



California Regional Water Quality Control Board

Central Coast Region

Alan C. Lloyd, Ph.D.
Secretary for
Environmental
Protection

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



Arnold
Schwarzenegger
Governor

October 13, 2005

Monterey Bay Aquarium Research Institute (MBARI)
c/o Ecology and Environment, Inc
350 Sansome Street, Suite 300
San Francisco, CA 94104

Dear Ms. Adrienne Fink:

WATER QUALITY CERTIFICATION NUMBER 3270509WQ02 FOR THE MBARI MONTEREY ACCELERATED RESEARCH SYSTEM (MARS) PROJECT, MONTEREY COUNTY

Thank you for the opportunity to review your July 21, 2005 application for water quality certification of the MARS Project. The project appears to protect beneficial uses of State waters. We are issuing the enclosed Standard Letter of Certification.

Per California Code of Regulations Section 3857, we will take no further action on your application and anticipate no further regulatory involvement. Should new information come to our attention that indicates a water quality problem, we may issue Waste Discharge Requirements.

Your Section 401 Water Quality Certification application and CEQA documents indicate that project activities may affect beneficial uses and water quality. The Regional Board issues this certification to protect water quality and associated beneficial uses from project activities. We need reports to determine compliance with this certification. All technical and monitoring reports requested in this certification, or anytime after, are required per Section 13267 of the California Water Code.

Your failure to submit reports required by this certification, or your failure to submit a report of technical quality acceptable to the Executive Officer, may subject you to enforcement action per Section 13268 of the California Water Code. The Regional Board will base enforcement actions on the date of certification. Any person affected by this Regional Board action may petition the State Water Resources Control Board (State Board) to review this action in accordance with California Water Code Section 13320; and Title 23, California Code of Regulations, Sections 2050 and 3867-3869. The State Board, Office of Chief Counsel, PO Box 100, Sacramento, CA 95812, must receive the petition within 30 days of the date of this certification. We will provide upon request copies of the law and regulations applicable to filing petitions.

California Environmental Protection Agency



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If you have questions please contact **Daniel Gutierrez at (805) 549-3876 or by e-mail at DGutierrez@waterboards.ca.gov**. Please mention the above certification number in all future correspondence pertaining to this project.

Sincerely,



Roger W. Briggs
Executive Officer

Enclosure: Standard Letter of Certification, including Attachment 1

S:\Section 401 Certification\Certifications by County\Monterey Co\MBARI MARS cable install.doc

cc: Enclosures

Mandy Allen
Operations Administrator
MBARI
7700 Sandholdt Road
Moss Landing, CA 95039

Tim Vendlinski, Supervisor
Wetlands Regulatory Office (WTR-8)
U.S. Environmental Protection Agency
75 Hawthorne St.
San Francisco, CA 94105

Mark D'Avignon
U.S. Army Corps of Engineers
San Francisco District
Regulatory Section
333 Market Street
San Francisco, CA. 94105-2197

Daniel Cooper
Lawyers for Clean Water
1004 O'Reilly Avenue
San Francisco, CA 94129

401 Program Manager
State Water Resources Control Board
Division of Water Quality
Water Quality Certification Unit
1001 "T" Street
Sacramento, CA 95812-0100

California Department of Fish and Game
Lake and Streambed Alteration Program
Post Office Box 47
Yountville, CA 94599

Action on Request for
Clean Water Act Section 401 Water Quality Certification
for Discharge of Dredged and/or Fill Materials

PROJECT: Monterey Bay Aquarium Research Institute (MBARI) Monterey Accelerated Research System (MARS) Project

APPLICANT: MBARI
7700 Sandholdt Road
Moss Landing, CA 95039

ACTION:

1. ☒ Order for Standard Certification
2. ☐ Order for Technically-conditioned Certification
3. ☐ Order for Denial of Certification

STANDARD CONDITIONS:

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment per section 13330 of the California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
2. This certification action is not intended to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed per to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license was being sought.
3. The validity of any non-denial certification action (Actions 1 and 2) shall be conditioned upon total payment of the fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.
4. Violation or threatened violation of this certification shall be subject to any remedies, penalties, process or sanctions as provided for under state law. For purposes of Section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.
5. In response to a suspected violation of this certification, the Regional Board may require the holder of any permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Board deems appropriate, provided that the burden, including costs, of the reports shall have a reasonable relationship to the need for the reports and the benefits obtained from the reports.
6. If you violate conditions of this certification, or if there is a water quality problem, the Regional Board may change the conditions of this certification to ensure compliance, or may issue Waste Discharge Requirements. Otherwise, we plan no further action on your application. Should new

information come to our attention that indicates a water quality problem, we may reassess certification conditions.

REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:

Daniel Gutierrez

Central Coast Region, Region 3

(805) 549-3876

(805) 543-0397 (fax)

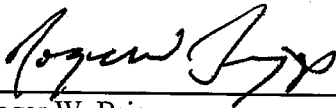
DGutierrez@waterboards.ca.gov

Please mention the certification number in all future correspondence with the Water Board concerning this project.

WATER QUALITY CERTIFICATION:

I hereby issue an order certifying that any discharge from the MBARI Monterey Accelerated Research System Project shall comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act.

Except insofar as may be modified by any preceding conditions, all certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicant's project description and the attached Project Information Sheet, and (b) compliance with all applicable requirements of the Regional Water Quality Control Board's Water Quality Control Plan (Basin Plan).



Roger W. Briggs
Executive Officer
Regional Water Quality Control Board

10-13-05
Date

Attachment 1: Project Information Sheet

PROJECT INFORMATION

Application Date	Received On: July 21, 2005 Completed On: September 30, 2005
Applicant	Monterey Bay Aquarium Research Institute
Applicant Representatives	Ecology and Environment, Inc.
Project Name	Monterey Accelerated Research System (MARS) Project
Regional Board Application Number	3270509WQ03
Type of Project	Utility cable installation
Project Location	City, location description Longitude: 121° 44' 41" Latitude: 37° 00' 30"
County	Monterey
Receiving Water(s)	Pacific Ocean at Monterey Bay
Water Body Type	Ocean
Designated Beneficial Uses	Industrial Service Supply Water Contact Recreation Non-Contact Recreation Wildlife Habitat Rare, Threatened, or Endangered Species Commercial and Sport Fishing Shellfish Harvesting
Project Description (purpose/goal)	The purpose of the project is to install and operate an advanced cabled observatory in Monterey Bay that would provide a continuous monitoring presence in the Bay. <u>The Central Coast Water Board understands that the project includes the following:</u> • MBARI will lay a single 1.5-inch diameter submarine cable between a shore station in Moss Landing and a new scientific instrument node to be installed approximately 31.7 miles west-southwest of Moss Landing. The node will be on the seabed beyond the State Offshore Boundary at the end of the cable route and housed in a bottom mount frame to secure it to the seabed. Approximately 17.8 miles of cable are within State waters. • At the shore-landing site, the cable will be placed in a steel pipeline installed by horizontal direction drilling from the shore. The pipe will extend from the shore to a point on the seabed about 0.89 miles to the northwest of the shore site. • Prior to laying cable, operators will conduct a grapnel run along the cable route to clear the seabed of debris. The grapnel remains in contact with the seafloor while pulled by vessels at the surface. The grapnel may penetrate up to 15.7 inches into the seafloor. • Operators will then bury the cable with a hydraulic plow along about 76 percent of the route to a depth of 3.3 feet where feasible. Where the

Project Information (cont'd)

	plow cannot be used, operators will bury the cable by jetting sediments with high-pressure water to excavate them. Where they cannot bury the cable it will rest on rock outcrops. • At the end of the project's expected 25-year life, the cable, node, and mount frame will be removed. • Ten to fourteen days should be required for project implementation; work is scheduled 24 hours per day.
Preliminary Water Quality Concerns	The Water Board's principal concerns include: • The potential release of bentonite drilling fluids in the horizontal directional drilling portion of the project. • The potential for the cable to interfere with commercial fishing. • Disturbance of benthic biota and turbidity effects on aquatic life from sediment disturbance from plowing, jetting, and the grapnel run. • Resuspension of anticipated concentrations of about 14 ppb of DDT in the fine-grained sediments encountered over much of the seafloor.
Water Board Mitigation Requirements	<u>Mitigations proposed by MBARI that are required to comply with 401 Water Quality Certification are as follows:</u> • Implement Spill Prevention Control and Countermeasure Plan • Implement "General Best Management Practices for upland and in-water work," (Attachment 1 to Section 401 Certification Application, pp. 9 and 10, E&E, Inc., 7/19/05) • Implement California State Lands Commission Lease conditions for MARS Project (as related to commercial fishing industry) • Follow proposed workplan to minimize disturbance area and duration
Area of Disturbance	Approximately 2 acres of temporary disturbance of seafloor substrate, including soft to medium accumulated sediments, cemented sediments, and exposed rock. Based on 12-inch width of plowshare across approximately 89,000 feet of seafloor.
Fill/Excavation Area	No dredged and/or fill material will be discharged into waters of the state.
Dredge Volume	0 cubic yards
U.S. Army Corps of Engineers Permit No	Nationwide Permit No. 12 - Utility Line Activities
Possible Listed Species	Stellar sea lion, blue whale, fin whale, Sei whale, humpback whale, pacific right whale, sperm whale, southern sea otter, leatherback turtle, olive Ridley sea turtle, green sea turtle, short-tailed albatross, California brown pelican, California least tern, marbled murrelet, western snowy plover, California clapper rail, steelhead, coho salmon.
Status of CEQA Compliance	Final Environmental Impact Report, July 2005. State Clearinghouse No. 2004051138 Lead Agencies: California State Lands Commission and Monterey Bay National Marine Sanctuary
Water Board Compensatory Mitigation Requirements	None required

Project Information (cont'd)

Application Fee Provided	\$ 500
Additional Conditions	• Contact Regional Board staff when project begins to allow for a site visit. • Within 30 days of project completion, submit a <u>project completion report</u> that contains a summary of daily activities, monitoring observations, and problems incurred and actions taken; include properly identified post-project photos. • Monitor after completion of the project for two years to ensure that the cable is not strumming excessively or resulting in water quality problems. Report findings in two annual reports due December 31 of the years in which you conduct monitoring. If the project does cause water quality problems, contact the Regional Board staff member overseeing the project. You will be responsible for obtaining any additional permits necessary for implementing plans for restoration to prevent further water quality problems.