



Department Of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Navy (Navy), Naval Base Kitsap Bangor, Washington, 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 wharf construction project in the Hood Canal, Washington.

1. This Incidental Harassment Authorization (IHA) is valid from July 16, 2012 through February 15, 2013.
2. This IHA is valid only for pile driving and removal activities associated with construction of Explosive Handling Wharf #2 (EHW-2) in the Hood Canal, Washington.
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*), California sea lion (*Zalophus californianus*), Steller sea lion (*Eumetopias jubatus*), killer whale (transient only) (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), and the harbor porpoise (*Phocoena phocoena*).
 - (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) During impact pile driving, the Navy shall implement a minimum shutdown zone of 20 m radius around the pile, to be effective for all species of pinniped, and a minimum shutdown zone of 85 m radius around the pile, to be effective for all species of cetacean. If a marine mammal comes within these zones, such operations shall cease. No marine mammal should be exposed to sound pressure levels equaling or exceeding 180/190 dB rms (re 1 μ Pa) for cetaceans and pinnipeds, respectively, in order to prevent unauthorized Level A harassment.
- (b) During vibratory pile driving and removal, the Navy shall implement a minimum shutdown zone of 10 m radius around the pile for marine mammals. If a marine mammal comes within these zones, such operations shall cease. No marine mammal should be exposed to sound pressure levels equaling or exceeding 180/190 dB rms (re 1 μ Pa) for cetaceans and pinnipeds, respectively, in order to prevent unauthorized Level A harassment.
- (c) The Navy shall similarly avoid direct interaction with marine mammals during any other in-water activities that may occur in association with the wharf construction project. If a marine mammal comes within 10 m of any in-water activity, such activity shall be shut down. Similarly, working vessels shall avoid such interactions by reducing speed to the minimum level required to maintain steerage and safe working conditions, as appropriate.
- (d) The Navy shall establish monitoring locations as described in the Marine Mammal Monitoring Plan (Mammal Plan; attached). For all pile driving activities, a minimum of one observer shall be assigned to each active pile driving rig in order to monitor the shutdown zones, while at least one additional observer shall be positioned for optimal monitoring of the surrounding waters within the Waterfront Restricted Area (WRA). In addition, at least one biological observer with no other duties shall be stationed aboard a vessel outside the WRA, for the duration of acoustic monitoring but for no less than 30 days. 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.
- (e) 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 within the WRA must be visible to the naked eye).

- (f) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted (i.e., implementation of shutdown at one pile driving location may not necessarily trigger shutdown at other locations when pile driving is occurring concurrently). 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.
- (g) Monitoring shall be conducted by qualified observers, as described in the Mammal 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.
- (h) Approved sound attenuation devices shall be used during impact pile driving operations. The Navy shall require that such devices be capable of achieving attenuation performance of 10 dB reduction, and that deployment of the device is implemented properly such that no reduction in performance may be attributable to faulty deployment.
- (i) The Navy shall use soft start techniques recommended by NMFS for impact pile driving and vibratory pile driving/extraction. The soft start requires contractors to initiate noise from vibratory hammers for 15 seconds at reduced energy followed by a 30-second waiting period. This procedure shall be repeated two additional times. For impact driving, contractors shall be required to provide an initial set of three strikes from the impact hammer at forty percent energy, followed by a 30-second waiting period, then two subsequent three-strike sets.
- (j) Pile driving shall only be conducted during daylight hours.
- (k) The Navy shall adjust shutdown zones as necessary to prevent Level A harassment of marine mammals, on the basis of the results of acoustic monitoring. Any necessary adjustments shall be made in coordination with NMFS after review of the draft acoustic monitoring report, which will be delivered to NMFS no later than 90 calendar days following the completion of the first 30 days of acoustic monitoring. The shutdown zone established for pinnipeds (20 m) for pile driving shall not be made smaller.

5. Monitoring

The holder of this Authorization is required to conduct acoustic and marine mammal monitoring during pile driving activity and to avoid direct interaction with marine mammals during all other in-water construction activities. Acoustic monitoring and reporting shall be conducted in accordance with the Acoustic Monitoring Plan (Acoustic Plan; attached) and marine mammal monitoring and reporting shall be conducted in accordance with the Mammal 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 Mammal Plan.
- (c) The Navy shall conduct acoustic monitoring for representative scenarios of pile driving activity, including scenarios involving the simultaneous operation of the maximum amount of pile driving rigs allowed (i.e., three vibratory and one impact).

6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft acoustic monitoring report to NMFS within 90 calendar days of the first 30 days of acoustic measurements. 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 Acoustic Plan, at minimum (see attached).
- (b) Submit a draft comprehensive report on all marine mammal monitoring conducted under the IHA within 90 calendar days of the end of the in-water work period. 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 Mammal Plan, at minimum (see attached).
- (c) 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 Northwest Regional Stranding Coordinator (206-526-6550), 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 Northwest 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 Northwest 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.



Helen M. Golde,
Acting Director, Office of Protected Resources,
National Marine Fisheries Service.

JUL 11 2012

Date

Table 1. Authorized take numbers, by species

Species	Authorized Take
Harbor seal (<i>Phoca vitulina</i>)	10,530
California sea lion (<i>Zalophus californianus</i>)	5,070
Steller sea lion (<i>Eumetopias jubatus</i>)	390
Killer whale (<i>Orcinus orca</i>)	90
Dall's porpoise (<i>Phocoenoides dalli</i>)	195
Harbor porpoise (<i>Phocoena phocoena</i>)	1,950