



## INCIDENTAL HARASSMENT AUTHORIZATION

UniSea, Inc. (UniSea), 15400 NE 90th Street, Redmond, WA, 98073, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)) and 50 CFR 216.107 to take, by Level B harassment only, small numbers of marine mammals incidental to conducting in-water construction work for the G1 dock construction project in Unalaska, Alaska, contingent upon the following conditions:

1. This Authorization (IHA) is valid from March 1, 2016 through February 28, 2017.
2. This Authorization is valid only for activities associated with in-water construction work at the G1 dock construction project in Iliuliuk Harbor, Unalaska, Alaska.
3. General Conditions
  - (a) A copy of this IHA must be in the possession of UniSea, its designees, and work crew personnel operating under the authority of this IHA.
  - (b) The species authorized for taking are the harbor seal (*Phoca vitulina*) and Steller sea lion (*Eumetopias jubatus*).
  - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). 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) 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.
  - (e) UniSea shall conduct briefings between construction supervisors and crews, marine mammal observing team, and UniSea 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 observing protocol, and operational procedures.

4. Mitigation Measures

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



- (a) **Establishment of Level A Exclusion Zone**  
During impact and vibratory pile driving and removal and down-the-hole drilling, UniSea shall establish a Level A exclusion zone that shall extend to a 10 m radius around the pile being driven or removed.
- (b) **Establishment of Level B Harassment Zones**  
During impact and vibratory pile driving and removal and down-the-hole drilling, UniSea shall establish Level B harassment zones. The modeled radial distances for Level B harassment zones are shown in the Marine Mammal Monitoring Plan (Monitoring Plan; attached).
- (c) **Shutdown**  
If a marine mammal enters or approaches the Level A exclusion zone, all impact and vibratory pile driving and removal and down-the-hole drilling operations shall cease. In-water construction activities shall not resume until the animal is observed leaving the Level A zone voluntarily and has been visually confirmed beyond the Level A zone, or 15 minutes has elapsed without re-detection of the animal in the Level A zone (30 minutes in the case of a cetacean). Shutdown of construction operations shall also occur if a species for which authorization has not been granted (including cetaceans) is observed within, or approaches, the Level B harassment zone; in-water construction activities shall be suspended until the animal is observed leaving the Level B zone voluntarily and has been visually confirmed beyond the Level B harassment zone, or 15 minutes has elapsed without re-detection of the animal in the Level B harassment zone (30 minutes in the case of a cetacean). In addition, shutdown of construction shall occur if a Steller sea lion or harbor seal approaches, or is observed within, the Level B harassment zone, and the number of takes authorized for the respective species has already been met; in this case, in-water construction activities shall be suspended until the Steller sea lion or harbor seal is observed leaving the Level B zone voluntarily and has been visually confirmed beyond the Level B harassment zone, or 15 minutes has elapsed without re-detection of the animal in the Level B harassment zone. If pile driving is halted or delayed due to the presence of a marine mammal, animals shall be allowed to remain in the respective zone (i.e., must leave of their own volition) and their behavior shall be monitored and documented. Construction activity may not commence or resume until the animal has voluntarily left the applicable zone and been visually confirmed beyond it, or 15 minutes have passed since the most recent observation of the animal in the applicable zone (30 minutes in the case of a cetacean).
- (d) **Air Bubble Curtain**  
UniSea shall use air bubble curtains as sound attenuation devices during impact pile driving operations.
- (e) **Soft Start**

UniSea 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 thirty-second waiting period. This procedure is repeated two additional times. Soft start for impact drivers requires contractors to provide an initial set of strikes at 50 percent 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. UniSea may discontinue use of vibratory soft starts if unsafe working conditions believed to result from implementation of the measure are reported by the contractor, verified by an independent safety inspection, and reported to NMFS.

5. Monitoring

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

- (a) For all pile driving and removal and down-the-hole drilling activities, a minimum of two marine mammal observers shall be on duty, in addition to a monitoring coordinator who will be an employee of the construction contractor and will serve as the main point of contact for observers. The primary responsibility of one of the observers shall be to monitor the 10 m Level A exclusion zone from a location near the existing dock, while the additional observer shall be positioned for optimal monitoring of the surrounding waters within Iliuliuk Harbor. If, in the opinion of any member of the marine mammal monitoring team, a marine mammal enters, or appears likely to enter, the Level A exclusion zone (or the Level B harassment zone in the case of a marine mammal under NMFS's jurisdiction other than Steller sea lion or harbor seal) all pile driving or down-the-hole drilling activities shall be halted.
- (b) Monitoring shall be conducted by qualified observers, as described in the Monitoring Plan. These qualified observers must have the authority to order immediate shutdown or delay procedures as warranted through verbal, radio and/or mobile phone communication with the equipment operator. Observers shall record all observations of marine mammals, regardless of distance from project activities, as well as behavioral reactions of the animals.
- (c) UniSea shall establish monitoring locations as described in section 3.5 of the Monitoring Plan. Observers shall be placed from the best vantage point(s) practicable (i.e., provides the most unobstructed view of the monitoring zones and are at the highest elevation possible) to monitor for marine mammals.

- (d) Monitoring shall take place from thirty minutes prior to initiation of pile driving or down-the-hole drilling activity through thirty minutes post-completion of such activity. Pre-activity monitoring shall be conducted for thirty minutes to ensure that the Level A exclusion zone is clear of marine mammals, and that the Level B zone is clear of marine mammals under NMFS's jurisdiction other than Steller sea lions and harbor seals. Pile driving or down-the-hole drilling may commence only when observers have declared the Level A exclusion zone is clear of marine mammals, and the Level B zone is clear of all marine mammals under NMFS's jurisdiction other than Steller sea lions and harbor seals.
- (e) Monitoring shall occur throughout the time required to drive a pile. Observers shall collect sighting data and behavioral responses to pile driving/removal for marine mammal species observed in the region of activity during pre-activity monitoring, ramp-up procedures, operational pile driving, shut downs and delays. All observers shall be trained in marine mammal identification and behaviors, and shall have no other construction related tasks while conducting monitoring.
- (f) Pile driving and removal shall not be initiated until the entire Level A and Level B zones are clearly visible to observers. In case of fog or reduced visibility, observers must be able to see the entire Level A and Level B zones (i.e., the entire Level A and Level B zones must be visible to the naked eye).
- (g) For all marine mammal monitoring, the information shall be recorded as described in the Monitoring Plan.

## 6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft report on all marine mammal monitoring conducted under the IHA within 90 calendar days of the end of the in-water work period, or within 45 calendar days of the renewal of the IHA (if applicable). 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 Monitoring Plan, at minimum.
- (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 (as determined by the lead observer), such as an injury (Level A harassment), serious injury, or mortality, UniSea shall immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources at (301) 427-8401, and the NMFS Alaska Regional Stranding Coordinator at (907) 586-7248. The report must include the following information:

- A. Time and date of the incident;
- B. Description of the incident;
- C. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- D. Description of all marine mammal observations in the 24 hours preceding the incident;
- E. Species identification or description of the animal(s) involved;
- F. Fate of the animal(s); and
- G. 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 UniSea to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. UniSea may not resume their activities until notified by NMFS.

- ii. In the event that UniSea 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), UniSea 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. Construction activities may continue while NMFS reviews the circumstances of the incident and makes a final determination on the cause of the reported injury or death. NMFS will work with UniSea to determine whether additional mitigation measures or modifications to the activities are appropriate.
- iii. In the event that UniSea 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, scavenger damage), UniSea shall report the incident to the Office of Protected Resources, NMFS, and the Alaska Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. UniSea shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS. The cause of injury or death may be subject to review and a final determination by NMFS. Construction activities may continue while NMFS reviews the circumstances of the incident and makes a final determination on the cause of the reported injury or death.

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.

FEB 18 2016

Parmy Gaynes

*for*

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

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Date

**Table 1: Authorized take numbers, by species**

<b>Species</b>	<b>Authorized take (Level B harassment)</b>
Steller sea lion ( <i>Eumetopias jubatus</i> )	2,177
Harbor seal ( <i>Phoca vitulina</i> )	385