



INCIDENTAL HARASSMENT AUTHORIZATION

The Alaska Department of Transportation & Public Facilities (DOT&PF) 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 reconstruction project in Kodiak, Alaska.

1. This Incidental Harassment Authorization (IHA) is valid from September 30, 2015 through September 29, 2016.
2. This Authorization is valid only for pile installation and removal activities associated with the Pier 1 Kodiak Ferry Terminal and Dock Improvements Project. Any reference to pile driving in this document is intended to refer to all pile installation and removal activities, unless otherwise stated.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of DOT&PF, its designees, and work crew personnel operating under the authority of this IHA.
 - (b) The species authorized for taking are transient killer whale (*Orcinus orca*), western distinct population segment (wDPS) of Steller sea lion (*Eumetopias jubatus jubatus*), harbor porpoise (*Phocoena phocoena*), and harbor seal (*Phoca vitulina richardii*).
 - (c) Taking by Level B harassment is limited to the species listed in condition 3(b). See Table 1 (attached) for numbers of take authorized. Taking by Level A harassment is authorized only for the wDPS of Steller sea lion. 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 condition 3(b), with the exception of the authorized Level A harassment of Steller sea lions, 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) DOT&PF shall conduct briefings between construction supervisors and crews, the marine mammal monitoring team, and DOT&PF 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) DOT&PF may conduct a maximum of 120 days of in-water impact driving, vibratory driving, and down-the-hole drilling.

4. Mitigation Measures

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

- (a) For all pile driving, DOT&PF shall implement shutdown zones as defined in Table 2 (attached). If a marine mammal comes within or approaches the relevant shutdown zone, such operations shall cease. This measure is not applicable to Steller sea lions, unless the authorized amount of takes by Level A harassment (see Table 1) is reached.
- (b) DOT&PF 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 DOT&PF shall establish monitoring locations as described below. Please also refer to the Monitoring Plan (Monitoring Plan; attached).
 - (i) For all pile driving activities, a minimum of one observer shall be stationed at Pier 1 work site in order to monitor the shutdown zones.
 - (ii) For all pile driving activities, a minimum of one additional observer shall be positioned on Near Island or in a location providing optimal monitoring of the project site and 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. Observers shall scan the waters within each monitoring zone activity using binoculars (Vector 10X42 or equivalent), spotting scopes (Swarovski 20-60 zoom or equivalent), and visual observation.
 - (iv) If waters exceed a sea-state which restricts observers' ability to make observations within the shutdown zone (e.g. excessive wind or fog), impact pile installation shall cease until conditions allow the resumption of monitoring.
- (d) Monitoring shall take place from thirty minutes prior to initiation of pile driving activity through thirty minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for thirty minutes to ensure that the shutdown zone is clear of marine mammals (other than Steller sea lion), 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 (other than Steller sea lion) 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 (other than Steller sea lion) 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 fifteen minutes (small odontocetes and pinnipeds) or thirty minutes (medium-sized whales, including killer whales), as appropriate, have passed without re-detection of the animal.
- (f) Monitoring shall be conducted by qualified observers, as described in 5(b) below. 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) DOT&PF shall use soft start techniques recommended by NMFS for vibratory and impact pile driving. Soft start for vibratory drivers requires contractors to initiate sound for fifteen seconds at reduced energy followed by a one-minute waiting period. This procedure is repeated two additional times. Soft start for impact drivers requires contractors to provide an initial set of strikes at reduced energy, followed by a one-minute waiting period, then two subsequent reduced energy strike sets. Soft start shall be implemented at the start of each day's pile driving and at any time following cessation of pile driving for a period of thirty minutes or longer. Soft start for impact drivers must be implemented at any time following cessation of impact driving for a period of thirty minutes or longer.
- (h) Pile cushions shall be used during all impact pile-driving activities.
- (i) For all in-water pile driving activities, DOT&PF shall operate up to a maximum of 10 hours per day.

5. Monitoring

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

- (a) During all in-water pile driving activities, DOT&PF shall establish monitoring zones as described in Table 2 (attached). DOT&PF 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.
- (b) Observers shall meet the following minimum qualifications:
 - (i) Visual acuity in both eyes (correction is permissible) sufficient for discernment of moving targets at the water's surface with ability to

estimate target size and distance; use of binoculars may be necessary to correctly identify the target.

- (ii) Education, training, or suitable combination thereof in biological science, wildlife management, mammalogy or related fields. Observers should have field experience in identification and behavior of marine mammals and project-specific training.
 - (iii) Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience).
 - (iv) Experience or training in the field identification of marine mammals, including the identification of behaviors.
 - (v) Experience or training in protocols to communicate with contractors and operators, including shut down procedures.
 - (vi) 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.
 - (vii) Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.
 - (viii) 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 and times when in-water construction activities were suspended to avoid potential incidental injury from construction sound of marine mammals observed within a defined shutdown zone; and marine mammal behavior.
 - (ix) Have no other project-related responsibility other than marine mammal monitoring, documentation, and reporting during observation periods.
 - (x) Must read and understand the monitoring plan and the IHA, agree to enforce the conditions presented therein, be able to coordinate and communicate with other personnel, and identify and report incidental harassment of marine mammals.
- (c) For all marine mammal monitoring, information shall be recorded using approved data forms.
- (d) If any non-authorized marine mammal enters into the disturbance zone as described in Table 2, all in-water pile driving activities must shut down.
- (e) If any non-authorized marine mammal is present in the disturbance zone as described in Table 2, ramping up will be delayed until the animal(s) leaves the zone. Ramping up will begin only after the observer has determined, through sighting, that the animal(s) has moved outside the disturbance zone.

6. Reporting

The holder of this Authorization 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. 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 following informational elements:
 - (i) 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.
 - (ii) Information regarding attempts to distinguish between the number of individual animals taken and the number of incidents of take.
 - (iii) The following information, to be collected on the data forms:
 1. Date and time that monitored activity begins or ends;
 2. Construction activities occurring during each observation period;
 3. Weather parameters (e.g., percent cover, visibility);
 4. Water conditions (e.g., sea state, tide state);
 5. Species, numbers, and, if possible, sex and age class of marine mammals;
 6. Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;
 7. Distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
 8. Locations of all marine mammal observations; and
 9. Other human activity in the area.
- (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 to animals other than Steller sea lions), serious injury, or mortality, DOT&PF shall immediately cease the specified activities and report the incident to the Office of Protected Resources

(301-427-8408), NMFS, and the Alaska Regional Stranding Coordinator (Aleria Jensen, 907-586-7248), 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).

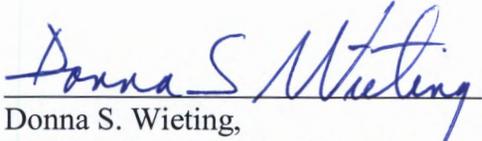
Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with DOT&PF to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. DOT&PF may not resume their activities until notified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

- (ii) In the event that DOT&PF 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), DOT&PF shall immediately report the incident to the Office of Protected Resources, NMFS, and the Alaska 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 DOT&PF to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that DOT&PF 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), DOT&PF shall report the incident to the Office of Protected Resources, NMFS, and the Alaska Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. DOT&PF 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 NMFS determines 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 30 2015

Date

Table 1. Authorized take numbers, by species.

Species	Authorized Level A Takes	Authorized Level B Takes	Total Authorized Takes
Killer Whale (<i>Orcinus orca</i>) <i>Eastern N. Pacific, Gulf of Alaska, Aleutian Islands, and Bering Sea Transient Stock</i>	0	48	48
Harbor Porpoise (<i>Phocoena phocoena</i>) <i>Gulf of Alaska Stock</i>	0	40	40
Steller Sea Lion (<i>Eumetopias jubatus</i>) <i>wDPS Stock</i>	30	3,260	3,290
Harbor Seal (<i>Phoca vitulina richardii</i>) <i>South Kodiak Stock</i>	0	40	40

Table 2. Minimum radial distance to Shutdown and Disturbance Zones

Activity	Distance to threshold in meters		
	Shutdown, pinnipeds	Shutdown, cetaceans	Disturbance zone
Impact driving, steel piles	4	20	350
Vibratory driving, steel piles	n/a	n/a	1,150
DTH drilling	n/a	n/a	300