



INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Army Corps of Engineers (USACE) 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 the North Jetty Maintenance and Repairs Project in Coos Bay, Oregon, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from September 1, 2020 to August 31, 2021.
2. This IHA is valid only for vibratory pile driving installation associated with the North Jetty Maintenance and Repairs Project Coos Bay, Oregon.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of USACE, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are provided in Table 1 (attached).
 - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). Table 1 provides the authorized number of takes per species and stock.
 - (d) The taking, by serious injury or death of any of species listed in condition 3(b) of this IHA is prohibited.
 - (e) The taking, by Level A harassment, Level B harassment, serious injury, or death, of marine mammal species not identified in condition 3(b) is prohibited.
 - (f) The USACE may conduct a maximum of 14 working days associated with vibratory pile driving installation.

4. Mitigation Measures

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



- (a) For in-water construction, heavy machinery activities other than pile driving (e.g., use of barge-mounted excavators, or dredging), if a marine mammal comes within 10 m, USACE must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.
- (b) USACE is required to conduct briefings for construction supervisors and crews, the monitoring team, and USACE 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.
- (c) USACE is required to employ PSOs per the Marine Mammal Monitoring Measures as described in section 12 of the USACE's application and Monitoring Measures described in section 5 of this IHA.
- (d) Marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. 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 (Table 2 attached), their behavior must be monitored and documented until they leave of their own volition, at which point the activity may begin.
- (e) If a marine mammal is entering or is observed within an established shutdown zone (Table 2), pile driving must be halted or delayed. Pile driving may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone; 15 minutes have passed without subsequent detections of small cetaceans and pinnipeds; or 30 minutes have passed without subsequent detections of large cetaceans.
- (f) If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized takes are met, is observed approaching or within the Level B harassment zone (monitoring zone) (Table 3 attached), pile driving installation activities must shut down immediately using delay and shut-down procedures. Activities must not resume until the animal has been confirmed to have left the area or the observation time period, as indicated in condition 4(b) above, has elapsed.
- (g) All work must be conducted during daylight hours. If poor environmental conditions restrict full visibility of the shutdown zone, pile installation must be delayed.

5. Monitoring Measures

The holder of this IHA is required to abide by the following marine mammal and acoustic monitoring measures:

(a) Marine mammal monitoring must be conducted in accordance with the Marine Mammal Monitoring as described in section 12 of the USACE application and described in section 5 of this IHA.

(b) Marine mammal monitoring during pile driving installation must be conducted by NMFS-approved PSOs in a manner consistent with the following:

- i. Independent PSOs (*i.e.*, not construction personnel) who have no other assigned tasks during monitoring periods must be used.
- ii. Other PSOs may substitute education (degree in biological science or related field) or training for experience.
- iii. Where a team of three or more PSOs are required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience working as a marine mammal observer during construction.
- iv. USACE must submit PSO CVs for approval by NMFS prior to the onset of pile driving.
- v. During vibratory driving of AZ-sheets or H-piles, two PSOs must be present. One PSO must be located on the shoreline adjacent to the Materials Offloading Facilities (MOF) site or on the barge used for driving piles. The other PSO must be boat-based and detect animals in the water, along with monitoring the three haul-out sites in the Level B harassment zone (*i.e.*, Pigeon Point, Clam Island/North Spit, and South Slough). During vibratory driving steel pipe piles (30-inch), three PSOs must be present. As indicated above, one PSO must be on the shoreline or barge adjacent to the MOF site. A second PSO must be stationed near the South Slough haul out site, and the third PSO must be boat-based and make observations while actively monitoring at and between the two remaining haul out sites (*i.e.*, Pigeon Point and Clam Island).

(c) PSOs must have the following additional qualifications:

- i. Ability to conduct field observations and collect data according to assigned protocols.

- ii. Experience or training in the field identification of marine mammals, including the identification of behaviors.
- iii. Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.
- iv. Writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior.
- v. Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

6. Reporting

The holder of this IHA is required to:

(a) Submit a draft report on all monitoring conducted under the IHA within ninety calendar days of the completion of marine mammal monitoring or sixty days prior to the issuance of any subsequent IHA for this project, whichever comes first. PSO datasheets/raw sightings data would be required to be submitted with the reports. A final report must 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, section 5 of this IHA, including, but not limited to:

- i. Dates and times (begin and end) of all marine mammal monitoring.
- ii. Construction activities occurring during each daily observation period, including how many and what type of piles were driven and by what method (*i.e.*, vibratory).
- iii. Weather parameters and water conditions during each monitoring period (*e.g.*, wind speed, percent cover, visibility, sea state).
- iv. The number of marine mammals observed, by species, relative to the pile location and if pile driving installation was occurring at time of sighting.
- v. Age and sex class, if possible, of all marine mammals observed.
- vi. PSO locations during marine mammal monitoring.

- vii. 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).
- viii. Description of any marine mammal behavior patterns during observation, including direction of travel.
- ix. 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). Level B harassment takes must be extrapolated based upon the number of observed takes and the percentage of the Level B harassment zone that was not visible.
- x. 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.
- xi. 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.

(b) Reporting injured or dead marine mammals:

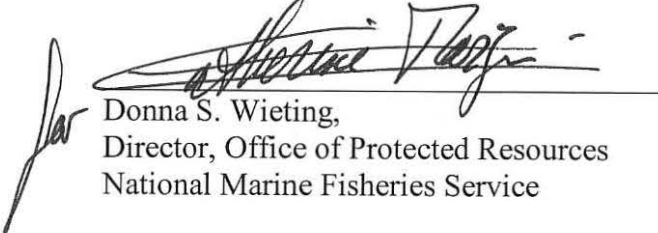
- i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as serious injury, or mortality, USACE must immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources (301-427-8401) and the West Coast Region Stranding Coordinator (206-526-4747). 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 and active sound source use 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 must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with USACE to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. USACE may not resume their activities until notified by NMFS.

- ii. In the event USACE 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), USACE must immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Region 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 USACE to determine whether additional mitigation measures or modifications to the activities are appropriate.
 - iii. In the event that USACE 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 specified activities (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), USACE must report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS, within 24 hours of the discovery.
7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.
8. Renewals - On a case-by-case basis, NMFS may issue a one-year IHA renewal with an additional 15 days for public comments when (1) another year of identical or nearly identical activities as described in the Specified Activities section of this notice is planned or (2) the activities as described in the Specified Activities section of this notice would not be completed by the time the IHA expires and a second IHA would allow for completion of the activities beyond that described in the Dates and Duration section of this notice, provided all of the following conditions are met:
- (a) A request for renewal is received no later than 60 days prior to expiration of the current IHA.
 - (b) The request for renewal must include:
 - i. An explanation that the activities to be conducted under the requested Renewal are identical to the activities analyzed under the initial IHA, are a

subset of the activities, or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take because only a subset of the initially analyzed activities remain to be completed under the Renewal).

- ii. A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.
- (c) Upon review of the request for Renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings in the initial IHA remain valid.



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

JAN - 3 2020

Date

Attachments

Table 1. Authorized Amount of Taking, by Level B harassment only, by species and stock.

Marine Mammal	Level B Harassment AZ sheets (or H-plies)	Level B Harassment 30-inch piles
	YR-1 Installation	YR-1 Installation
Harbor seal (<i>Phoca vitulina</i>)	1,169	1,169
Northern Elephant seal (<i>Mirounga angustirostris</i>)	7	7
Steller sea lion (<i>Eumetopias jubatus</i>)	14	14
California sea lion (<i>Zalophus californianus</i>)	21	21
Gray whale (<i>Eschrichtius robustus</i>)	1	1
Killer whale (<i>Orcinus orca</i>)	2	
Harbor porpoise (<i>Phocoena phocoena</i>)	2	2

Table 2. Shut-down Zones during Project Activities.

Activity	Shutdown Zones (radial distance in m, area in km ²)				
	Low-Frequency Cetaceans	Mid-Frequency Cetaceans	High-Frequency Cetaceans	Phocid	Otariid
In-Water Construction Activities					
Heavy machinery work (other than pile driving)	10 (0.00015)	10 (0.00015)	10 (0.00015)	10 (0.00015)	10 (0.00015)
Vibratory Pile Driving/Removal					
12-in H pile steel installation/removal	55 (0.00475)	55 (0.00475)	55 (0.00475)	25 (0.00098)	25 (0.00098)
24-in sheet pile installation/removal	55 (0.00475)	55 (0.00475)	55 (0.00475)	25 (0.00098)	25 (0.00098)
30-in pile installation/removal	55 (0.00475)	55 (0.00475)	55 (0.00475)	25 (0.00098)	25 (0.00098)

Table 3. Level B Harassment Monitoring Zones

Activity	Received Level at 10 m	Level B Harassment Zone (m)*	Level B Harassment Zone (km ²)
Vibratory Pile Driving/Removal			
12-inch H piles installation/removal	150 dB SPL	1,000	9.1
24-inch sheet pile installation/removal	160 dB SPL	4,642	9.1
30-inch pile installation/removal	164 dB SPL	8,577	11.5