



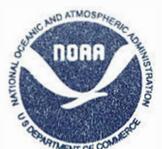
INCIDENTAL HARASSMENT AUTHORIZATION

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 activities at the Auke Bay Ferry Terminal in Juneau, Alaska, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from January 1, 2020 through December 31, 2020.
2. This IHA is valid only for pile installation and removal (hereafter referred to as pile driving) associated with Auke Bay Ferry Terminal Modifications and Improvements Project in Juneau, Alaska.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of ADOT&PF, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), harbor porpoise (*Phocoena phocoena*), Dall's porpoise (*Phocoenoides dalli*), Steller sea lion (*Eumetopias jubatus*), and harbor seal (*Phoca vitulina*).
 - (c) The taking, by Level A and B harassment, 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 the species listed in condition 3(b) of this IHA or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA. Any taking exceeding the authorized amounts listed in Table 1 is prohibited and may result in the modification, suspension, or revocation of this IHA.

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, drilling, or dredging), if a marine mammal comes within 10 m, ADOT&PF must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.
- (b) ADOT&PF is required to conduct briefings for construction supervisors and crews, the monitoring team, and ADOT&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, the marine mammal monitoring protocol, and operational procedures.
- (c) ADOT&PF is required to establish and implement monitoring and shutdown zones (as shown in Tables 2 and 3) for each activity.
- (d) Marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving through 30 minutes post-completion of pile driving. Pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of resulting from marine mammals in the shutdown zone (Table 2), 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 or 15 minutes have passed without subsequent detections of the animal.
- (f) ADOT&PF must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy strike sets. A soft start must 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.
- (g) 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 monitoring zone (Table 3), pile driving 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.

5. Monitoring Measures

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

- (a) Marine mammal monitoring must be conducted in accordance with the final Marine Mammal Mitigation and Monitoring Plan. Two PSOs are required during all pile installation and removal activities.
- (b) Marine mammal monitoring during pile driving 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. ADOT&PF must submit PSO CVs for approval by NMFS prior to the onset of pile driving.
- (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. 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 informational elements described in the final Marine Mammal Mitigation and Monitoring Plan, 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 or removed and by what method (*i.e.*, impact or 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 or removal 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).
 - 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, ADOT&PF must immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources (301-427-8401) and Alaska Region Stranding Coordinator (907-586-7209). 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 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.’

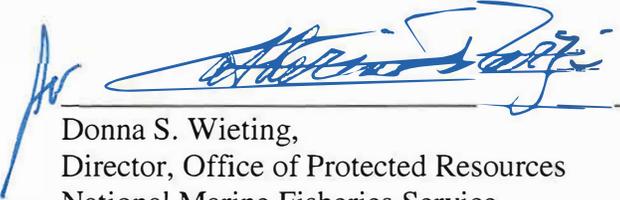
ii. In the event ADOT&PF discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), ADOT&PF must immediately report the incident to the Office of Protected Resources, NMFS, and the Alaska 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 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 specified activities (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), ADOT&PF must report the incident to the Office of Protected Resources, NMFS, and Alaska 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 expedited public comment period (15 days) when 1) another year of identical or nearly identical activities is planned or 2) the activities would not be completed by the time the IHA expires and a second IHA would allow for completion of the activities beyond that allowed for under this IHA, 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 the following:
 - i. An explanation that the activities to be conducted beyond the initial dates either are identical to the previously analyzed activities or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, take estimates, or mitigation and monitoring requirements.
 - 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 remain the same and appropriate, and the original findings remain valid.

OCT 17 2019



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

Date

Table 1. Proposed Authorized Take by Species/Stocks

Common name	Stock	Level A	Level B
Humpback whale	Central North Pacific	0	56
Minke Whale	Alaska	0	6
Killer whale	Alaska Resident	0	15
	Northern Resident		
	West Coast Transient		
Harbor porpoise	Southeast Alaska	10	18
Dall’s porpoise	Alaska	0	30
Steller sea lion	Western U.S.	0	307
	Eastern U.S.	0	1,387
Harbor seal	Lynn Canal/ Stephens Passage	110	618

Table 2. Shutdown Zones during Pile Installation and Removal

Activity	Piles per day	Shutdown Zone (m)				
		LF cetaceans	MF cetaceans	HF cetaceans	Phocids	Otariids
All vibratory installation and removal	3	50			20	
30-inch pile impact installation	3	500	20	600	270	20
	2	380		460	200	
	1	250		290	130	
24-inch pile impact installation	3	450		550	250	
	2	350		410	200	
	1	220		260	120	

Table 3. Marine Mammal Monitoring Zones

Activity	Monitoring zone (m)
20-inch vibratory removal	5,415
24-inch vibratory removal and installation	
24-inch impact installation	1,000
30-inch vibratory installation	8,450
30-inch impact installation	1,330