



Incidental Harassment Authorization

The U.S. Navy (Navy), Naval Base Point Loma, 140 Sylvester Road, Room 1, San Diego, California 92106, 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 216.107 to take, by Level B harassment only, small numbers of marine mammals incidental to conducting their Pier Replacement Project in San Diego Bay at Naval Base Point Loma, California, contingent upon the following conditions:

1. This Incidental Harassment Authorization (IHA) is valid from October 8, 2017, through October 7, 2018.
2. This IHA is valid only for pile driving and removal activities associated with the Fuel Pier Replacement Project at the Naval Station Point Loma 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*), bottlenose dolphin (*Tursiops truncatus truncatus*), common dolphin (*Delphinus delphis*), northern elephant seal (*Mirounga angustirostris*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), Risso's dolphin (*Grampus griseus*), and 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 for numbers of take authorized.

Table 1. Authorized Take Numbers, by Species

Species	Authorized Take
California sea lion	8,971
Harbor seal	281
Northern elephant seal	43
California coastal bottlenose dolphin	704
Common dolphin	861
Pacific white-sided dolphin	28
Risso's dolphin	114
Gray whale	10

- (d) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in condition 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, acoustic 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.

4. Mitigation Measures

The holder of this Authorization is required to implement the following mitigation measures:

- (a) For all pile driving, the Navy shall implement a minimum shutdown zone of 10 m radius around the pile. If a marine mammal comes within or

approaches the shutdown zone, such operations shall cease. See Table 2 for minimum radial distances required for shutdown zones.

Table 2. Radial Distance to Shutdown and Disturbance Zones Associated with Relevant Thresholds, Including Buffers.

Activity	Underwater						Airborne	
	Shutdown zone (m)				Disturbance zone (m)		Disturbance zone (m)	
	LF ¹	MF ¹	PW ¹	OW ¹	160 dB	120 dB ²	100 dB	90 dB
Old Fuel Pier and Temporary Mooring Dolphin Demolition								
66-inch and 84-inch caissons (Diamond saw cutting)	10				N/A	631		
Concrete piles (Pile clipping)	10				N/A	2,511		
30-inch steel piles (Plasma torch cutting)	10				N/A			
NMAWC Construction and Demolition								
16-inch concrete piles (Vibratory extraction/driving)	20 ⁴		10		N/A	1,848		
16-inch concrete piles (Impact driving)	100 ⁵		60 ⁶		270	N/A		
16-inch concrete piles (Jetting pile extraction)	10				N/A	1,165		
16-inch concrete piles (Pile dead-pull)	10				N/A			

¹ LF = Low-frequency cetaceans; MF = Mid-frequency cetaceans; PW = Phocid pinnipeds; OW = Otariid pinnipeds. The high-frequency cetacean hearing group (HF) is omitted, because no species in the hearing group occur in, or around, Project area.

² Mean ambient sound levels in San Diego Bay are approximately 128 dB rms (NAVFAC SW 2015), and all 120 dB Level B ZOIs are based on the ambient value.

³ Airborne noise levels did not exceed regulatory thresholds during previous IHAs. No airborne monitoring will take place for diamond saw cutting of caissons, plasma torch cutting of temporary mooring dolphin 30-inch steel piles, jetting or dead-pull extraction of concrete piles.

⁴ Includes buffer of calculated Level A threshold out to 20 m (65.6 ft).

⁵ Includes buffer of calculated Level A threshold out to 100 m (328 ft).

⁶ Includes buffer of calculated Level A threshold out to 60 m (197 ft).

- (b) The Navy shall shutdown activity as appropriate upon observation of any species for which take is not authorized. Activity shall not be resumed until those species have been observed to leave the relevant zone or until one hour has elapsed.
- (c) The Navy shall deploy marine mammal observers as described below and as indicated in the Acoustic and Marine Species Monitoring Plan (Monitoring Plan; attached).
 - i. For all pile driving and applicable demolition activities, a minimum of one observer shall monitor the shutdown zones. However, any action requiring the impact or vibratory hammer will necessitate two MMOs.
 - ii. For impact and vibratory pile driving of 16-in concrete piles, two observers shall be positioned for optimal monitoring of the surrounding waters.
 - 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, as described in the Monitoring Plan.

- iv. All observers shall be equipped for communication of marine mammal observations amongst themselves and to other relevant personnel (*e.g.*, those necessary to effect activity delay or shutdown).
- (d) Monitoring shall take place from fifteen minutes prior to initiation of pile driving activity through thirty minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for fifteen 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. During periods of good visibility, the shutdown zone must be determined to be clear (*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 due to the presence of a marine mammal, the activity may not commence or resume until either the animal has left and been visually confirmed beyond the shutdown zone or 30 minutes have passed without re-detection of gray whales or 15 minutes for all other animals.

- (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. Soft start for impact drivers requires contractors to provide an initial set of strikes at reduced energy, followed by a thirty-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 marine mammal monitoring during pile driving activity. Marine mammal monitoring and reporting shall be conducted in accordance with the Monitoring Plan.

- (a) The Navy shall collect sighting data for marine mammal species observed in the Level A and Level B ZOIs during the period of activity as described in the monitoring plan. 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 marine mammal and acoustic monitoring, or 60 days prior to the issuance of any subsequent IHA for this project, whichever comes first. A final report shall be prepared and submitted within thirty 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), and shall also include:
 - (b) Detailed information about any implementation of shutdowns, including the distance of animals to the pile and description of specific actions that ensued and resulting behavior of the animal, if any.
 - (c) Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals.
 - (d) Results of acoustic monitoring, including the information described in the Monitoring Plan.
 - (e) 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 Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the following information:
 - A. Time and date of the incident;
 - B. Description of the incident;
 - C. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
 - D. Description of all marine mammal observations in the 24 hours preceding the incident;
 - E. Species identification or description of the animal(s) involved;
 - F. Fate of the animal(s); and
 - G. 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.

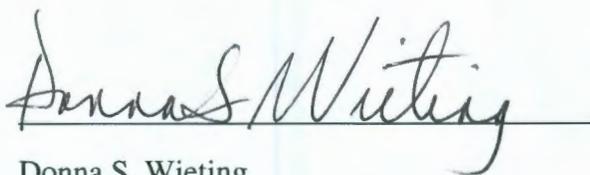
- (f) In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate

state of decomposition), Navy shall immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast 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.

- (g) 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, scavenger damage), Navy shall report the incident to the Office of Protected Resources, NMFS, and the West Coast 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.



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

SEP 26 2017

Date