Mr. Jeffrey A. Lindley  
Division Administrator  
Federal Highway Administration,  
California Division  
U.S. Department of Transportation  
980 Ninth Street, Suite 400  
Sacramento, California 95814-27240  

Dear Mr. Lindley:

Enclosed is an Incidental Harassment Authorization (IHA) issued to the Federal Highway Administration, on behalf of 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 harassment incidental to conducting a pile installation demonstration project at the San Francisco-Oakland Bay Bridge, San Francisco Bay, CA.

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 IHA 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 Christina Fahy, Southwest Regional Office, National Marine Fisheries Service (NMFS) at 552-980-4023, or Kenneth Hollingshead, Office of Protected Resources, NMFS at (301) 713-2055, ext 128.

Sincerely,

[Signature]

Donald R. Knowles  
Director  
Office of Protected Resources

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

Incidental Harassment Authorization

The Federal Highway Administration is hereby authorized under
section 101(a)(5)(D) of the Marine Mammal Protection Act (16
U.S.C. 1371(a)(5)(D); MMPA) to incidentally harass a small number
of seals and sea lions in the course of conducting a pile
installation demonstration project (PIDP) at the San Francisco-
Oakland Bay Bridge, San Francisco Bay, CA contingent upon the
following conditions:

1. This Authorization is valid from May 23, 2000, until

2. This Authorization is valid only for activities
associated with the pile installation demonstration project.

3. (a) The taking, by incidental harassment only, is
limited to the species listed under condition 3(b) below. The
taking by 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 incidental harassment
takings are: Pacific harbor seals (Phoca vitulina) and California
sea lions (Zalophus californianus).

(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 Southwest Regional Administrator or
his representative at the National Marine Fisheries Service,
telephone (562) 980-4023.

4. The California Department of Transportation 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 Christina
Faby at the Southwest Regional Office, National Marine Fisheries
Service, (562-980-4023), at least 48 hours prior to beginning the
designated activity.
5. Mitigation.

(a). The California Department of Transportation will establish a safety zone around each of the pile driving sites. The safety zone is intended to include all areas where the underwater sound pressure levels are anticipated to equal or exceed 190 dB re 1 \( \mu \text{Pa}\text{rms} \). Prior to, and until the 190 dB re 1 \( \mu \text{Pa}\text{rms} \) safety zone can be determined through measuring the sound pressure level from each hammer, a 500-meter (1,640 ft) safety zone shall be established. Once sound pressure levels have been recorded to determine where this radius should be established, the appropriate safety zone for 190 dB re 1 \( \mu \text{Pa}\text{rms} \) can be utilized.

(b). The California Department of Transportation will establish a safety zone around the harbor seal haulout site at Yerba Buena Island as illustrated in Figure 1. Except in an emergency situation, the California Department of Transportation, its employees and contractors, or vessels must not enter this safety zone. In addition, the California Department of Transportation, its employees and contractors, or vessels must not approach the Yerba Buena Island haulout closer than 300 ft (91 meters) when outside the boundaries of the designated safety zone described herein.

(c). Before pile driving of a pile segment begins, NMFS-approved observers on boats must survey the PIDP safety zone to ensure that no marine mammals are seen within the designated zone. If marine mammals are found within the safety zone, pile driving of the segment will be delayed until they move out of the area or until the Southwest Regional Administrator authorizes the intentional harassment of individual animals under section 109(h) (1)(A) of the MMPA. If a marine mammal enters the safety zone after pile driving of a segment has commenced, hammering may continue unabated and marine mammal observers will monitor and record their numbers and behavior.

(d). Pile driving must not commence unless the safety zone can be monitored for a minimum of 15 minutes immediately prior to the start-up of the pile driving episode.


(a). Biological monitoring of the PIDP activities on harbor seals and California sea lions will be conducted by a minimum of three biological observers, approved in advance by the National Marine Fisheries Service, during all active pile driving periods. Monitoring will begin a minimum of 30 minutes prior to initiation of each pile driving episode.
(b). The California Department of Transportation will ensure that the biological monitors will conduct observations of
seal behavior at the Yerba Buena Island harbor seal haul-out and collect data as described in paragraph 6(d).

(c). The California Department of Transportation will ensure, that, to the greatest extent practicable, at least 50
percent of all pile driving episodes will be performed during daylight hours. All restriking of the piles (5 episodes) must be
conducted during daylight hours.

(d). The following data will be recorded: (1) number of
harbor seals and other marine mammals on site; (2) date and time of observation(s); (3) tidal height; (4) number of adults,
subadults, and pups; (5) number of individuals with red pelage;
(6) number of females and males; (7) number of molting seals; and (8) details of any observed disturbances. Concurrently, the
monitor(s) will record general PIDP activity, location, duration, and estimated noise levels.

7. Activities related to the monitoring described in this Authorization do not require a separate scientific research
permit issued under section 104 of the Marine Mammal Protection Act.

8. Reporting.

(a). The California Department of Transportation will provide daily reports to the Southwest Regional Administrator,
National Marine Fisheries Service, 501 West Ocean Boulevard,
Suite 4200, Long Beach, CA 90802. The daily report will include
species and numbers of marine mammals observed, time and location
of observation, and behavior. In addition the daily report will
include an estimate of the number of Pacific harbor seals and
California sea lions that may have been harassed as a result of
the pile driving activities.

(b). The California Department of Transportation will provide the Southwest Regional Administrator with the initial
sound pressure level measurements taken to estimate the 190 dB re
1 μPa re contour and the final safety-zone radii that are
established.

(c). A draft final report must be submitted to the
Southwest Regional Administrator within 120 days of completion of
the Pile Installation Demonstration Project. This report will
provide in detail the monitoring protocol, a summary of the data
recorded during monitoring, an estimate of the numbers of marine
mammals that may have been harassed due to pile driving, and
conclusions drawn from measurements with and without the attenuation measures. The draft final report will also provide a description of observed or possible relationships between the PIDP activities and harbor seal behavior patterns at the Yerba Buena Island haulout.

(d). A final report must be submitted to the Southwest Regional Administrator within 30 days after receiving comments from the Regional Administrator on the draft final report. If no comments are received from the Southwest Regional Administrator, the draft final report will be considered to be the final report.

9. A copy of this Authorization must be in the possession of each observer or group operating under the authority of this Incidental Harassment Authorization.

[Signature]
Donald R. Knowles
Director
Office of Protected Resources

MAY 23 2000
Date
Proposed new limits

Proposed no entry buffer zone by the National Marine Fishery Service (500 meter radius)

INFORMATION HANDOUT,
ENVIRONMENTAL CHAPTER, HARBOR SEAL ON YBI

PILE INSTALLATION
DEMONSTRATION PROJECT,
SFBB EAST SPAN SEISMIC SAFETY PROJECT

Prepared for California Department of Transportation
Contract EA 04-012084
