



The Otter Project

www.otterproject.org

475 Washington Street, Suite A
Monterey, CA 93940
831/646-8837
831/646-8843 FAX

September 29, 2008

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401
Attn: Ryan Lodge

Re: GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DISCHARGES FROM AQUACULTURE FACILITIES AND AQUARIUMS, CENTRAL COAST REGION

Dear Chair Young, Board Members, Staff, and Mr. Lodge:

On behalf of The Otter Project and Monterey Coastkeeper please accept the following comments regarding the General Permit for Aquaculture and Aquariums. We find the General Permit to be incomplete in scope and vague in its requirements. We request the permit be referred back to staff for further clarification.

The permit lists only five businesses currently under permit (listed north to south):

- Silverking Oceanic, Davenport
- Longs Marine Lab (UC Santa Cruz Institute of Marine Studies)
- Granite Canyon Lab (UC Davis Marine Pollution lab)
- Abalone Farm Morro Bay
- Cultured Abalone Ltd, Goleta

Without searching, we can recall 20 businesses and agency related operations that could come under the permit (three operations need further inquiry: NOAA at Longs Marine, NOAA Fisheries Lab at Point Pinos, and the Santa Barbara Zoo).

- US Abalone (aka American Abalone) Davenport
- Silverking Oceanic, Davenport
- Cal Fish and Game facility at Longs Marine Lab
- NOAA at Longs Marine Lab
- Longs Marine Lab (UC Santa Cruz Institute of Marine Studies)
- Seymour Center
- Moss Landing Marine Lab
- Marine Mammal Center at Moss Landing
- MBARI
- Monterey Abalone at Monterey Wharf
- Monterey Bay Aquarium
- Hopkins Marine Station
- NOAA Fisheries Lab at Pt. Pinos
- Granite Canyon Lab (UC Davis Marine Pollution lab)
- Abalone Farm Morro Bay

**Item No. 24 Attachment No. 2
Permit for Aquaculture Facilities
December 4-5, 2008 Meeting**

- Cultured Abalone Ltd, Goleta
- UC Santa Barbara
- Santa Barbara Sea Center (Stearns Wharf)
- Santa Barbara Zoo and Aquarium
- Santa Barbara Marine Mammal Center (not affiliated with MMC of Sausalito)
- Pacific Seafood Industries, Inc.

No criteria are offered in the permit for why some operations are in and others are not. When staff was contacted we heard that some operations such as Monterey Bay Aquarium and Hopkins Marine Station may come under the ASBS permit. We would suggest that the ASBS permit situation is in flux and we do not know if the ASBS permit will have the same monitoring requirements as this permit should have. Monterey Bay Aquarium is a very large operation with no NPDES permit. It is our understanding that they have completed an application for exception under ASBS requirements. However, they should be required to file an NOI under this permit as well. We have major cleaning chemicals and pharmaceuticals concerns with Monterey Bay Aquarium.

We were told that Monterey Abalone is not covered because it is too small, yet no criteria are offered to sort what is too small and what is not. We were also told that Monterey Abalone is “in the water” and does not discharge. We would note that open-ocean salmon aquaculture (as has been occasionally been suggested by Silverking) is potentially “in the water” and discharge will be a major concern. We were also told that Monterey Abalone uses no chemicals and therefore has no discharge; we would note that this permit is intended to regulate discharge of unused feed and discharged animal waste (feces). We are not highlighting Monterey Abalone for regulation; we believe the Monterey Abalone operation is relatively small, clean, uses little or no chemicals, is very well run, has excellent community relations, and should not become a focus of RWQCB staff time. We simply want the permit to elucidate why some operations are in and others out. We are critically concerned that open ocean aquaculture be regulated under NPDES permits and not be excluded because they are “in the water.”

Further, many disparate operations are lumped under the UC Santa Cruz Marine Studies permit. Seymour Center is a public aquarium, Longs Marine Lab has multiple uses including invertebrate study and marine mammal holding tanks, and CA Department of Fish and Game Oiled Wildlife and Research Center is a very significant veterinary care center (antibiotics and chemicals are pollutants of concern) and oiled wildlife cleaning facility. It is unclear to us this permit regulates the various users of this single intake and outfall. While the discharge may fall under the authority of UC Santa Cruz, reporting of chemicals and pharmaceuticals in use may be very difficult.

Many facilities appear to be simply overlooked: US Abalone at Davenport, the Marine Mammal Center at Moss Landing, Moss Landing Marine Labs, Santa Barbara Sea Center, and Pacific Seafood are examples.

In short, we would like to see and understand the criteria for what is covered under this permit. Precedent and criteria become critical as the US moves towards increased open ocean aquaculture.

We find the effluent limitations to be far too narrow and/or incomplete. The permit only offers numeric limitations on oil & grease, total suspended solids, settleable solids, turbidity, and pH. Nutrient discharges should be numerically limited. Beyond these numeric criteria we find the discharge prohibitions subjective: "Discharges containing substances in concentrations that are toxic to human, animal, plant, or aquatic life are prohibited." Pharmaceuticals are a growing concern in nearshore ocean waters and both aquaculture and aquariums are major users of chemicals and pharmaceuticals. The permit does not appear to regulate or require monitoring of pharmaceutical impacts. This permit is the appropriate vehicle to gather information to better understand pharmaceutical impacts.

Numeric criteria are also offered in the receiving water limitations for coliform and enterococcus. However, we are concerned that these limitations are not consistent with water contact recreation beneficial uses. Many, perhaps most, of these facilities are in or near areas where water contact recreation very commonly occurs. Bacteriological limitations should be highly protective of water contact beneficial uses.

Nutrient discharges into receiving waters should be numerically limited. Currently, the limitation simply says: "Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota." While "degrade" is a defined term, "objectionable" is not and is highly subjective.

Groundwater limitations are entirely inadequate. Simply read, it appears the only limitation is that the discharge shall not impact groundwater to the extent that it "contain taste or odor producing substances in concentrations that adversely affect beneficial uses." We would suggest that concern be broadened beyond taste and odor.

Within the provisions we question giving already covered but poorly performing dischargers an automatic renewal. We note that four of the five operations covered under the previous permit have violations. While most are reporting violations, some are exceedences. We would suggest that operations with more than three reporting violations in any previous year of the past three years or any operation with more than two exceedences in the past five years be required to reapply. Using this criteria, Silverking (many reporting violations) and Cultured Abalone (exceedences) would be required to reapply.

We can find little or no linkage between the receiving water limitations and the monitoring and reporting program (MRP). This is a major concern with this permit. The bacteriological limitations referred to in the surface water limitations appear to be omitted in the MRP. Further, many of the receiving water limitations listed on pages 11-12 of the permit require comparative sampling of the benthic chemistry and biota yet there appear to be no requirements for benthic monitoring in the MRP. Benthic monitoring - both at or near the discharge and at comparative sites - must be a condition of this permit. The benthic monitoring program should include provisions to study the impacts of cleaning chemicals and pharmaceuticals on the benthic community. Study of benthic organisms known to bio-accumulate contaminants should be included in the MRP.

In conclusion, we have several concerns and a variety of specific suggestions for this permit:

Concerns:

- We can find no criteria for who is covered under this permit and we are concerned a precedent may be set that limits the Board's ability to regulate offshore mariculture.

- We are concerned about the relationship between this permit and the the ASBS exception process.
- We are concerned that this permit appears to ignore the cumulative impact of cleaning chemicals and pharmaceuticals on the marine environment.

Specific suggestions:

- Better criteria be offered for who is covered by this permit.
- All operations covered by this permit be required to apply.
- The monitoring and reporting requirements for multiple users sharing one discharge be clarified (Longs Marine Lab).
- Nutrient discharges be numerically limited.
- Groundwater limitations be made complete.
- Poorly performing dischargers be required to reapply.
- The monitoring program be made more comprehensive and linked to the receiving water limitations, especially those limitations on impacts to the benthic community.
- Cumulative impacts of cleaning chemicals and pharmaceuticals be studied and monitored.

Until such time as our concerns and comments are addressed, we suggest the General Permit is incomplete in scope and vague in its requirements. We request the permit be referred back to staff for further clarification.

Thank you for your consideration of our comments.

Sincerely,



Steve Shimek
Executive Director