California Regional Water Quality Control Board

Central Coast Region

Internet Address: http://www.waterboards.ca.gov/centralcoast 895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906 Phone (805) 549-3147 • FAX (805) 543-0397



February 5, 2006

Alan C. Lloyd,Ph.D.

Agency Secretary

Dr. George Somero, Director Hopkins Marine Station Department of Biological Sciences Stanford University Pacific Grove, CA 93950

Dear Dr. Somero

REQUEST FOR EXCEPTION FOR DISCHARGES INTO AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE

This letter is to acknowledge the receipt by the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Board (Regional Water Board) of the Hopkins Marine Station letter dated November 30, 2004, regarding your discharges into the Pacific Grove Area of Special Biological Significance (ASBS).

Hopkins Marine Station must submit additional information to support the State Water Board's consideration of an exception to the California Ocean Plan (Ocean Plan) for waste discharges to an ASBS. To be granted an exception, the required documentation must support the premise that allowing the discharge of seawater effluent and storm water runoff to continue will not compromise protection of ocean waters for beneficial uses. Note that one beneficial use is the preservation and enhancement of ASBS, which are defined as those areas designated by the State Water Board as requiring protection of species of biological communities to the extent that alteration of natural water quality is undesirable.

In order for Regional Water Board and State Water Board staff to characterize whether wastes are discharged into the ASBS by either storm water or the seawater system at Hopkins Marine Station, please send the following information by August 31, 2006.

- 1. The discharger's name, address, and contact information.
- 2. The daily discharge volume of seawater from the system
- 3. The amount of aquatic animals harvested or produced in the aquarium per year.
- 4. The amount of food fed to the animals in the aquarium during the month of maximum feeding.
- 5 A list of species cultured at the facility including those listed in California Code of Regulations Title 14, Section 245, or referenced in Part a.8 of the same section, which is not indigenous to the Central Coast Region (exotic species).
- 6. Please describe controls employed to eliminate the potential discharge of parasites into the marine environment and, if applicable, all pertinent information regarding any CA Fish and Game Permit.

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- 7. Information on all chemicals added to the facility seawater system, or to marine life food used at the facility, including quantity, application rates, and chemical composition.
- 8. A diagram or sketch that gives the general flow and location of intake and discharge point of the Hopkins Marine Station seawater system.
- 9. A characterization of your facility in terms of percent impervious surfaces, and a map of surface drainage of storm water runoff, including areas of sheet runoff, and locations of any structural Best Management Practices (BMPs) employed. The map must also show the storm water conveyances in relation to other facility features such as the laboratory seawater system and discharges, service areas, sewage lines or treatment facilities, and waste and hazardous materials storage areas. If pesticides or herbicides are applied to any part of your facility, provide a listing of such treatments in term of the chemicals and application rates.
- 10. Compliance history for drainages into the ASBS, including any spills, or upset events that resulted in the discharge of toxic or otherwise prohibited substances, including untreated or partially treated wastewater.
- 11. Documentation showing that the public interest will be served by granting the exception.
- 12. Please describe any monitoring that has been done and/or that is presently employed at the facility, including:
 - a. An assessment of all available historical data on discharge volume, chemical and physical constituents, toxicity, and indicator bacteria in the waste seawater and desalination brine effluent.
 - b. Data on the status and description of marine life in the ASBS, and on the natural background of the ASBS.
- 13. A description of current treatment processes, pollution controls, and/or BMPs currently used or planned including structural BMPs to control storm water runoff (with a schedule for implementation).
- 14. An analysis of alternatives to the discharge and their impacts if implemented.
- 15. At a minimum, submit a quantitative description of representative marine life at the ASBS near the discharges and at a similar location away from the discharges.
- 16. At a minimum, include measurements of representative samples from all waste seawater and desalination brine outfalls for the following constituents:
 - a. flow rate
 - b. total Ocean Plan metals
 - c. ammonia nitrogen
 - d. nitrate nitrogen
 - e. turbidity
 - f. settleable solids
 - g. BOD₅
 - h. temperature
 - i. pH
 - j. salinity
 - k. critical life stage (chronic) toxicity for three marine species
 - 1. indicator bacteria including total coliform, fecal coliform (or E. coli), and enterococcus.

The applicable Ocean Plan detection limits and other applicable monitoring requirements must be adhered to in performing this work.

- 17. An assessment of discharge volume, chemical and physical constituents, toxicity, and indicator bacteria in the storm water runoff and in the ambient marine water of the ASBS during a rain event. At a minimum, include measurements of representative samples (from each storm water outfall, and adjacent marine ASBS receiving water) collected within the last two years, or the current storm season, during a rain event, for each of the following constituents:
 - a. total Ocean Plan metals
 - b. polynuclear aromatic hydrocarbons (PAHs)
 - c. oil and grease
 - d. ammonia nitrogen
 - e. acute toxicity for a marine species
 - f. critical life stage (chronic) toxicity for three marine species
 - g. indicator bacteria including total coliform, fecal coliform (or E. coli), and enterococcus.

The applicable Ocean Plan detection limits and other applicable monitoring requirements must be adhered to in performing this work. All samples must be collected during a storm event that is greater than 0.1 inch and at least 72 hours from the previous measurable storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

Please send this information to the State Water Board, Division of Water Quality, attention Dominic Gregorio, and to the Central Coast Regional Water Board, attention Roger Briggs, Executive Officer. The Regional Water Board staff will review the information in consultation with the State Water Board staff. Once the application is deemed complete the Regional Water Board staff will make a recommendation to the State Water Board staff. State Water Board staff can then prepare a staff report, in compliance with the California Environmental Quality Act, for the State Water Board to consider the exception request.

If the State Water Board issues an exception, the Central Coast Regional Water Board may allow your discharges to be covered under a NPDES Permit, which will include the mitigating conditions required in the exception. The Central Coast Regional Water Board will enforce the mitigation measures described in the exception if the State Water Board grants it.

If you have questions, please call Peter von Langen (805-549-3688) at the Central Coast Regional Water Board or Dominic Gregorio (916-341-5488) at the State Water Board.

Sincerely.

Roger W. Briggs Executive Officer

Filename and Path: S:\NPDES\NPDES Facilities\Monterey Co\Hopkins Marine Station\Hopkins Marine Station ASBS Exception Request.doc

cc:

Dominic Gregorio
Division of Water Quality
Ocean Standards Unit

State Water Resources Control Board

1001 I St.

Sacramento, CA 95814

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