



INCIDENTAL HARASSMENT AUTHORIZATION

The Alaska Department of Transportation and Public Facilities (ADOT&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 pile driving and removal in Tenakee Springs, Alaska, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from June 1, 2019 to May 31, 2020
2. This IHA is valid only for in-water construction activities associated with improvements at the Tenakee Springs city dock and ferry terminal, in Tenakee Springs, Alaska.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the ADOT&PF, its designees, work crew, and marine mammal monitoring personnel operating under the authority of this IHA.
 - (b) The species authorized for taking are humpback whale (*Megaptera novaeangliae*), killer whale (*Orcinus orca*), Harbor porpoise (*Phocoena phocoena*), Dall's porpoise (*Phocoenoides dalli*), Steller sea lion (*Eumetopias jubatus*), harbor seal (*Phoca vitulina*) and minke whale (*Balaenoptera acutorostrata*).
 - (c) The taking, by Level B harassment only, is limited to the species/stocks listed in condition 3(b). See Table 1 for numbers of take authorized.
 - (d) For those marine mammals for which take has not been authorized, in-water pile installation/removal and drilling shall shut down immediately when the animals are sighted.
 - (e) 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.
 - (f) ADOT&PF shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, and ADOT&PF staff prior to the start of all piling and drilling activities, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.



(g) Work may only occur during daylight hours.

4. Mitigation Measures

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

(a) Shutdown Measures

- (i) For all pile driving/removal and drilling activities, ADOT&PF shall implement shutdown measures in which operations shall cease if a marine mammal enters or approaches an established shutdown zone. Shutdown zones are defined below.
- (ii) For all vibratory pile driving/removal, drilling, impact pile driving of 14-inch, 18-inch, and 20-inch piles, and impact pile driving of 24-inch and 30-inch steel piles at a frequency of one pile per day, ADOT&PF shall implement a shutdown zone of 100 meters for cetaceans and 50 meters for pinnipeds.
- (iii) For impact pile driving of 24-inch and 30-inch steel piles at a frequency of two or more piles per day, ADOT&PF shall implement a shutdown zone of 200 meters for high and low frequency cetaceans and 100 meters for pinnipeds and mid-frequency cetaceans.
- (iv) ADOT&PF shall implement shutdown measures if the amount of take authorized is reached and if such marine mammals are sighted.
- (v) If a marine mammal comes within 10 meters of in-water, heavy machinery work other than pile driving or drilling (*e.g.*, standard barges, tugboats), operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions. Construction crew members can enforce this shutdown zone.
- (vi) If a marine mammal is observed at or within the shutdown zone, work shall be delayed or stopped until the individual has been observed outside of the zone, or has not been observed for at least 15 minutes for pinnipeds and small cetaceans and 30 minutes for large whales.

(b) ADOT&PF shall establish Level A and Level B harassment zones as shown in Tables 3 and 4.

(c) Soft Start for Impact Pile Driving

- (i) At the start of any pile driving activities or when there has been downtime of 30 minutes or more without impact pile driving, the contractor shall initiate the driving with ramp-up procedures described below.
- (ii) During soft start for impact hammers, contractors are required to provide an initial set of strikes from the impact hammer at 40 percent energy, followed by no less than a 30-second waiting period. This procedure shall be conducted three times before impact pile driving begins.

5. Monitoring

The holder of this Authorization is required to conduct marine mammal monitoring during pile driving/removal and drilling activities. Monitoring and reporting shall be conducted in accordance with the Monitoring Plan within the IHA Application.

(a) Pre-Activity Monitoring

- (i) Prior to the start of a daily in-water construction activity, or whenever a break in pile driving of 30 minutes or longer occurs, the observer(s) shall observe the shutdown and monitoring zones for a period of 30 minutes.
- (ii) If the shutdown zones has been observed to be clear of marine mammals for 30 minutes, in-water construction can commence and work can continue even if visibility becomes impaired within the Level B harassment zone.
- (iii) When a marine mammal is present in the Level B harassment zone, piling and drilling activities may begin and or continue and Level B harassment take shall be recorded.
- (iv) If the entire Level B harassment zone is not visible while work continues, takes shall be recorded and extrapolated based upon the amount of total observed takes and the percentage of the Level B harassment zone that was not visible.

(b) Monitoring shall be conducted by qualified protected species observers (PSOs).

- (i) Two observers shall be on site to actively observe the shutdown and harassment zones during all pile driving, removal, and drilling.
- (ii) Observers shall use their naked eye with the aid of binoculars, and/or a spotting scope during all pile driving and extraction activities.
- (iii) Monitoring location(s) shall be identified with the following characteristics:
 - 1. Unobstructed view of pile being driven; and

2. Unobstructed view of all water within the Level A harassment zone (if applicable) and as much of the Level B harassment zone as possible for piles being driven.
- (c) If waters exceed a sea-state which restricts the PSOs ability to observe within the shutdown zone (*e.g.*, excessive wind or fog), pile installation and removal shall cease. Pile driving shall not be initiated until the entire shutdown zone is visible.
- (d) Marine mammal location shall be determined using a rangefinder and a GPS or compass.
- (e) Ongoing in-water pile installation may be continued during periods when conditions such as low light, darkness, high sea state, fog, ice, rain, glare, or other conditions prevent effective marine mammal monitoring of the entire Level B harassment zone. PSOs would continue to monitor the visible portion of the Level B harassment zone throughout the duration of driving activities.
- (f) Post-construction monitoring shall be conducted for 30 minutes beyond the cessation of piling and drilling activities at end of day.

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. This report shall detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed, including the total number extrapolated from observed animals across the entirety of relevant monitoring zones. 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:
 - (i) Date and time a monitored activity begins or ends;
 - (ii) Construction activities occurring during each observation period;
 - (iii) Record of 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;
 - (iv) Weather parameters (*e.g.*, percent cover, visibility);
 - (v) Water conditions (*e.g.*, sea state, tide state);
 - (vi) Species, numbers, and, if possible, sex and age class of marine mammals;

- (vii) Description of any observable marine mammal behavior patterns;
 - (viii) Distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
 - (ix) Locations of all marine mammal observations; and
 - (x) 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), serious injury, or mortality, ADOT&PF shall immediately cease the specified activities and report the incident to the Office of Protected Resources (301-427-8401), NMFS, and the Alaska Regional Stranding Coordinator (907-271-1332), 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 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).

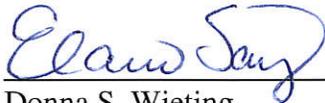
Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with ADOT&PF to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. ADOT&PF may not resume their activities until notified by NMFS.
 - (ii) In the event that ADOT&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), ADOT&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 shall work with ADOT&PF to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that ADOT&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), ADOT&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. ADOT&PF shall provide photographs, 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.



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

JUN 20 2018

Date

Table 1. Authorized take numbers, by species/stocks

Species	Stock	Level A Takes	Level B Takes
Steller sea lion	Eastern DPS	0	5,351
	Western DPS		1,159
Harbor seal	Glacier Bay/Icy Strait	0	8,144
Harbor porpoise	Southeast Alaska	0	242
Dall's porpoise	Alaska	0	49
Killer whale	West Coast transient	0	60
	Alaska resident	0	60
	Northern Resident	0	60
Humpback whale	Central North Pacific	0	558
Minke whale	Alaska		3

