHMENT A – DEFINITIONS

Acute Toxicity (not applicable to Test of Significant Toxicity hypothesis testing)

a. Acute Toxicity (TUa)
Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{\text{96-hr LC 50\%}}$$

b. Lethal Concentration 50% (LC 50)
LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the Permittee as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

Areas of Special Biological Significance (ASBS)
Those areas designated by the State Water Resources Control Board (State Water Board) as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Arithmetic Mean (μ)
Also called the average is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative Pollutants
Substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic Pollutants
Substances that are known to cause cancer in living organisms.

Chlordane
Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity (not applicable to Test of Significant Toxicity hypothesis testing)
This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)
   Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III, Table III-1.

Coefficient of Variation (CV)
A measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT
Shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degrade
Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)
Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes
Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Dilution Credit
The amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Downstream Ocean Waters
Waters downstream with respect to ocean currents.

Dredged Material
Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil."

Effective Concentration (EC)
A point estimate of the toxicant concentration that would cause an adverse effect on a quantal, "all or nothing," response (such as death, immobilization, or serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as probit, logit, and Spearman-Karber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

Effluent Concentration Allowance (ECA)
A value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan
The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estimated Chemical Concentrations
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, Russian, San Diego, and Otay Rivers. Estuaries do not include inland surface waters or ocean waters.

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Inhibition Concentration
The IC25 is typically calculated as a percentage of effluent. It is the level at which the organisms exhibit 25 percent reduction in biological measurement such as reproduction or growth. It is calculated statistically and used in chronic toxicity testing.

Initial Dilution
The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum

induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Water Board, whichever results in the lower estimate for initial dilution.

Inland Surface Waters
All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Kelp Beds
For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Mariculture
The culture of plants and animals in marine waters independent of any pollution source.

Material
(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)
The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Natural Light
Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND)
Those sample results less than the laboratory's MDL.

Ocean Waters
The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons)
The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls)
The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Persistent Pollutants
Substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3).

Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Publicly Owned Treatment Works (POTW)
A treatment works as defined in section 212 of the Clean Water Act (CWA), which is owned by a State or municipality as defined by section 502(4) of the CWA. [Section 502(4) of the CWA defines a municipality as a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes). This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

Reporting Level (RL)
The ML (and its associated analytical method) used for reporting and compliance determination. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Shellfish
Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference
Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation
The highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs)
Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Standard Deviation (σ)
A measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

TCDD Equivalents
The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

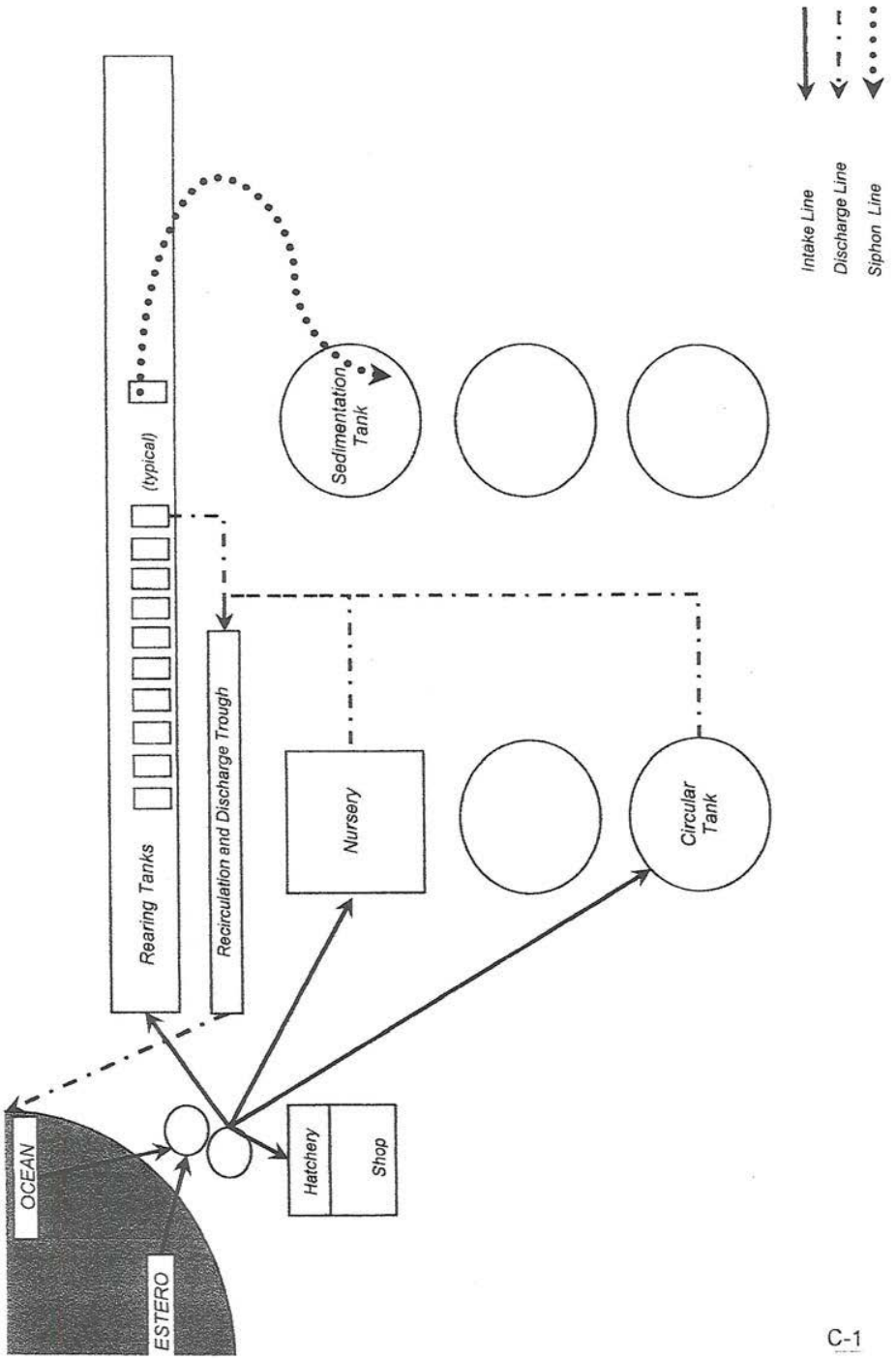
Toxicity Reduction Evaluation (TRE)
A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Waste
As used in the Ocean Plan, waste includes a discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

Water Recycling
The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B – MAP

ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Permittee must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Permittee 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 Permittee to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Permittee shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative),

upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Permittee submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

a. An upset occurred and that the Permittee can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Order after the expiration date of this Order, the Permittee must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Permittee and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Permittee (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Permittee shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Permittee shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus

be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, 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 for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Permittee 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 steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Permittee shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Permittee shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Permittee shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Contents

Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. California Water Code section 13383 also authorizes the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. Wastewater Monitoring Provision. Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

B. If the Permittee monitors any pollutant more frequently than required by this Order, using test procedures approved by 40 C.F.R. part 136 or as specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharge monitoring reports.

C. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (CDPH) in accordance with the provisions of Water Code section 13176, and must include quality assurance / quality control data with their analytical reports.

D. All monitoring instruments and devices used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated no less than the manufacturer's recommended intervals or one year intervals, (whichever comes first) to ensure continued accuracy of the devices.

E. Reasonable potential monitoring analyses shall be conducted using commercially available and reasonably achievable detection limits that are lower than the applicable water quality objectives in Table 1 of the Ocean Plan. If no Minimum Level (ML) value is below the water quality objectives, the lowest ML shall be selected as the Reporting Level (RL). Appendix II of the Ocean Plan lists the test methods the Permittee may use for reasonable potential monitoring to analyze priority pollutants.

II. MONITORING LOCATIONS

The Permittee shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	A location where representative samples of seawater can be collected prior to its introduction to the rearing system.
001	EFF-001	A location where representative samples of discharges from the rearing tank system can be collected, following all contributions to and treatments of the waste stream but prior to contact with the receiving water.

The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

1. During periods of discharge, the Permittee shall monitor intake seawater to the rearing tank system at Monitoring Location INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency	Required Analytical Test Method
Total Suspended Solids (TSS)	mg/L	Composite	Weekly[2]	Standard Methods[3]
Settleable Solids	mL/L-hr	Composite	Weekly[2]	Standard Methods
pH	s.u.	Grab	Weekly	Standard Methods

Table Notes:

1. Composite samples for non-Ocean Plan Table 1 parameters may be taken by a proportional sampling device approved by the Executive Officer or by grab sample composites. In compositing grab samples, the sampling interval shall not exceed 2 hours. A grab sample is defined as an individual sample of at least 100 mL collected over a period not exceeding 15 minutes. Grab samples shall be collected over a shorter period if necessary to ensure that the parameter in the sample is the same as the sampling location at the time the sample is collected.
2. Monitoring of intake water shall occur near simultaneously with monitoring of the discharge from the rearing tank system at Monitoring Location EFF-001.
3. In accordance with the current edition of *Standard Methods for Examination of Water and Wastewater* (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Permittee shall monitor the discharge from the rearing tanks prior to contact with the receiving water at Monitoring Location EFF-001 during periods of discharge to Bodega Bay as follows:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Meter	Continuous	--
Oil and Grease	mg/L	Composite	Annually	Standard Methods[2]
Total Suspended Solids (TSS)	mg/L	Composite	Weekly[3]	Standard Methods
Settleable Solids	mL/L-hr	Composite	Weekly[3]	Standard Methods
Turbidity	NTU	Composite	Weekly	Standard Methods
pH	s.u.	Grab	Weekly	Standard Methods
Ammonia, Total (as N)	mg/L	Composite	Annually	Standard Methods
Ocean Plan Table 1 Pollutants[4]	µg/L	Composite[5]	Three Per Term[6]	Standard Methods

Parameter	Units	Sample Type[1]	Minimum Sampling Frequency	Required Analytical Test Method
Chronic Toxicity[7]	Pass or Fail, % Effect	Grab	1/Year	See Section V below

Table Notes:

1. Composite samples for non-Ocean Plan Table 1 parameters may be taken by a proportional sampling device approved by the Executive Officer or by grab sample composites. In compositing grab samples, the sampling interval shall not exceed 2 hours. A grab sample is defined as an individual sample of at least 100 mL collected over a period not exceeding 15 minutes. Grab samples shall be collected over a shorter period if necessary to ensure that the parameter in the sample is the same as the sampling location at the time the sample is collected.
2. In accordance with the current edition of *Standard Methods for Examination of Water and Wastewater* (American Public Health Administration) or current test procedures specified in 40 C.F.R. part 136.
3. Monitoring for TSS and settleable solids shall coincide with monitoring at Monitoring Location INF-001.
4. Those pollutants listed in Table 1 of the Ocean Plan (2012), excluding Table 1 pollutants with specific monitoring requirements established by this table (Table E-3) and acute toxicity.
5. Grab samples shall be used for volatile chemicals listed in Table II-1 of the Ocean Plan (2012). Composite samples shall be used for all other Ocean Plan Table 1 parameters.
6. Monitoring shall occur during the first year of the permit term in which a discharge occurs and every other year thereafter.
7. The **median monthly summary result** shall be reported as "Pass" or "Fail." The **maximum daily single result** shall be reported as "Pass" or "Fail" with a "% Effect." Exactly three independent toxicity results are required when one toxicity test results in "Fail." Refer to section V.8 for accelerated monitoring.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

Although effluent limitations for whole effluent toxicity (WET) are not established by the Order, WET testing of discharge is required by this MRP to assess whether there is reasonable potential to exceed water quality objectives established by the Ocean Plan for chronic WET. In certain circumstances, accelerated WET testing and/or a Toxicity Reduction Evaluation (TRE) are required by the MRP. Table E-4, below, summarizes the WET testing requirements of the MRP.

Table E-4. Summary of WET Testing Requirements

Monitoring Location	WET Testing Requirement
EFF-001	Chronic WET shall be tested once per year for discharges of abalone rearing tank wastewater.

A. Chronic Toxicity Testing

The Permittee shall conduct chronic toxicity testing. The Permittee shall meet the following chronic toxicity testing requirements:

1. **Test Frequency.** The Permittee shall conduct chronic WET testing in accordance with the schedule established by this MRP while discharging at Discharge Point 001, as summarized in MRP section IV.A and Table E-4, above.
2. **Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity**. The chronic toxicity IWC for this discharge is 100 percent effluent.
3. **Sample Volume and Holding Time.** The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform

the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

4. **Chronic Marine Test Species and Test Methods.** If effluent samples are collected from outfalls discharging to receiving waters with salinity ≥1 ppt, the Permittee shall conduct the following chronic toxicity tests on effluent samples at the IWC for the discharge in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

   a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.011).

   b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).

   c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

5. **Species Sensitivity Screening**. Species sensitivity screening shall be conducted during this permit's first required sample collection. The Permittee shall collect a single effluent sample and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required for the discharge. The species that exhibits the highest "Percent (%) Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit term.

6. **Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

   a. The discharge is subject to determination of "Pass" or "Fail" and "Percent (%) Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response 0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: ((Mean control response Mean discharge IWC response) ÷ Mean control response)) × 100.

b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, then the Permittee must re-sample and re-test within 14 days.

c. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.

e. The Permittee shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the MRP and the rationale is explained in the Fact Sheet (Attachment F).

Ammonia Removal. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Permittee must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

i. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

ii. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

iii. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

iv. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent.

7. Notification. The Permittee shall notify the Regional Water Board verbally within 72 hours and in writing within 14 days after the receipt of test results exceeding a median monthly summary result of "Fail" during routine monitoring or a single test result of "Fail" during accelerated monitoring.

8. Accelerated Monitoring Requirements. Within 24 hours of the time the Permittee becomes aware of a median monthly summary result "Fail", the Permittee shall implement

an accelerated monitoring schedule consisting of four toxicity tests—consisting of 5-effluent concentrations (including the discharge IWC) and a control—conducted at approximately two week intervals, over an eight week period. If each of the accelerated toxicity tests results in "Pass", the Permittee shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail", the Permittee shall immediately implement the Toxicity Reduction Evaluation (TRE) Process conditions set forth below:

9. Toxicity Reduction Evaluation (TRE) Process.

a. Preparation and Implementation of a Detailed TRE Work Plan. The Permittee shall immediately initiate a TRE using, according to type of treatment facility, EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989) and within 30 days submit to the Regional Water Board Executive Officer a Detailed TRE Work Plan, which shall follow the generic initial investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Regional Water Board Executive Officer:

i. Further actions by the Permittee to investigate, identify, and correct causes of toxicity.

ii. Actions the Permittee will take to mitigate effects of the discharge and prevent the recurrence of toxicity.

iii. A schedule for these actions, progress reports, and the final report.

b. TIE Implementation. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test methods and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Permittee shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

d. The Permittee shall conduct routine effluent monitoring for the duration of the TRE process. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.

e. The Regional Water Board recognizes that toxicity may be episodic and identification of the causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

10. Reporting. The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, including:

a. The toxicity test results for the TST approach, reported as "Pass" or "Fail" and "Percent (%) Effect" at the chronic toxicity IWC for the discharge.

b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

c. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.

d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Surface Water Monitoring – Not Applicable

B. Groundwater Monitoring – Not Applicable

IX. OTHER MONITORING REQUIREMENTS

A. Chemical and Drug Use

The Permittee shall report annually on chemicals and drugs used for disease control, disinfection, and health maintenance at the Facility with sufficient information to determine compliance with Discharge Prohibition III.E. Reporting shall include the following information:

1. Product name, active ingredients, and reasons for use;

2. Duration of treatment and method of application (batch or continuous);

3. The location where treatment was applied and volume of water that received treatment;

4. Application rates of products;

5. The amount of medicated feed used, including active medicinal ingredients; and

6. The fate of chemicals and drugs (e.g., discharged, transported off-site, etc.).

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Permittee shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self-Monitoring Reports (SMRs)

1. The Permittee shall submit electronic Self-Monitoring Reports (eSMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal. The Permittee shall maintain sufficient staffing and resources to ensure it submits eSMRs that are complete and timely. This includes provision of training and supervision of individuals (e.g., Permittee personnel or consultant) on how to prepare and submit eSMRs.
2. The Permittee shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Permittee shall submit monthly SMRs including the results of all required monitoring using U.S. EPA -approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Permittee monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. All monitoring results reported shall be supported by the inclusion of the complete analytical report from the laboratory that conducted the analyses.
4. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	First day of second calendar month following month of sampling
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	First day of second calendar month following month of sampling
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	First day of second calendar month following month of sampling
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	First day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January through March April through June July through September October through December	First day of second calendar month following end of quarter
Semi-annually	Closest of January 1 or July 1 following (or on) permit effective date	January through June July through December	September 1, each year March 1, each year
Annually	January 1 following (or on) permit effective date	January 1 through December 31	March 1, each year
Once per Permit Term	Permit effective date	All	With application for permit renewal

5. **Reporting Protocols.** The Permittee shall report with each sample result the applicable ML, the RL, and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. § 136.

   The Permittee shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

   d. The Permittee is to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

6. The Permittee shall submit SMRs in accordance with the following requirements:

   a. The Permittee shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The reported data shall include calculation of

all effluent limitations that require averaging, taking of a median, or other computation. The Permittee is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Permittee shall electronically submit the data in a tabular format as an attachment.

b. The Permittee shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:

i. Facility name and address;

ii. WDID number;

iii. Applicable period of monitoring and reporting;

iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);

v. Corrective actions taken or planned; and

vi. The proposed time schedule for corrective actions.

c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the CIWQS Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). In the event that paper submittal of SMRs is required, the Permittee shall submit the SMR to the address listed below:

Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

C. Discharge Monitoring Reports (DMRs) – Not Applicable

D. Other Reports

1. The Permittee shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C.2 and VI.C.3 of this Order.

2. Annual Report. The Permittee shall submit an annual report to the Regional Water Board for each calendar year through the CIWQS Program Web site. In the event that a paper copy of the annual report is required, the Permittee shall submit the report to the address in section X.B.6.c., above. The report shall be submitted by March 1st of the following year. The report shall, at a minimum, include the following:

a. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Permittee monitors any pollutant more frequently than required by this Order, using test procedures approved under 40 C.F.R. part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted SMR.

b. A comprehensive discussion of the Facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.

c. The names and general responsibilities of all persons employed at the Facility;

d. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations; and

e. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.

ATTACHMENT F – FACT SHEET

Contents

Tables

ATTACHMENT F – FACT SHEET

As described in section I, the Regional Water Board incorporates this Fact Sheet as findings of the Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Permittee. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Permittee.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	1B820220SON
Permittee	Ocean Farms, Inc.
Name of Facility	Bodega Farms
Facility Address	2000 Estero Lane
	Bodega Bay, CA 94923
	Sonoma County
Facility Contact, Title and Phone	H. Roy Gordon, President, (415) 595-0833
Authorized Person to Sign and Submit Reports	H. Roy Gordon, President
Mailing Address	P.O. Box 6886, San Rafael, CA 94903
Billing Address	Same as Mailing Address
Type of Facility	Concentrated Aquatic Animal Production Facility
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	C
Pretreatment Program	NA
Recycling Requirements	NA
Facility Permitted Flow	0.45 million gallons per day (mgd), maximum daily discharge rate
Facility Design Flow	0.43 mgd, maximum projected 30-day average discharge rate
Watershed	Russian/Bodega Watershed Management Area (WMA)
Receiving Water	Pacific Ocean
Receiving Water Type	Marine

A. Ocean Farms, Inc. (hereinafter Permittee) is the owner and operator of Bodega Farms (hereinafter Facility), an abalone rearing facility.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Permittee herein.

B. The Facility discharges once-through abalone rearing tank wastewater to the Pacific Ocean, a water of the United States. The Permittee was previously regulated by Order No. R1-2008-0063 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0024481 adopted on July 24, 2008 and expired on September 12, 2013. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Permittee filed a report of waste discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit on January 18, 2013. The application was deemed complete on December 2, 2013.

II. FACILITY DESCRIPTION

The Facility is a red abalone rearing facility. The Facility falls under the concentrated aquatic animal production category as defined in Appendix C to 40 C.F.R. part 122. Seawater is pumped from the Estero Americano during flood tide through a screen to a holding tank, where it is pumped uphill to additional holding tanks. The intake water is filtered through multiple cartridge filters prior to discharge into fiberglass raceway tanks for aquaculture of abalone. Abalone larvae are settled out in the raceway tanks or in a nursery. The Facility utilizes twenty 16' x 4' x 1.5' tanks, five 16' x 4' x 2.5' tanks, forty-eight 10' x 2' x 5' tanks, seven 3' x 10' x 2' brood tanks, four 40' x 1' circular tanks, and one 40' x 4' circular sediment tank.

Juvenile abalone seeds are grown out on fiberglass wavy plates and feed on natural occurring diatoms in the intake water when small, and are fed brown kelp as they grow larger, at a rate of 16,000 pounds of kelp per month at full operation. The Facility anticipates a maximum harvestable weight of 11,600 pounds per year and a maximum weight at any one time of 15,000 pounds. All flows leaving the raceways and tanks are plumbed to a trough. The trough contains a series of two barrels and three baffles which detain the majority of the particulate found in daily flows. The once-through rearing tank wastewater is discharged at Discharge Point 001 to the surf zone of the Pacific Ocean, a water of the United States. The Facility anticipates a year round operation, but may not operate during periods when the Estero Americano is closed from tidal influence. During brief periods when the Estero Americano is closed from tidal action by the formation of a sandbar, seawater is either pumped from the ocean line or re-circulated through the system.

Processing waste, which consists of abalone viscera, is used as land-based compost and is no longer discharged with wastewater. During tank cleaning, the tanks are drained slowly to within 1 inch of the bottom, and any particulate matter is siphoned to the sediment tank and left to evaporate. The trough is also periodically cleaned into the sediment tank.

A. Description of Wastewater and Biosolids Treatment and Controls

The Permittee does not employ chemical or biological wastewater treatment prior to discharging, rather, treatment is limited to solids removal through baffles and sedimentation. When recirculation of seawater or use of the ocean line is employed due to restricted intake at Estero Americano, additional treatment to remove solids and organic material from intake water is provided by cartridge filtration, stripper, ultraviolet (UV) disinfection, biological filtration and aeration. The Permittee employs best management practices (BMPs), however, to control and minimize the discharge of pollutants from the Facility. The BMPs include incorporation of the baffle system in the trough, as described above; the use of a sediment tank for disposal of particulate matter when cleaning the tanks; maintaining high dissolved oxygen levels in the rearing tanks; removal of dead abalone and shells from the flow through system for compost; and

the sale of processing waste to fishermen as bait. The Facility does not use chemicals or drugs in the flow-through system.

B. Discharge Points and Receiving Waters

The Facility and the point of discharge in the surf zone of Bodega Bay are located in the Russian/Bodega Watershed Management Area (WMA) and within the Estero Americano Hydrologic Area of the Bodega Hydrologic Unit. Abalone rearing tank wastewater is discharged at Discharge Point 001 to the Pacific Ocean, a water of the United States, at latitude 38° 17' 49" N and longitude 123° 00' 16" W.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Effluent limitations contained in Order No. R1-2008-0063 for discharges from Discharge Point 001 (Monitoring Location EFF-001) are as follows. The Permittee did not discharge at Discharge Point 001 during the term of Order No. R1-2008-0063; therefore, effluent monitoring data is not available.

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation		
		Average Monthly	Average Weekly	Maximum Daily
Oil and Grease	mg/L	25	40	75
	lbs/day[1]	94	150	280
Total Suspended Solids (TSS)[1]	mg/L	8	--	15
	lbs/day[1]	30	--	56
Settleable Solids[1]	mL/L-hr	1.0	--	3.0
Turbidity	NTU	75	100	225
pH	s.u.	--	--	7.0 – 8.5[2]

Table Notes:
1. This limitation represents an allowable incremental increase above the concentration present in the influent water. The concentration of constituents in the influent shall be subtracted from the final concentration for the purpose of applying this effluent limitation.
2. Not less than 7.0 nor greater than 8.5.

D. Compliance Summary

The Permittee did not experience any violations of the effluent limitations or permit requirements during the term of Order No. R1-2008-0063.

E. Planned Changes

There are no changes in operation or modifications to facilities planned for the Facility during the anticipated term of this Order which will cause a material change in the volume or quality of discharges from the Facility.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

C. State and Federal Laws, Regulations, Policies, and Plans

1. **Water Quality Control Plan.** The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. With high concentrations of total dissolved solids, ocean waters meet an exception to State Water Board Resolution No. 88-63; and therefore, the MUN designation is not applicable to the ocean receiving water for this Permittee. Beneficial uses applicable to the Pacific Ocean are summarized in Table F-3, below:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Existing: Navigation (NAV); Water contact recreation (REC-1); Non-contact water recreation (REC-2); Commercial and sport fishing (COMM); Wildlife habitat (WILD); Rare, threatened, or endangered species (RARE); Marine habitat (MAR); Migration of aquatic organisms (MIGR); Spawning, reproduction, and/or early development (SPAWN); Shellfish harvesting (SHELL); and Aquaculture (AQUA). Potential: Industrial water supply (IND); Industrial process supply (PRO); and Preservation of Areas of Special Biological Significance (ASBS).

Requirements of this Order implement the Basin Plan.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters. The Permittee does not discharge thermal waste; therefore, the Order does not include effluent limitations for temperature in response to the requirements of the Thermal Plan.

3. **California Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, and 2012. The State Water Board adopted the latest amendment on October 16, 2012, and it became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the Pacific Ocean. In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program for implementation. The Ocean Plan identifies the beneficial uses of ocean waters of the State to be protected as summarized below:

Table F-4. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Existing: Industrial water supply; Water contact and non-contact recreation, including aesthetic enjoyment; Navigation; Commercial and sport fishing; Mariculture; Preservation and enhancement of designated Areas of Special Biological Significance (ASBS); Rare and endangered species; Marine habitat; Fish migration; Fish spawning; and Shellfish harvesting.

Requirements of this Order implement the Ocean Plan.

4. **Compliance Schedules and Interim Requirements.** The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, which includes compliance schedule policies for pollutants that are not addressed by the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). This Policy became effective on August 27, 2008.

   This Order does not include a compliance schedules or interim effluent limitations.

5. **Alaska Rule.** On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved by U.S. EPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by U.S. EPA.

6. **Antidegradation Policy.** 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. As discussed in detail in section IV.D.2 of this Fact Sheet, the permitted discharge

is consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

8. **Endangered Species Act Requirements.** This Order does not authorize an act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Permittee is responsible for meeting all requirements of the applicable Endangered Species Act.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the federal CWA requires states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses after implementation of technology-based effluent limitations on point sources. Each state must submit an updated list, the 303(d) List of Impaired Waterbodies, to U.S. EPA by April of each even numbered year. In addition to identifying the waterbodies that are not supporting beneficial uses, the 303(d) list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. The CWA requires development of a total maximum daily load (TMDL) for each 303(d) listed pollutant and water body contaminant. TMDLs establish the maximum quantity of a given pollutant that can be added to a water body from all sources without exceeding the applicable water quality standard for that pollutant and determine wasteload allocations (the portion of a TMDL allocated to existing and future point sources) and load allocations (the portion of a TMDL attributed to existing and future nonpoint sources).

On October 11, 2011, the U.S. EPA provided final approval of the 2008-2010 303(d) list of impaired water bodies prepared by the State. Bodega Bay, in the vicinity of the discharge, is not listed as an impaired waterbody on the 303(d) list. The list identifies Bodega Harbor, located within Bodega Bay Hydrologic Unit, as impaired for invasive species. This Order prohibits the discharge of exotic species.

E. Other Plans, Polices and Regulations

1. On June 17, 1982, the State Water Board adopted Resolution No. 82-34, attached to this Order as Attachment G, which granted an exception to the Ocean Plan 75 percent removal requirement for total suspended solids (TSS), and established net effluent limitations for TSS and settleable solids for the Facility.

2. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Permittee must file a petition with the State Water Board, Division of Water Rights, and

receive approval for such a change. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water where a reasonable potential to exceed those criteria exist.

A. Discharge Prohibitions

1. **Discharge Prohibition III.A.** The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.

   Because limitations and other requirements of the Order have been established based on the current understanding of Facility operations by Regional Water Board staff, as provided by the Permittee, discharges not addressed by the Order have not been properly considered by the Regional Water Board and are viewed as unauthorized discharges.

2. **Discharge Prohibition III.B.** Creation of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code is prohibited.

   This prohibition is based on section 13050 of the Water Code and section 5411 of the California Health and Safety Code. It is a standard condition/prohibition included in NPDES permits and waste discharge requirements adopted by the Regional Water Board.

3. **Discharge Prohibition III.C.** The discharge of waste at any point not described in Finding II.B of the Fact Sheet or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.

   This prohibition is a general prohibition that allows the Permittee to discharge waste only in accordance with WDRs. It is based on sections 301 and 402 of the federal CWA and section 13263 of the Water Code.

4. **Discharge Prohibition III.D.** The discharge of waste to land that is not under the control of the Permittee is prohibited, except as authorized under Section VI.C.6.a (Solids Disposal).

   This prohibition is retained from Order No. R1-2008-0063. Land used for the application of wastewater must be owned by the Permittee or be under the control of the Permittee by contract so that the Permittee maintains a means for ultimate disposal of treated wastewater.

5. **Discharge Prohibition III.E.** The discharge of detectable levels of chemicals used for the treatment and control of disease is prohibited.

   This prohibition is retained from Order No. R1-2008-0063 and is contained in the Basin Plan *Policy on the Regulation of Fish Hatcheries, Fish Rearing Facilities, and Aquaculture Operations.*

6. **Discharge Prohibition III.F.** The discharge of processing wastes and wastewater is prohibited.

   This prohibition is retained from Order No. R1-2008-0063 and is based on current Facility operations where process wastes are no longer discharged in the effluent and the effluent limitations in this Order reflect the current operations.

7. **Prohibition III.G.** The discharge of waste resulting from cleaning activities is prohibited.

   This prohibition is retained from Order No. R1-2008-0063 and is contained in the Basin Plan *Policy on the Regulation of Fish Hatcheries, Fish Rearing Facilities, and Aquaculture Operations*.

8. **Prohibition III.H.** The rate of discharge shall not exceed 450,000 gallons per day (gpd).

   This Prohibition is retained from Order No. R1-2008-0063 and limits the rate of discharge to the maximum flow rate contemplated by the Regional Water Board in establishing effluent limitations and requirements in this Order.

9. **Prohibition III.I.** The discharge of exotic organisms (non-endemic, non-naturalized plants, animals and microorganisms, including gametes, spores, larvae, and parts of such organisms) is prohibited.

   This prohibition is retained from Order No. R1-2008-0063 and reflects the Regional Water Board's concern regarding the introduction of non-native and/or exotic species and/or fish pathogens in Bodega Bay. This prohibition is relevant because Bodega Harbor, and adjacent waterbody, is 303(d) listed for exotic species.

10. **Prohibition III.J.** The discharge of any radiological or biological warfare agent into waters of the state is prohibited under Water Code section 13375.

    This prohibition is established by this Order and is based on the discharge prohibitions contained in section III.I. of the Ocean Plan.

11. **Prohibition III.K.** The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 to the Ocean Plan (2012) is prohibited.

    This prohibition is established by this Order and is based on the discharge prohibitions contained in section III.I. of the Ocean Plan.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 C.F.R. section 125.3 authorize the use of BPJ to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

2. Applicable Technology-Based Effluent Limitations

ELGs for the Flow-Through and Recirculating Systems Subcategory of the Concentrated Aquatic Animal Production Point Source Category are established at 40 C.F.R. part 451, subpart A. The ELGs are applicable to facilities that produce 100,000 pounds or more of aquatic animals per year in a flow-through system. The ELGs at 40 C.F.R. part 451, subpart A require implementation of BMPs to represent the application of BPT. The ROWD indicates that the expected maximum red abalone (*Haliotis rufescens)* production is 11,600 pounds per year; therefore, the ELGS at 40 C.F.R. part 451, subpart A are not applicable to the Facility. Although the ELGs are not directly applicable to this Permittee, this Order includes a requirement to maintain a BMP Plan, as contemplated by the ELGs, based on BPJ.

Table 2 of the Ocean Plan specifies effluent limitations that apply only to publicly owned treatment works and industrial discharges for which ELGs have not been established pursuant to Sections 301, 302, 304, or 306 of the Federal CWA. Compliance with Table 2 effluent limitations, or EPA ELGs for industrial discharges, based on BCT, shall be the minimum level of treatment acceptable under the Ocean Plan, and shall define reasonable treatment and waste control technology. The Facility is not subject to ELGs at this time.

Therefore, technology-based limitations contained in Table 2 of the Ocean Plan are applicable to the Permittee.

The effluent limitations for oil and grease and turbidity have been retained from Order No. R1-2008-0063 and reflect the requirements of Table 2 of the 2012 Ocean Plan. The State Water Board adopted Resolution No. 82-34 on June 17, 1982, which granted an exception to the Ocean Plan Table 2 requirements of 75% removal of TSS and established "net" effluent limitations for TSS and settleable solids. Consistent with Order No. R1-2008-0063 and Resolution No. 82-34, this Order includes net effluent limitations for settleable solids and TSS and does not include the 75% removal requirement for TSS.

Order No. R1-2008-0063 established mass-based effluent limitations for oil and grease and TSS. As discussed further in section IV.D.1 of this Fact Sheet, this Order does not retain mass limitations for oil and grease and TSS.

Table F-5. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations				
		30-Day Average	Average Weekly (7-Day Average)	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	--	75
Settleable Solids[1]	mL/L	1.0	--	3.0	--	--
Total Suspended Solids (TSS)[1]	mg/L	8	--	15	--	--
Turbidity	NTU	75	100	--	--	225
pH	standard units	--	--	--	6.0	9.0

Table Notes:

1. This limitation represents an allowable incremental increase above the concentration present in the influent water at Monitoring Location INF-001. The concentration of constituents in the influent shall be subtracted from the final concentration for the purpose of applying this effluent limitation.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) of 40 C.F.R. requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant

of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. Beneficial Uses. Beneficial use designations for receiving waters for discharges from the Facility are presented in section III.C.1 of this Fact Sheet.

b. Ocean Plan Water Quality Objectives. Water quality criteria applicable to ocean waters of the Region are established by the Ocean Plan, which includes general provisions and water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. These water quality objectives from the Ocean Plan are incorporated as receiving water limitations into the Order. Table 1 of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Monitoring data for the Ocean Plan Table 1 constituents was not available at the time of permit reissuance; therefore, the Regional Water Board was unable to conduct a reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table 1 toxic pollutants pursuant to NPDES regulations at 40 C.F.R. section 122.44(d)(1) and the Ocean Plan.

3. Determining the Need for WQBELs

NPDES regulations at 40 C.F.R. section 122.44 (d) require effluent limitations to control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

a. Ocean Plan Reasonable Potential Analysis (RPA). Monitoring data for the Ocean Plan Table 1 constituents was not available at the time of permit reissuance. Therefore, an RPA was not conducted.

b. pH. Chapter 3, Table 3-1 of the Basin Plan includes site-specific water quality objectives for pH for Bodega Bay which specify that the pH shall not be depressed below natural background levels nor raised above 8.5. This Order includes an instantaneous minimum effluent limitation of pH 6.0 based on Table 2 of the Ocean Plan and an instantaneous maximum of pH 8.5 based on the site-specific maximum water quality objective for Bodega Bay established in Chapter 3, Table 3-1 of the Basin Plan. The technology-based maximum requirement prescribed in the Ocean Plan is not sufficient to meet the Basin Plan water quality standard.

4. WQBEL Calculations

Because of the lack of data representative of the Permittee's current system, no WQBELs for Ocean Plan Table 1 constituents are established at this time. The site-specific maximum

water quality objective for pH for Bodega Bay from Chapter 3, Table 3-1 of the Basin Plan has been applied directly as an instantaneous maximum effluent limitation.

5. Whole Effluent Toxicity (WET)

Monitoring triggers for chronic toxicity protect the receiving water from the aggregate effect of a mixture of pollutants that may be present in effluent. There are two types of WET tests – acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. Since the Permittee did not discharge during the term of Order No. R1-2008-0063, acute and chronic toxicity monitoring data for the discharge is not available.

The Ocean Plan contains toxicity testing requirements based on minimum initial dilution (Dm) factors in section III.C.4.c. Following the implementation procedures of the Ocean Plan, dischargers with Dm factors below 99 are required to conduct only chronic toxicity testing. This Order does not allow dilution for the chronic condition; therefore, the Dm for Discharge Point 001 is zero. This Order does not contain WET limitations; however, in accordance with the Ocean Plan (section III.C, Implementation Provisions for Table 1), this Order establishes annual chronic toxicity monitoring requirements for the discharge at Discharge Point 001.

The Ocean Plan establishes a daily maximum chronic toxicity objective of 1.0 TUc = 100/NOEC, using a five-concentration hypothesis test, and a daily maximum acute toxicity objective of 0.3 TUa = 100/LC50, using a point estimate model. In 2010, U.S. EPA endorsed the peer-reviewed Test of Significant Toxicity (TST) two-concentration hypothesis testing approach in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) as an improved hypothesis-testing tool to evaluate data from U.S. EPA's toxicity test methods. The TST hypothesis testing approach more reliably identifies toxicity—in relation to the chronic (0.25 or more) and acute (0.20 or more) mean responses of regulatory management concern—than the current NOEC hypothesis-testing approach used in the Ocean Plan. TST results are also more transparent than the point estimate model approach used for acute toxicity in the Ocean Plan that is not designed to address the question of statistical uncertainty around the modeled toxicity test result in relation to the effect level of concern. The TST is the superior approach for addressing statistical uncertainty when used in combination with U.S. EPA's toxicity test methods and is implemented in federal permits issued by U.S. EPA Region 9. Use of the TST approach to establish the numeric monitoring trigger is expected to be protective of the Ocean Plan's numeric toxicity objective.

The TST's null hypothesis for chronic toxicity is:

> H_0: Mean response (In-stream Waste Concentration (IWC) in % effluent) ≤ 0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test are analyzed using the TST approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

The chronic IWC (in % effluent) for Discharge Point 001 is 100%. The chronic toxicity trigger for Discharge Point 001 is expressed as a null hypothesis (H_0) and regulatory

management decision (*b* value) of 0.75 for the chronic toxicity methods in the MRP The null hypothesis for this discharge is:

H_0: Mean response (100% effluent) ≤ 0.75 mean response (control)

Results obtained from a single-concentration chronic toxicity test shall be analyzed using the TST hypothesis testing approach in the MRP. Compliance with this chronic toxicity trigger is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P".

If chronic toxicity results for effluent samples exceed the "trigger", the Permittee must initiate accelerated monitoring as specified in the MRP (Attachment E, section V). After accelerated monitoring, if conditions of chronic toxicity are found to persist, the Permittee will be required to conduct a Toxicity Reduction Evaluation, as described by the MRP.

Notification requirements for chronic WET testing include a 72 hour verbal notification requirement and a 14 day written report requirement, if test results indicate toxicity. The 14 day written notification is established in the USEPA WET Guidance documents cited in the MRP. The 72 hour verbal notification requirement is being added to provide the Regional Water Board with knowledge of the toxicity in advance of the written report. The 72 hour requirement is intended to give the Permittee sufficient time to make a telephone call to Regional Water Board staff and accounts for non-working days (e.g., weekends). Verbal notification of WET test exceedances may be left by voice mail if the Regional Water Board staff person is not immediately available by telephone.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R1-2008-0063, except for the mass-based effluent limitations for oil and grease, TSS, and pH.

Previous Order Nos. 98-22 and R1-2008-0063 established final mass-based effluent limitations for oil and grease and TSS, but did not provide the basis for doing so. 40 CFR 122.45(f)(1)(ii) states that mass limitations are not required when applicable standards and limitations are expressed in terms of other units of measurement. The numerical effluent limitations for these pollutants established in this Order are based on the effluent limitations required by Table 2 of the Ocean Plan, which are expressed in terms of concentration. Pursuant to 40 CFR 122.45(f)(1)(ii), expressing the effluent limitations in terms of concentration is in accordance with federal regulations. Furthermore, the Ocean Plan does not require mass-based effluent limitations for the Table 2 constituents.

Previous Order R1-2008-0063 established an effluent limitation of pH 7.0 based on a reference document that contained a typographic error. This Order replaces the minimum effluent limitation in the previous Order with instantaneous minimum effluent limitation of pH 6.0 in accordance with Table 2 of the Ocean Plan. The relaxation of the effluent limitation for pH in this Order is permissible under CWA section 402(o)(2)(B), based on new information available to Regional Water Board staff.

2. Antidegradation Policies

This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater beyond that which was permitted to discharge in accordance with Order No. R1-2008-0063.

This Order removes the mass-based effluent limitations for oil and grease and TSS from Order No. R1-2008-0063; however, this Order retains the concentration-based effluent limitations for these constituents and does not allow an increase in the permitted flow. Compliance with the concentration-based effluent limitations for these constituents and the flow prohibition in this Order will ensure that additional mass of these pollutants will not be discharged to the receiving water. Thus, the Regional Water Board finds that the removal of the mass-based effluent limitations for oil and grease and TSS will not result in an allowed increase in pollutants or any additional degradation of the receiving water. Thus, the removal of effluent limitations is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on oil and grease, settleable solids, TSS, and turbidity. Restrictions on these pollutants are discussed in section IV.B of this Fact Sheet. This Order's technology-based pollutant restrictions implement section III.B, Table 2, of the Ocean Plan.

WQBELs have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically the addition of the beneficial uses Water Quality Enhancement (WQE), Flood Peak Attenuation/Flood Water Storage (FLD), Wetland Habitat (WET), Native American Culture (CUL), and Subsistence Fishing (FISH) and the General Objective regarding antidegradation) were approved by U.S. EPA on March 4, 2005 and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

The Regional Water Board has considered the factors in Water Code section 13263, including the provisions of Water Code section 13241, in establishing these requirements.

Table F-6 summarizes all final effluent limitations included in the Order and the basis for their inclusion.

Table F-6. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis[1]
		30-Day Average	Average Weekly (7-Day Average)	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Oil and Grease	mg/L	25	40	--	--	75	OP
Settleable Solids[2]	mL/L	1.0	--	3.0	--	--	RES
Total Suspended Solids (TSS)[2]	mg/L	8	--	15	--	--	RES
Turbidity	NTU	75	100	--	--	225	OP
pH	standard units	--	--	--	6.0	8.5	OP/BP

Table Notes:

1. Definitions of acronyms in Table F-6:
   OP Ocean Plan
   RES State Water Board Resolution No. 82-34
   BP Basin Plan
2. These limitations represent an allowable incremental increase above the concentration present in the influent water at Monitoring Location INF-001. The concentration of constituents in the influent shall be subtracted from the final concentration for the purpose of applying this effluent limitation.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

H. Other Requirements

1. Storm Water Specifications

If notified by the Regional Water Board that coverage is necessary, this Order requires that the Permittee seek coverage under the NPDES General Permit for Discharges Associated with Industrial Activities Excluding Construction Activities (General Permit No. CAS000001).

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Regional Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The State Water Board adopted water quality criteria as water quality objectives in the Ocean Plan. Receiving water limitations within this Order reflect all applicable, general water quality objectives of the Basin Plan and Ocean Plan.

The Basin Plan and Ocean Plan include numeric and narrative water quality objectives for various beneficial uses. This Order contains receiving water limitations for discharges to the Pacific Ocean based on the Ocean Plan numerical and narrative water quality objectives for bacteria, dissolved oxygen, floating particulates, oil and grease, pH, discoloration, natural lighting, deposition of solids, dissolved sulfides, organic materials in sediments, Table 1 parameters, nutrient materials, radioactive wastes, and biological characteristics. This Order contains receiving water limitations based on the Basin Plan numerical and narrative water quality objectives for biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, suspended material, tastes and odors, temperature, toxicity, and turbidity.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D to the Order. The Permittee must comply with all standard provisions and with those additional conditions that are applicable under 40 C.F.R. section 122.42. The rational for the special conditions contained in the Order is provided in section VI.B, below.

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

2. Regional Water Board Standard Provisions

In addition to the Federal Standard Provisions (Attachment D), the Permittee shall comply with the Regional Water Board Standard Provisions provided in Standard Provisions VI.A.2 of the Order.

a. Order Provision VI.A.2.a identifies the State's enforcement authority under the Water Code, which is more stringent than the enforcement authority specified in the federal regulations (e.g., 40 C.F.R. sections 122.41(j)(5) and (k)(2)).

b. Order Provision VI.A.2.b requires the Permittee to notify Regional Water Board staff, orally and in writing, in the event that the Permittee does not comply or will be unable to comply with any Order requirement. This provision requires the Permittee to make direct contact with a Regional Water Board staff person.

B. Special Provisions

1. Reopener Provisions

a. Standard Revisions (Special Provision VI.C.1.a). Conditions that necessitate a major modification of a permit are described in 40 C.F.R. section 122.62, which include the following:

i. When standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision. Therefore, if revisions of applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such revised standards.

ii. When new information that was not available at the time of permit issuance would have justified different permit conditions at the time of issuance.

b. Reasonable Potential (Special Provision VI.C.1.b). This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or future investigations demonstrate that the Permittee governed by this Permit is causing or contributing to excursions above any applicable priority pollutant criterion or objective, or adversely impacting water quality and/or the beneficial uses of receiving waters.

c. Whole Effluent Toxicity (Special Provision VI.C.1.c). This Order requires the Permittee to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity through a TRE. This Order may be reopened to include a numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.

d. 303(d)-Listed Pollutants (Special Provision VI.C.1.d). This provision allows the Regional Water Board to reopen this Order to modify existing effluent limitations or add effluent limitations for pollutants that are the subject of any future TMDL action.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements (Special Provision VI.C.2.a). In addition to routine toxicity monitoring, this Order requires the Permittee to review and update their TRE Workplan, in accordance with appropriate U.S. EPA guidance, as necessary in order to remain current and applicable to the discharge and discharge facilities. The TRE is initiated by evidence of toxicity demonstrated through the additional effluent monitoring provided as a result of an accelerated monitoring program.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program (Special Provision VI.C.3.a). This provision is included in this Order pursuant to section III.C.9 of the Ocean Plan. The Regional Water Board includes standard provisions in all NPDES permits requiring development of a Pollutant Minimization Program when there is evidence that a toxic pollutant is present in the effluent at a concentration greater than an applicable effluent limitation.

b. Best Management Practices (BMP) Plan (Special Provision VI.C.3.b). As discussed in section IV.B.2 of this Fact Sheet, this Order includes a requirement to maintain a BMP Plan, as contemplated by the ELGs, based on BPJ. The Permittee was required by Order No. R1-2008-0063 to develop and maintain a BMP Plan. The Permittee's BMP Plan is required to be maintained in Provision VI.C.3.a. The Permittee does not apply chemical or biological treatment of the discharge, so the use of BMPs is necessary for control of pollutants of concern, such as TSS, prior to discharge.

4. Construction, Operation, and Maintenance Specifications – Not Applicable

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions

a. Solids Disposal (Special Provision VI.C.6.a). This provision is retained from Order No. R1-2008-0063 and requires proper disposal of solids in accordance with the provisions of title 27, division 2 of the California Code of Regulations.

7. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 C.F.R. requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code section 13383 authorizes the Regional Water Board to require technical and monitoring reports. The MRP, Attachment E, establishes monitoring and reporting requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

Intake water monitoring requirements are retained from Order No. R1-2008-0063. Intake water monitoring provides characterization of background water quality and is necessary to determine compliance with effluent limitations for suspended and settleable solids, which are expressed as allowable increases from those concentrations measured in the intake water. Intake water monitoring requirements are contained in section III.A of the MRP (Attachment E).

B. Effluent Monitoring

1. Effluent monitoring requirements are necessary to determine compliance with prohibitions and/or effluent limitations established by the Order. Monitoring at Monitoring Location EFF-001 is necessary to demonstrate compliance with effluent limitations and demonstrate whether or not the discharge poses reasonable potential for a pollutant to exceed any numeric or narrative water quality objectives.

a. Effluent monitoring frequencies and sample types for flow, oil and grease, TSS, settleable solids, turbidity, pH, and ammonia have been retained from Order No. R1-2008-0063.

b. Consistent with Order No. R1-2008-0063, effluent monitoring requirements for the Ocean Plan Table 1 pollutants is required three times during the term of the Order to generate adequate data to perform an RPA.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) monitoring requirements are established for discharges to Bodega Bay from Discharge Point 001 at Monitoring Location EFF-001 and are included in the Order to protect the receiving water quality from the aggregate effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer time period and may measure mortality, reproduction, and/or growth. The Ocean Plan section III.C.4.c specifies chronic toxicity testing where the minimum initial dilution of the effluent falls below 100:1 at the edge of the mixing zone. Because there is no dilution allowance for the Facility, WET monitoring shall consist of chronic toxicity testing. This Order includes monitoring requirements for chronic toxicity to assess whether there is reasonable potential to exceed the Ocean Plan's narrative water quality objectives for toxicity.

D. Receiving Water Monitoring – Not Applicable

E. Other Monitoring Requirements

1. The Permittee shall report on chemicals and drugs used for disease control, disinfection, and health maintenance at the facility with sufficient information to determine compliance with Discharge Prohibition III. E.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Ocean Farms, Inc., Bodega Farms. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Permittee and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following posting on the Regional Water Board's Internet site at: http://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs.shtml and through publication in the Press Democrat on February 20, 2014.

B. Written Comments

The staff determinations are tentative. Interested persons were invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

The deadline to submit comments concerning these tentative WDRs closed on March 24, 2014.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	**May 8, 2014**
Time:	**8:30 a.m.** or as announced in the Regional Water Board's agenda
Location:	**River Lodge Conference Center** **1800 Riverwalk Dr** **Fortuna, CA 95540**

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/northcoast where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and title 23, section 2050 of the California Code of Regulations. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider the Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If the Permittee chooses to request reconsideration of this Order or file a petition with the State Water Board, the Permittee must comply with the Order while the request for reconsideration and/or petition is being considered. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (707) 576-2220.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Charles Reed at Charles.Reed@waterboards.ca.gov or (707) 576-2752.

ATTACHMENT G – RESOLUTION NO. 82-34

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 82-34

APPROVAL OF AN EXCEPTION TO THE WATER QUALITY CONTROL PLAN FOR OCEAN WATERS (OCEAN PLAN) FOR CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, NORTH COAST REGION, (REGIONAL BOARD) ORDER NO. 82-22, "WASTE DISCHARGE REQUIREMENTS FOR CALIFONRIA FISH GROWERS, INCORPORATED, BODEGA BAY FISH FARMS, SONOMA COUNTY"

WHEREAS:

1. On January 19, 1978, the State Water Resources Control Board (State Board) adopted a revised "Water Quality Control Plan for Ocean Waters of California" (Ocean Plan).

2. California Fish Growers, Incorporated, Bodega Bay Fish Farms, is proposing to discharge 6.5 million gallons per day of seawater which has passed through rearing tanks containing fish into the surf zone of Bodega Bay at Estero Americano in Sonoma County.

3. On March 25, 1982, the Regional Board adopted Order No. 82-22.

4. The NPDES permit as adopted requires the discharger in part to comply with the following:
   A. EFFLUENT LIMITATIONS:
   1. The discharge of effluent to Bodega Bay shall not exceed the following limitations:

Constituent	Units	30-day Average[a]	Daily Maximum[b]
Suspended Solids	mg/l[c]	8	15
Settleable Solids	mg/l[c]	1.0	3.0
...			
...			

...

c. This limitation represents an allowable incremental increase above the concentration present in influent water. The concentration of constituents in the influent shall be subtracted from the final effluent concentration for the purpose of applying this effluent limitation."

Table A of the Ocean Plan contains the following effluent limits for suspended solids and settleable solids:

	Unit of Measurement	Limiting Concentrations: Monthly (30-Day Average)	Weekly (7-Day Average)	Maximum at any time
Suspended Solids	mg/l	75% removal	1.5	3.0
Settleable Solids	mg/l	1.0		

Since the requirements as prescribed are not in compliance with Table A of the Ocean Plan, the Regional Board has requested an exception to the Ocean Plan requirements for suspended solids and settleable solids.

5. The Regional Board requested that the discharger be granted an exception based on the following points:

   a. At the time of adoption of the Ocean Plan, no consideration was given to simple flow-through seawater systems which do not significantly alter the suspended and settleable solids concentrations of the intake water;

   b. This exception will not compromise protection of ocean water for recognized beneficial uses; and

   c. The public interest will be served by not requiring the discharger to remove those constituents.

6. As set forth in Chapter VI, Section G, of the Ocean Plan, the State Board may, subsequent to a public hearing and with the concurrence of the United States Environmental Protection Agency (EPA), grant exceptions to any provision of the Ocean Plan provided it determines:

   a. The existence of unusual circumstances not anticipated at the time of the plan's adoption;

   b. The exception will not compromise protection of ocean waters for beneficial uses; and

   c. The public interest will be served.

7. Based on evidence received during a public hearing held on June 17, 1982, the State Board concurs with the Regional Board's points quoted previously.

THEREFORE BE IT RESOLVED:

1. That the State Board approve the exception to the 75% suspended solids removal and the settleable solids limitations in Table A of the Ocean Plan requested by the Regional Board.

2. That the State Board declares that the exception will become effective upon receipt of written concurrence from EPA.

3. That the State Board requests by this resolution that EPA provide concurrence as soon as possible.

CERTIFICATION

The undersigned, Executive Director of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 17, 1982.

Clint Whitney
Executive Director