



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

## INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Navy (Navy), Naval Base Point Loma, California, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)), to harass marine mammals incidental to a pier replacement project in San Diego Bay, California.

1. This Incidental Harassment Authorization (IHA) is valid from September 1, 2013 through August 31, 2014.
2. This IHA is valid only for pile driving and removal activities associated with demolition and construction associated with the fuel pier replacement project (P-151) in San Diego Bay, California.
3. General Conditions
  - (a) A copy of this IHA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of this IHA.
  - (b) The species authorized for taking are the harbor seal (*Phoca vitulina richardii*), California sea lion (*Zalophus californianus californianus*), bottlenose dolphin (*Tursiops truncatus truncatus*), and the gray whale (*Eschrichtius robustus*).
  - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). See Table 1 (attached) for numbers of take authorized.
  - (d) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in item 3(b) of the Authorization or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.
  - (e) The Navy shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, acoustical monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.
  - (f) The Navy shall comply with applicable equipment noise standards and ensure that all construction equipment has noise control devices no less effective than those provided on the original equipment.

4. Mitigation Measures

In order to ensure the least practicable impact on the species listed in condition 3(b), the holder of this Authorization is required to implement the following mitigation measures:



- (a) The Navy shall implement shutdown zones sufficient to encompass the estimated distances to the 180/190 dB rms (re 1  $\mu$ Pa) thresholds for cetaceans and pinnipeds, respectively, in order to prevent unauthorized Level A harassment. The minimum shutdown zone for all pile driving shall be of 10 m radius. If a marine mammal comes within these zones, operations shall cease. See Table 2 (attached) for minimum radial distances required for shutdown zones.
- (b) The Navy shall similarly avoid direct interaction with marine mammals during in-water heavy machinery work other than pile driving that may occur in association with the specified activities. If a marine mammal comes within 10 m of such activity, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions, as appropriate.
- (c) The Navy shall establish monitoring locations as described in the Acoustic and Marine Mammal Monitoring Plan (Monitoring Plan; attached).
  - (i) For all pile driving activities, a minimum of one observer shall be stationed at the active pile driving rig in order to monitor the shutdown zones.
  - (ii) For all pile driving activities at the fuel pier location, at least three additional vessel-based observers shall be positioned for optimal monitoring of the surrounding waters. During impact driving of steel piles, one of these shall be stationed for optimal monitoring of the cetacean Level A injury zone, while two of these may be positioned at the discretion of the Navy for optimal fulfillment of both acoustic monitoring objectives and monitoring of the Level B harassment zone. During all other pile driving, all three vessel-based observers may be positioned at the discretion of the Navy for optimal fulfillment of both acoustic monitoring objectives and monitoring of the Level B harassment zone.
  - (iii) These observers shall record all observations of marine mammals, regardless of distance from the pile being driven, as well as behavior and potential behavioral reactions of the animals.
- (d) Monitoring shall take place from 15 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 15 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (i.e., must leave of their own volition) and their behavior shall be monitored and documented. Monitoring shall occur throughout the time required to drive a pile. The shutdown zone must be determined to be clear during periods of good visibility (i.e., the entire shutdown zone and surrounding waters must be visible to the naked eye).
- (e) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. If pile driving is halted or delayed at a

specific location due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.

- (f) Monitoring shall be conducted by qualified observers, as described in the Monitoring Plan. Trained observers shall be placed from the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.
- (g) The Navy shall use soft start techniques recommended by NMFS for impact pile driving. The soft start requires contractors to provide an initial set of strikes from the impact hammer at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.
- (h) Pile driving shall only be conducted during daylight hours.

5. Monitoring

The holder of this Authorization is required to conduct acoustic and marine mammal monitoring during pile driving activity. Monitoring and reporting shall be conducted in accordance with the Monitoring Plan.

- (a) The Navy shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity. All observers shall be trained in marine mammal identification and behaviors, and shall have no other construction related tasks while conducting monitoring.
- (b) For all marine mammal monitoring, the information shall be recorded as described in the Monitoring Plan.
- (c) The Navy shall conduct acoustic monitoring for representative scenarios of pile driving activity, as described in the Monitoring Plan.

6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft report on all monitoring conducted under the IHA within 45 calendar days of the completion of monitoring. A final report shall be prepared and submitted within 30 days following resolution of comments on the draft report from NMFS. This report must contain the informational elements described in the Monitoring Plan, at minimum (see attached).
- (b) Reporting injured or dead marine mammals:
  - (i) In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as an injury

(Level A harassment), serious injury, or mortality, Navy shall immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division (301-427-8425), Office of Protected Resources, NMFS, and the Southwest Regional Stranding Coordinator (562-980-3230), NMFS. The report must include the following information:

1. Time and date of the incident;
2. Description of the incident;
3. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
4. Description of all marine mammal observations in the 24 hours preceding the incident;
5. Species identification or description of the animal(s) involved;
6. Fate of the animal(s); and
7. Photographs or video footage of the animal(s).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with Navy to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Navy may not resume their activities until notified by NMFS.

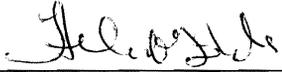
- (ii) In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), Navy shall immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southwest Regional Stranding Coordinator, NMFS.

The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Navy to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the IHA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Navy shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southwest Regional Stranding Coordinator, NMFS, within 24 hours of the

discovery. Navy shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.



*for* Donna S. Wieting,  
Director, Office of Protected Resources,  
National Marine Fisheries Service.

July 18, 2013  
Date

**Table 1. Authorized take numbers, by species**

Species	Authorized Take
Harbor seal ( <i>Phoca vitulina</i> )	90
California sea lion ( <i>Zalophus californianus</i> )	994
Bottlenose dolphin ( <i>Tursiops truncatus</i> )	307
Gray whale ( <i>Eschrichtius robustus</i> )	15

**Table 2. Minimum radial distance to shutdown zones**

Activity	Distance to threshold in meters			
	190 dB	180 dB	160 dB	120 dB
Impact driving, steel piles	36	452	5,484	n/a
Vibratory driving, steel piles	10	14	n/a	6,470
Impact driving, concrete piles	10	10	505	n/a
Impact driving, concrete-fiberglass piles	10	10	259	n/a
Vibratory extraction, steel piles	10	10	n/a	6,467
Vibratory extraction/pneumatic chipping, non-steel piles	10	10	n/a	6,467
Impact driving, concrete piles (for Marine Mammal Program relocation only)	10	10	84	n/a