

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 7, 2007
Prepared July 2, 2007

ITEM NUMBER: 17

SUBJECT: Rescission of Individual Waste Discharge Requirements for the Abalone Farm, Inc, San Luis Obispo County--Order No. R3-2002-0057, NPDES Permit No. CA0049344 and Enrollment Under the General NPDES Permit for Discharges from Aquaculture and Aquariums--Order No. R3-2002-0076, NPDES Permit No. CAG993003

KEY INFORMATION

Location: Near Cayucos at Highway 1 and Villa Creek Road in San Luis Obispo County
Discharge Type: Flow-through seawater from abalone growing tanks
Current Flow Rate: 6.8 million gallons per day (MGD) average
Treatment: 3/8" slotted screens for solids removal
Disposal: Pacific Ocean
Existing Order: WDR Order No. R3-2002-0057 (NPDES Permit No. CA0049344)
This Action: Rescission of Individual Waste Discharge Requirements Order No. R3-2002-0057 and Enrollment Under the General NPDES Permit Order No. R3-2002-0076.

SUMMARY

The Abalone Farm, Inc. operates an abalone growing facility near Cayucos in San Luis Obispo County. The facility has produced an average of approximately 215,600 pounds live weight of abalone annually, for the past five years. Discharge of seawater that is pumped through the facility is currently regulated by Order No. R3-2002-0057 (NPDES Permit No. CA 0049344), which was adopted by the Central Coast Water Board on May 31, 2002. The Water Board subsequently adopted the General NPDES Permit for Discharges from Aquaculture and Aquariums, Order No. R3-2002-0076 (General Permit), on September 20, 2002.

Since the Abalone Farm's individual NPDES permit is due to expire, staff proposes to rescind the individual NPDES permit and enroll The Abalone Farm in the General Permit. The proposed modified monitoring and reporting program for the General Permit contains the same requirements as the Abalone Farm's existing monitoring and reporting program.

DISCUSSION

General Background

Facility Description – The Abalone Farm, Inc. (hereafter "Discharger") produces an average of 215,600 pounds of California Red Abalone (*Haliotis rufescens*) meat annually and is capable of producing up to 300,000 pounds per year. The Abalone Farm grows only native species that are propagated from farm-raised broodstock. Currently, no abalone seed is purchased from other

producers. The Abalone Farm is registered with the California Department of Fish and Game (CDFG) to grow several species of rockfish, but is currently only working on methods to grow one species, cabezon (*Scorpaenichthys marmoratus*). The Discharger reports that research and development, using existing infrastructure, is currently on going and that a significant harvest has not occurred to date, but that 2,000 to 4,000 pounds of cabezon are currently contained in the facility. The Abalone Farm's process is described in Figure 1.

Flow - Seawater is continuously pumped through growing tanks and discharged back to the ocean through two outfall pipes (001 and 002), which discharge over a 20-foot cliff to the intertidal zone. According to the Discharger's report of waste discharge, current flow rates vary as follows:

Outfall No.	Flow (MGD)		
	Maximum Daily	Maximum 30-day	Long Term Average
001	1.4	1.4	0.8
002	8.6	8.6	6.0

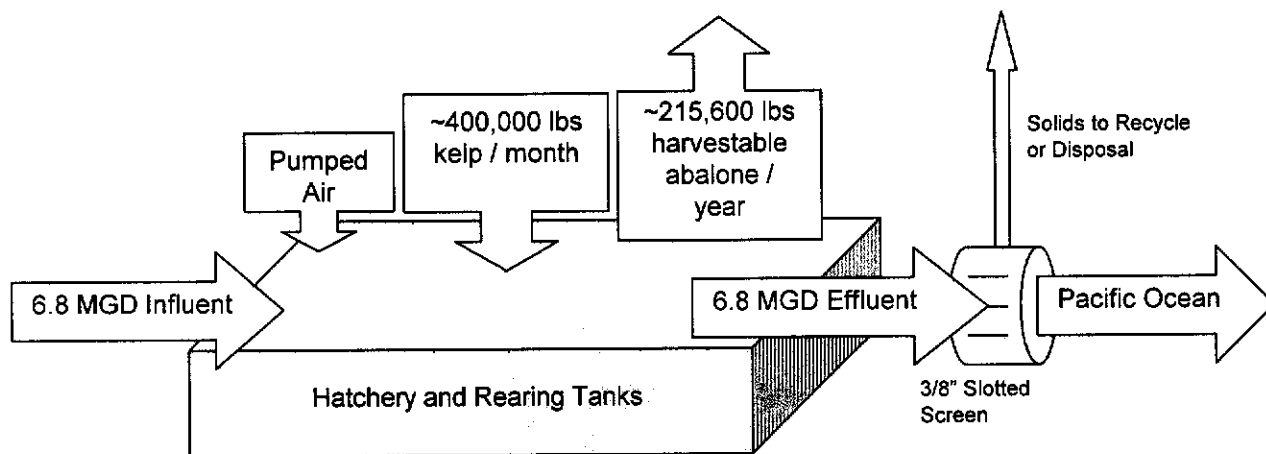


Figure 1: Simplified Process Schematic of the Abalone Farm Inc.

Source Control and Best Management Practices – In aquaculture operations, the most direct and least expensive approach to controlling pollution is through best management practices and efficient operations. The following are some of the Discharger's best management practices:

- Seawater intake pipelines are inspected and cleaned daily.
- Feeding efficiency is maximized and food waste is minimized.
- Density of abalone within each raceway is restricted.
- Rearing tanks are aerated to maintain elevated dissolved oxygen levels.
- Chemical use is minimized.
- Imported seed stock is frequently inspected to prevent infestation by exotic species.
- Exported seed stock is frequently inspected to prevent spread of exotic species.
- Any abalone suspected of exotic species infestation is immediately eradicated.

- Dead abalones and/or shells are removed from the flow-through system and composted or sold.
- Wastes from a small processing facility are bagged and sold to fisherman as bait.

Treatment – Treatment of effluent consists of a 3/8" slotted screen to prevent live abalone and/or shells from passing into the receiving water. Solids removed from the slotted screens are composted on the site.

Existing Permit - The discharge of flow-through seawater from the Abalone Farm is currently regulated by Order No. R3-2002-0057 (NPDES Permit No. CA 0049344), which was adopted by the Water Board on May 31, 2002, and administratively extended in May 2007. The existing NPDES permit is based on the California Ocean Plan and this Region's Basin Plan as they apply to aquaculture facility discharges to the ocean.

Compliance History – The Discharger has had no exceedances of permit effluent limitations. Concentrations of monitored constituents are consistently well below effluent limitations.

Proposed Permit

Enrollment under the General Permit will continue all existing permit conditions and incorporate all effluent limitations from the Ocean Plan.

Monitoring and Reporting Program – The monitoring program for the proposed Permit requires monitoring of flow and the Ocean Plan Table A constituents that may be present in the discharge. These include oil and grease, settleable solids, turbidity, pH, total suspended solids, and temperature. Since the Discharger has maintained outstanding, long-term compliance with effluent limitations for these constituents, staff believes the existing quarterly monitoring frequency for these constituents should be maintained.

The monitoring and reporting program proposed had been modified from the one adopted by the Board for the General Permit in 2002. The modified monitoring and reporting requirements are less stringent by not including monitoring for nitrogen species and bacteria. However, compliance with the modified monitoring and reporting requirements will ensure compliance with the Ocean Plan and have not changed from the requirements of the individual NPDES permit for this discharge.

The Discharger is required to report with each monitoring report any drug, disinfectant or other chemicals used. The Discharger is also required to certify with each monitoring report that substance(s) listed in Table B of the Ocean Plan or 40 CFR Section 131.38 were not added to the waste stream, and that no change has occurred in activities that could cause such substances to be present in the waste stream.

Exotic Species – If the discharger purchases seed from another producer, all batches of seed stock are inspected for exotic species prior to transfer to the rearing tanks. They are also required by CDFG to have each batch of seed stock that is exported from the facility inspected by CDFG staff. There have been no reports of exotic species since the provision contained within Order No. R3-2002-0057 were implemented in 2002. The requirement for exotic species inspections is also contained with the General Permit.

CEQA SUMMARY

Waste Discharge Requirements for the existing discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with Section 13389 of the California Code of Regulations.

COMMENTS AND RESPONSES

On July 2, 2007, staff notified all parties known to be interested in the Abalone Farm waste discharge of its recommendation to rescind the Abalone Farm's individual NPDES permit and enroll the Abalone Farm in the General Permit.

RECOMMENDATION

Rescind Order No. R3-2002-0057 and concur with Executive Officer's enrolling the Abalone Farm under General Order No. 2002-0076, with modified Monitoring and Reporting Program No. R3-2002-0076.

ATTACHMENTS

1. Order No. R3-2002-0057
2. General WDR Order No. R3-2002-0076
3. Modified Monitoring and Reporting Program No. R3-2002-0076

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SUMMARY

The Abalone Farm, Inc. operates an abalone growing facility near Cayucos in San Luis Obispo County. The facility has produced an average of approximately 215,600 pounds live weight of abalone annually, for the past five years. Discharge of seawater that is pumped through the facility is currently regulated by Order No. R3-2002-0057 (NPDES Permit No. CA 0049344), which was adopted by the Central Coast Water Board on May 31, 2002. The Water Board subsequently adopted the General NPDES Permit for Discharges from Aquaculture and Aquariums, Order No. R3-2002-0076 (General Permit), on September 20, 2002.

Since the Abalone Farm's individual NPDES permit is due to expire, staff proposes to rescind the individual NPDES permit and enroll The Abalone Farm in the General Permit. The proposed modified monitoring and reporting program for the General Permit contains the same requirements as the Abalone Farm's existing monitoring and reporting program.

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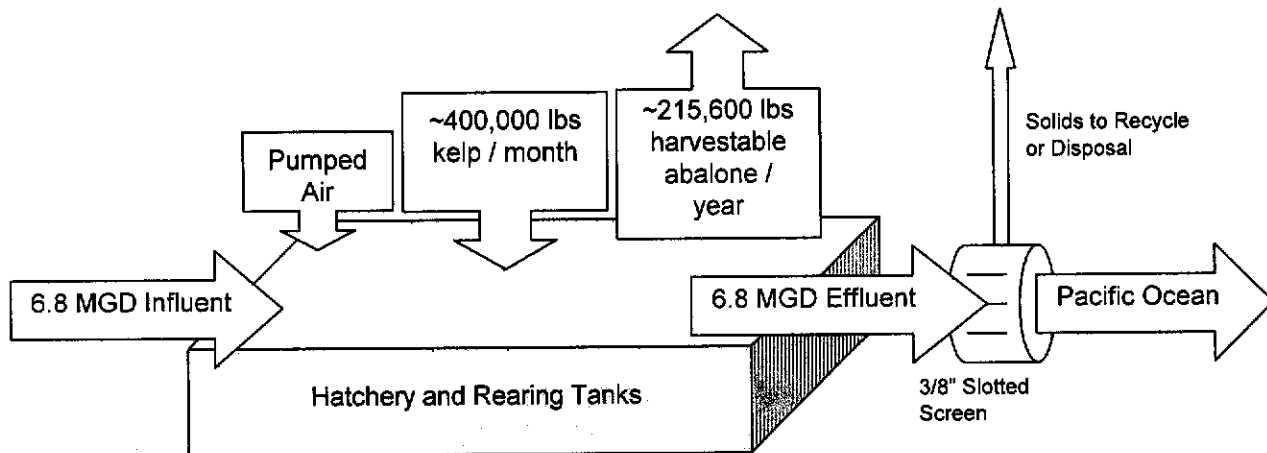


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Proposed Permit

Enrollment under the General Permit will continue all existing permit conditions and incorporate all effluent limitations from the Ocean Plan.

Monitoring and Reporting Program – The monitoring program for the proposed Permit requires monitoring of flow and the Ocean Plan Table A constituents that may be present in the discharge. These include oil and grease, settleable solids, turbidity, pH, total suspended solids, and temperature. Since the Discharger has maintained outstanding, long-term compliance with effluent limitations for these constituents, staff believes the existing quarterly monitoring frequency for these constituents should be maintained.

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