



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

FEB 2 2011

Mr. Jeffrey Jensen  
Chief, Office of Biological Science and Permits  
State of California Department of Transportation  
P.O. Box 23660  
Oakland, California 94623-0660

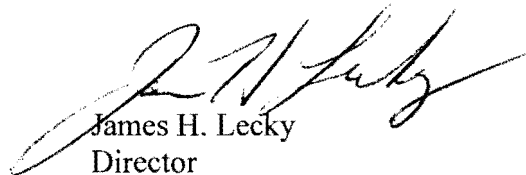
Dear Mr. Jensen:

Enclosed is an Incidental Harassment Authorization issued to the California Department of Transportation, under the authority of Section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*), to take small numbers of marine mammals by Level B harassment incidental to construction of the East Span of the San Francisco-Oakland Bay Bridge, San Francisco Bay, California.

You are required to comply with the conditions contained in this Authorization. In addition, you must cooperate with any Federal, State or local agency monitoring the impacts of your activities. The Authorization requires monitoring the presence of marine mammals, mitigating adverse impacts to the lowest level practicable, and reporting any behavioral modifications resulting from your activity as observed by qualified individuals.

If you have any questions concerning the Authorization or its requirements, please contact Monica DeAngelis, Southwest Regional Office, National Marine Fisheries Service (NMFS) at (562) 980-3232, or Shane Guan, Office of Protected Resources, NMFS, at (301) 713-2289, ext 137.

Sincerely,



James H. Lecky  
Director  
Office of Protected Resources

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL MARINE FISHERIES SERVICE

Incidental Harassment Authorization

The California Department of Transportation (CALTRANS) is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)) and 50 CFR 216.106, to take, incidentally by Level B harassment, small numbers of marine mammals incidental to construction of a replacement bridge for the East Span of the San Francisco-Oakland Bay Bridge (SF-OBB), California:

1. This Authorization is valid from February 7, 2011, until February 6, 2012.
2. This Authorization is valid only for activities involving the construction of the East Span of SF-OBB, California.
3. Species Impacted and Level of Takes
  - (a) The taking, by incidental Level B harassment only, is limited to the species listed under condition 3(b) below. The taking by serious injury or death of these species, or the taking by harassment, injury or death of any other species of marine mammal is prohibited and may result in the modification, suspension or revocation of this Authorization.
  - (b) The species authorized for takings by incidental harassment are the California sea lion (*Zalophus californianus*), Pacific harbor seal (*Phoca vitulina richardsi*), harbor porpoise (*Phocoena phocoena*), and gray whale (*Eschrichtius robustus*).
  - (c) The taking of any marine mammal in a manner prohibited under this Authorization must be reported within 48 hours of the taking to the Director, Southwest Regional Office, National Marine Fisheries Service, Telephone (562) 980-4000 and the Director, Office of Protected Resources, National Marine Fisheries Service, Telephone (301) 713-2332.
4. The holder of this Authorization is required to cooperate with the National Marine Fisheries Service and any other Federal, state or local agency monitoring the impacts of the activity on marine mammals. The holder must notify Monica DeAngelis of the Southwest



Regional Office (562-980-3232) at least 24 hours prior to starting activities (unless constrained by the date of issuance of this Authorization).

5. Mitigation Requirements

The holder of this authorization must:

- (a) Comply with equipment noise standards of the U.S. Environmental Protection Agency and ensure that all construction equipment has noise control devices no less effective than those provided on the original equipment.
- (b) Conduct briefings between construction supervisors and crews, marine mammal monitoring team, acoustical monitoring team, and CALTRANS staff prior to the start of all pile-driving activity, and when new personnel join the work, that explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.
- (c) For all in-water permanent pile-driving, establish marine mammal safety zones of 500 meters (1,640 feet) for pinnipeds and 150 meters (492 feet) for cetaceans around each of the pile-driving sites before pile driving commences. These radii represent received levels of 180 dB re 1  $\mu\text{Pa}_{\text{rms}}$  for harbor porpoises and/or gray whales, and 190 dB re 1  $\mu\text{Pa}_{\text{rms}}$  for California sea lions and/or harbor seals, respectively.
- (d) If marine mammals are visually sighted within the safety zone(s) prior to start of pile-driving, the Resident Engineer (or other authorized individual) is required to delay pile-driving of the segment until the harbor porpoises and/or gray whales have moved beyond the 180 dB re 1  $\mu\text{Pa}_{\text{rms}}$  safety zone, or seals and/or sea lions have moved beyond the 190 dB re 1  $\mu\text{Pa}_{\text{rms}}$  safety zone. Verification may be conducted either through sighting by a qualified observer or by waiting until enough time has elapsed without a sighting (at least 15 minutes for pinnipeds and 30 minutes for cetaceans) to assume the animal has moved beyond the safety zone.
- (e) If marine mammals are sighted within the safety zone(s) after pile-driving has begun, have a qualified marine mammal observer record the species, numbers and behaviors of the animal(s) and report to Monica DeAngelis at the Southwest Regional Office, National Marine Fisheries Service, phone (562-980-3232) within 48 hours of the sighting.
- (f) The holder of this Authorization shall require the contractor(s) to “soft-start” impact and vibratory pile driving operations.

6. Monitoring Requirements

- (a) General.

(1) The holder of this Authorization must designate a minimum of three biologically-trained, on-site individual(s), approved in advance by the National Marine Fisheries Service's Southwest Regional Office, to monitor the area for marine mammals before, during, and after pile driving activities from boats.

(2) The National Marine Fisheries Service must be informed immediately of any changes or deletions to any portions of the monitoring plan in accordance with condition 7(a) of this Authorization.

(b) Visual Monitoring

(1) For all in-water permanent pile-driving one three-person observer team must visually monitor each pile-driving site. When multiple sites are in operation, more than one observer team must be utilized from boats.

(2) Pre-Activity Monitoring: At least 30 minutes prior to the start of all in-water permanent pile-driving segments, marine mammal monitor(s) must conduct observations on the number, type(s), location(s), and behaviors of marine mammals in the designated safety zones and buffer zones, as well as other areas near pile driving sites. If the time between pile-segment driving is less than 30 minutes, a new 30-minute survey is unnecessary provided marine mammal monitors continue observations during the interruption. If pile driving ceases for 30 minutes or more and a marine mammal is sighted within the designated safety zone(s) prior to the commencement of pile-driving, the observer(s) must notify the Resident Engineer (or other authorized individual) immediately (see condition 5(e)).

(3) Monitoring during Activity: During all in-water permanent pile-driving marine mammal monitor(s) shall conduct and record observations on marine mammals in the vicinity of the pile driving sites and pay particular attention to designated safety zones.

(4) Post-Activity Monitoring: For a minimum of 30 minutes after in-water permanent pile-driving stops, marine mammal monitor(s) shall conduct observations of the project area and record information on the number, type(s), location(s), and behavior of marine mammals and pay attention to designated safety zones.

(5) Monitoring on Yerba Buena Island Haul-out: The holder of this authorization shall coordinate with the Richmond Bridge harbor seal survey team to collect observational data from Yerba Buena Island twice a week during in-water pile-driving activity.

(6) Monitoring under Low Light Condition: In late afternoon and/or early evening when light condition is low, marine mammal monitor(s) shall use infrared (IR) scopes to conduct observation of the project area.

(7) Monitoring at Control Site(s): At least one appropriate control site (i.e., harbor seal haul-out site(s) not impacted by the East Span project) must be designated and monitored twice a week during periods of in-water pile-driving.

(8) Data on all observations must be recorded and shall include the following information:

- (i) date and time that pile driving or removal starts and ends;
- (ii) location of sighting;
- (iii) species;
- (iv) number of individuals;
- (v) number of calves present;
- (vi) duration of sighting;
- (vii) behavior of marine animals sighted;
- (viii) direction of travel;
- (ix) distance from pile driving/removal;
- (x) environmental information associated with sighting event including Beaufort sea state, wave height, tide state, water currents, wind direction, visibility, glare, percentage of glare, percentage of cloud cover;
- (xi) when in relation to pile driving or removal activities did the sighting occur (before, "soft-start", during, or after the pile driving or removal); and
- (xii) other human activity in the area.

## 7. Reporting

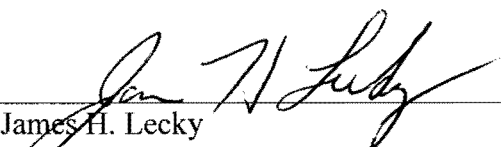
(a) If in-water pile driving or removal is conducted, the holder of this Authorization must consult once a week by telephone or e-mail with Monica DeAngelis, or her designee, at the Southwest Regional Office, National Marine Fisheries Service (562-980-

3232), providing a status report on the appropriate reporting items found under condition 7(b), unless other arrangements for monitoring reports are agreed to in writing.

(c) A report on all activities must be submitted to the Southwest Regional Office and the Office of Protected Resources, National Marine Fisheries Service, within 90 days after completion of the activities. This report must contain the following information:

- (1) Dates and types of activities;
- (2) The results of the visual monitoring program, including all items identified in Section 6(b)(8); and

8. A copy of this Authorization must be in the possession of all contractors and marine mammal monitors operating under the authority of this Incidental Harassment Authorization.

  
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James H. Lecky  
Director  
Office of Protected Resources  
National Marine Fisheries Service

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Date