



LETTER OF AUTHORIZATION

The U.S. Navy (Navy) is hereby authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(A)) to take marine mammals incidental to construction activities at Naval Weapons Station Seal Beach, California, subject to the provisions of the MMPA and the Regulations Governing Taking Marine Mammals Incidental to U.S. Navy Construction Activities at Naval Weapons Station Seal Beach, California (50 CFR Part 218, Subpart D) (Regulations).

1. This Letter of Authorization (LOA) is valid from March 25, 2020, through March 25, 2025.
2. This LOA is valid only for take incidental to the specified construction activities at Naval Weapons Station Seal Beach, California, and described in the preamble to the Regulations.
3. General Conditions
 - (a) A copy of this LOA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of this LOA.
 - (b) The species authorized for taking are listed in Table 1. The taking, by Level B harassment only, is limited to the species and numbers listed in Table 1.
 - (c) The taking by Level A harassment, serious injury, or death of any of the species listed in Table 1 or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this LOA. Any taking exceeding the authorized amounts listed in Table 1 is prohibited and may result in the modification, suspension, or revocation of this LOA.
 - (d) The Navy shall conduct briefings for construction supervisors and crews, the 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, the 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 activity, the Navy shall implement a minimum shutdown zone of a 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.



- (b) For all pile driving activity, the Navy shall implement shutdown zones with radial distances as identified in Table 2. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.
- (c) For all pile driving activity, the Navy shall designate monitoring zones with radial distances as identified in Table 2.
- (d) The Navy shall deploy marine mammal observers as described in Section 5 of this Authorization.
- (e) For all pile driving activities, a minimum of one observer shall be stationed at the active pile driving rig or in reasonable proximity in order to monitor the shutdown zone.
- (f) Monitoring shall take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 30 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. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.*, the entire shutdown zone and surrounding waters must be visible to the naked eye).
- (g) 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 voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.
- (h) During conditions where the entire shutdown zone is not visible (e.g., dark, fog, heavy rain), impact pile driving must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected.
- (i) Monitoring shall be conducted by trained observers, who shall have no other assigned tasks during monitoring periods. Trained observers shall be placed at 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. The Navy shall adhere to the following additional observer qualifications:
 - (i) Independent observers (*i.e.*, not construction personnel) are required.

- (ii) At least one observer must have prior experience working as an observer.
- (iii) Other observers may substitute education (degree in biological science or related field) or training for experience.
- (iv) Where a team of three or more observers are required, one observer shall be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer.
- (v) The Navy shall submit observer CVs for approval by NMFS.
- (j) The Navy shall use soft start techniques for impact pile driving. Soft start for impact drivers requires contractors to provide an initial set of three strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy three-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 thirty minutes or longer.

5. Monitoring

The holder of this Authorization is required to implement the following monitoring and reporting requirements:

- (a) Trained observers shall receive a general environmental awareness briefing conducted by Navy staff. At minimum, training shall include identification of marine mammals that may occur in the project vicinity and relevant mitigation and monitoring requirements. All observers shall have no other construction-related tasks while conducting monitoring.
- (b) For shutdown zone monitoring, the Navy shall report on implementation of shutdown or delay procedures, including whether the procedures were not implemented and why (when relevant).
- (c) The Navy shall deploy a minimum of one additional observer to aid in monitoring disturbance zones. This observer 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, and shall communicate with the shutdown zone observer as appropriate with regard to the presence of marine mammals. All observers shall be trained in identification and reporting of marine mammal behaviors.
- (d) The Navy must submit annual and summary reports.
 - (i) Navy shall submit an annual summary report to NMFS not later than 90 days following the end of each calendar year. Navy shall provide a final report within 30 days following resolution of comments on the draft

report. These reports shall contain, at minimum, the following:

- A. Dates and times (begin and end) of all marine mammal monitoring;
- B. Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (*i.e.*, impact or vibratory);
- C. Weather parameters and water conditions during each monitoring period (*e.g.*, wind speed, percent cover, visibility, sea state);
- D. The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting;
- E. Age and sex class, if possible, of all marine mammals observed;
- F. PSO locations during marine mammal monitoring;
- G. Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting);
- H. Description of any marine mammal behavior patterns during observation, including direction of travel;
- I. Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate);
- J. Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any;
- K. 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; and,
- L. An extrapolation of the estimated takes by Level B harassment based on the number of observed exposures within the Level B harassment zone and the percentage of the Level B harassment zone that was not visible, when applicable.

- (ii) Navy shall submit a comprehensive summary report to NMFS not later than ninety days following the conclusion of marine mammal monitoring

efforts.

- (e) Reporting of injured or dead marine mammals: In the event that personnel involved in the survey activities discover an injured or dead marine mammal, the LOA-holder must report the incident to the Office of Protected Resources (OPR), NMFS (301-427-8401) and to the West Coast Regional Stranding Network (866-767-6114) as soon as feasible. The report must include the following information:
 - (i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
 - (ii) Species identification (if known) or description of the animal(s) involved;
 - (iii) Condition of the animal(s) (including carcass condition if the animal is dead);
 - (iv) Observed behaviors of the animal(s), if alive;
 - (v) If available, photographs or video footage of the animal(s); and
 - (vi) General circumstances under which the animal was discovered.
6. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines that the authorized taking is having a 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.

Date

Table 1. Authorized Take Numbers, by Species

Species	Authorized Take
California sea lion	2,016
Harbor seal	336
Gray whale	34
Bottlenose dolphin	1,008
Common dolphin	1,361

Table 2. Radial Distance to Shutdown and Monitoring Zones.

Activity	Shutdown zone (m)				Monitoring zone (m) ²
	LF ¹	MF ¹	PW ¹	OW ¹	
24-in concrete piles; impact driving	46	10	25	10	100
12-in steel piles; impact driving	85	10	45	10	Various ³
24-in steel piles; vibratory driving	27	10	17	10	770
12-in steel piles; vibratory driving	32	10	19	10	Various ⁴
24-in timber piles; vibratory driving	10	10	10	10	1,359

¹ LF = Low-frequency cetaceans; MF = Mid-frequency cetaceans; PW = Phocid pinnipeds; OW = Otariid pinnipeds.

² Monitoring zones are equal to the described distance, as constrained by topography, and are limited to waters within Anaheim Bay.

³ Echo location = 424 m; OSCAR 4 location = 439 m; OSCAR 8 location = 430 m.

⁴ Echo location = 821 m; OSCAR 4 location = 1,496 m; OSCAR 8 location = 1,498 m.