



INCIDENTAL HARASSMENT AUTHORIZATION

Halibut Point Marine Services, LLC (HPMS) 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 Old Sitka Dock in Sitka, Alaska, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid through April 14, 2022.
2. This IHA is valid only for pile installation and removal (hereafter referred to as pile driving) and drilling associated with the Old Sitka Dock North Dolphins Expansion Project in Sitka, AK.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of HPMS, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), harbor porpoise (*Phocoena phocoena*), 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, or dredging), if a marine mammal comes within 10 m, HPMS must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.
- (b) HPMS is required to conduct briefings for construction supervisors and crews, the monitoring team, and HPMS 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) HPMS is required to employ PSOs per the Marine Mammal Monitoring Plan, dated March 2020, 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 3), 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 3), 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.
- (f) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (e.g., fog, heavy rain), pile driving and removal must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected.
- (g) HPMS 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 one-minute 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.
- (h) 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 (Table 2), pile driving and removal activities must shut down immediately using delay and shutdown 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(e) above, has elapsed.

- (i) HPMS is required to implement all mitigation measures described in the biological opinion, issued on 4/2/2020.

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 Marine Mammal Monitoring Plan, dated March 2020.
- (b) PSO locations must be as follows:
 - i. At or near the site of pile driving.
 - ii. Big Gavanski Island- During vibratory pile driving and down-the-hole drilling, this PSO will be stationed on the north end of the island, and positioned to view north into Olga Strait and southeast toward the project area. For impact pile driving, this PSO will be stationed on the east side of the island, and positioned to be able to view north into Olga Strait and south toward the project area.
 - iii. Middle Island- During vibratory pile driving and down-the-hole drilling, this PSO will be stationed on the north end of the island and positioned to be able to view west toward Kruzoff Island and east toward the project area. During impact pile driving, this PSO will be stationed on the east side of the island and positioned to view south toward Sitka Channel and east toward the project area.
- (c) Marine mammal monitoring during pile driving and removal 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. HPMS must submit PSO CVs for approval by NMFS prior to the onset of pile driving.

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 Marine Mammal Monitoring Plan, dated March 2020, 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.
 - xii. An extrapolation of the estimated takes by Level B harassment based on the number of observed exposures within the Level B harassment zone and the percentage of the Level B harassment zone that was not visible.
 - xiii. Other human activity in the area.
- (b) Submit all PSO datasheets and/or raw sighting data
- (c) Reporting injured or dead marine mammals:
- In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the IHA-holder must immediately cease the specified activities and report the incident to the Office of Protected Resources (OPR) (301-427-8401), NMFS and to Alaska Regional Stranding Coordinator (907-586-7209) as soon as feasible. The report must include the following information:
- i. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
 - ii. Species identification (if known) or description of the animal(s) involved;
 - iii. Condition of the animal(s) (including carcass condition if the animal is dead);
 - iv. Observed behaviors of the animal(s), if alive;
 - v. If available, photographs or video footage of the animal(s); and
 - vi. General circumstances under which the animal was discovered.

NMFS will work with HPMS to determine what, if anything, is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. HPMS must not resume their activities until notified by 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.

Catherine Marzin,
Acting Director, Office of Protected Resources
National Marine Fisheries Service

Date

Table 1: Authorized amount of taking, by Level A harassment and Level B harassment, by species and stock.

| Common Name | Stock | Level A | Level B |
|-------------------------|--|----------------|----------------|
| Gray Whale | Eastern North Pacific | 0 | 3 |
| Humpback Whale | Central North Pacific | 0 | 72 |
| Minke Whale | Alaska | 0 | 2 |
| Killer Whale | Alaska Resident | 0 | 16 |
| | Gulf of Alaska, Aleutian Islands, Bering Sea Transient | | |
| | Northern Resident | | |
| | West Coast Transient | | |
| Harbor Porpoise | Southeast Alaska | 4 | 45 |
| Steller Sea Lion | Eastern U.S. | 0 | 211 |
| | Western U.S. | | 5 |
| Harbor Seal | Sitka/ Chatham Strait | 4 | 252 |

Table 2: Distances to Level A and Level B harassment isopleths by marine mammal hearing group, pile size, and pile driving method.

| Activity | Level A harassment zone (m) | | | | | Level B harassment zone (m) |
|---|------------------------------------|--------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| | Low-Frequency Cetaceans | Mid-Frequency Cetaceans | High-Frequency Cetaceans | Phocid Pinnipeds | Otariid Pinnipeds | |
| 30-inch Pile Vibratory Installation/Removal | 20.0 | 1.8 | 29.6 | 12.2 | 0.9 | 15,849 |
| 48-inch Pile Vibratory Installation | 31.8 | 2.8 | 46.9 | 19.3 | 1.4 | 15,849 |
| Down-the-hole Drilling | 733.5 | 26.1 | 873.7 | 392.5 | 28.6 | 12,023 |
| 48-inch Pile Impact Installation <i>(and 30-inch steel impact installation, as necessary)</i> | 809.8 | 28.8 | 964.6 | 433.4 | 31.6 | 3,699 |

Table 3: Shutdown zones by marine mammal hearing group, pile size, and pile driving method.

| Activity | Shutdown Zone (m) | | | | |
|--|-------------------|--------------|--------------|---------|----------|
| | LF Cetaceans | MF Cetaceans | HF Cetaceans | Phocids | Otariids |
| 30" Vibratory Pile Driving/Removal | 50 | 10 | 50 | 25 | 10 |
| 48" Vibratory Pile Driving | 50 | 10 | 50 | 25 | 10 |
| Down-the-hole Drilling | 750 | 30 | 200 | 200 | 30 |
| 48" Impact Pile Driving <i>(and 30-inch impact pile driving, as necessary)</i> | 825 | 50 | 100 | 100 | 50 |