



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

Rick Heltzel
Healy Tibbitts Builders, Inc.
99-994 Iwaena Street, Suite A
Aiea, HI 96701

SEP 25 2012

Dear Mr. Heltzel,

Enclosed is an Incidental Harassment Authorization (IHA) issued to Honolulu Seawater Air Conditioning, LLC (HSWAC), under the authority of section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.). This Authorization allows for the incidental take, by Level B harassment only, of 19 marine mammal species, incidental to the HSWAC project. The IHA is valid from October 1, 2012 through September 30, 2013.

You are required to comply with the conditions contained in this IHA. In addition, you must cooperate with any federal, state, or local agency monitoring the impacts of your activity and submit a final report to the National Marine Fisheries Service's (NMFS) Office of Protected Resources, within 90 days after completion of the work authorized herein. Along with other mitigation measures to be incorporated, the IHA requires monitoring for the presence and behavior of marine mammals.

If you have any questions concerning the IHA or its requirements, please contact Michelle Magliocca, Office of Protected Resources, NMFS at 301-427-8426.

Sincerely,

A handwritten signature in blue ink, appearing to read "Helen M. Golde".

Helen M. Golde, Acting Director
Office of Protected Resources

Enclosure





UNITED STATES DEPARTMENT OF COMMERCE
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DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

INCIDENTAL HARASSMENT AUTHORIZATION

Honolulu Seawater Air Conditioning, LLC (HSWAC) (7 Waterfront Plaza, Suite 407, Box 124, Honolulu, Hawaii) 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 harass marine mammals incidental to pile driving during construction of the seawater air conditioning project, subject to the following:

1. This Authorization is valid from October 1, 2012 through September 30, 2013.
2. This Authorization is valid for the seawater air conditioning project offshore Honolulu, Hawaii, as described in the Incidental Harassment Authorization (IHA) application.
3. HSWAC is hereby authorized to take, by Level B harassment only, the following marine mammal species, incidental to pile driving associated with the seawater air conditioning project:
 - a. Beaked whales (Blainville's, Cuvier's, Longman's) - 16
 - b. Bryde's whale - 16
 - c. Dwarf sperm whale - 72
 - d. False killer whale - 16
 - e. Humpback whale - 16
 - f. Melon-headed whale - 16
 - g. Minke whale - 16
 - h. Short-finned pilot whale - 72
 - i. Pygmy killer whale - 16
 - j. Pygmy sperm whale - 16
 - k. Bottlenose dolphin - 216
 - l. Fraser's dolphin - 16
 - m. Risso's dolphin - 16
 - n. Rough-toothed dolphin - 16
 - o. Spinner dolphin - 384
 - p. Pantropical spotted dolphin - 72
 - q. Monk seal - 88
4. The taking by Level A harassment, serious injury, or mortality of any of the species listed in 3 above or the taking of any kind of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.



5. The taking of any marine mammal in a manner prohibited under this Authorization must be reported immediately to NMFS' Pacific Islands Region, 1601 Kapiolani Boulevard, Suite 1110, Honolulu, Hawaii 96814; phone 808-944-2200; fax 808-973-2941, and NMFS' Office of Protected Resources, 1315 East-West Hwy, Silver Spring, MD 20910; phone 301-427-8401; fax 301-713-0376.
6. The holder or designees must notify NMFS' Pacific Islands Region and Headquarters at least 24 hours prior to the commencement of the specified activity (see contact information in 5 above).
7. Mitigation Requirements

The holder of this Authorization is required to abide by the following mitigation conditions listed in 7(a)-(e). Failure to comply with these conditions may result in the modification, suspension or revocation of this Authorization.

(a) *Temporal Restriction*: HSWAC will not conduct any vibratory pile driving operations from December 1 through March 31. HSWAC may still conduct impact pile driving during this period with additional mitigation (see 7b).

(b) *Establishment of an Exclusion Zone*: During all in-water impact pile driving, HSWAC will establish a 91-meter radius around each pile driving site that will be continuously monitored for marine mammals. The exclusion zone will be monitored 30 minutes before, during, and 30 minutes after all impact pile driving to ensure that no marine mammals enter the 91-meter radius. At least one protected species observer will be located on the pile driver barge to perform monitoring.

HSWAC will extend the exclusion zone to 1,000 meters for all large whales from December 1 through March 31. Once in-situ underwater sound measurements are taken, the exclusion zone may be adjusted accordingly so that marine mammals are not exposed to Level A harassment sound pressure levels. An exclusion zone for vibratory pile driving is unnecessary to prevent Level A harassment as source levels will not exceed the Level A harassment threshold.

(c) *Pile Driving Shut Down and Delay Procedures*: If a protected species observer sees a marine mammal approaching or entering the 91-meter exclusion zone (or a large whale approaching or entering the 1,000-meter exclusion zone from December 1 through March 31) prior to the start of impact pile driving, the observer will notify the on-site project lead (or other authorized individual), who will then be required to delay pile driving until the marine mammal has moved away or if the animal has not been resighted within 15 minutes for pinnipeds or 60 minutes for cetaceans. If a marine mammal is sighted entering or on a path toward the 91-meter exclusion zone (or a large whale approaching or entering the 1,000-meter exclusion zone from December 1 through March 31) during pile driving, pile driving

will cease until that animal is on a path away from the exclusion zone or 15/60 minutes (pinnipeds/cetaceans) has lapsed since the last sighting.

(d) *Soft-start Procedures*: A “soft-start” technique will be used at the beginning of each pile installation to allow any marine mammal that may be in the immediate area to leave before the pile hammer reaches full energy. HSWAC will implement this technique by initiating pile driving at an energy level of about 40-60 percent. This level will be maintained for at least 5 minutes before gradually increasing the energy to full power. Soft-start procedures will be conducted prior to driving each pile if hammering ceases for more than 15 minutes.

8. Monitoring Requirements

The holder of this Authorization is required to abide by the following monitoring conditions listed in 8(a)-(c). Failure to comply with these conditions may result in the modification, suspension, or revocation of this Authorization.

(a) Visual Monitoring

(i) The holder of this Authorization must designate at least one biologically-trained, on-site individual(s), approved in advance by NMFS, to monitor the 91-m exclusion zone 30 minutes before, during, and 30 minutes after all impact pile driving operations.

(ii) In addition, the holder of this Authorization must designate at least one biologically-trained, on-site individual(s), approved in advance by NMFS, to monitor the 160-dB zone around the sound source during all impact pile driving operations. This observer will be responsible for monitoring from the 91-m exclusion zone out to the Level B harassment zone at 1,000 meters. The purpose of this observer is to: (1) conduct behavioral monitoring of marine mammals and record any Level B takes of marine mammals that occur during impact pile driving operations; and (2) notify the onsite project lead (or other authorized individual) if a large whale is seen approaching or entering the 1,000-meter exclusion zone from December 1 through March 31.

(iii) During at least 5 of the 16 days of vibratory pile driving operations, the holder of this Authorization must designate two additional observers to monitor the 120-dB zone around sound source. These observers will be stationed on a small power boat with an operator and will travel in a semi-circular route about 3.1 km from the sound source in order to observe and record any marine mammals that could be exposed to sound levels between 120-180 dB. Maximum travel speed will be 10 nautical miles per hour. Monitoring will begin 40 minutes prior to the start of sheet pile driving operations in order to observe whether any marine mammals in the area remained once pile driving operations started. Monitoring will continue during vibratory pile driving operations until 30 minutes after pile driving operations have ceased (as long as there is daylight), and the observers will record all marine mammal sightings and behavior. At a minimum, monitoring of the 120-dB zone will occur on the first and second day of pile driving

operations, followed by the fifth day, the tenth day, and fifteenth day. This will be done to validate take estimates and evaluate the behavioral impacts pile driving has on marine mammals out to the Level B harassment isopleth.

(iv) Protected species observers will be provided with the equipment necessary to effectively monitor for marine mammals (for example, high-quality binoculars, spotting scopes, compass, and range-finder) in order to determine if animals have entered into the exclusion zone or Level B harassment isopleth and to record species, behaviors, and responses to pile driving.

(v) If in-situ underwater sound monitoring indicates that harassment threshold isopleths are greater than originally calculated, the holder of the Authorization will contact NMFS within 48 hours and make the necessary adjustments.

(vi) NMFS must be informed immediately of any changes or deletions to any portions of the monitoring plan, as described in the application.

(b) Hydroacoustic Monitoring

(i) In-situ underwater sound measurements will be taken at the initial installation of each pile type (51-cm pipe; 61-cm sheet) to ensure that the harassment isopleths are not extending past the estimated distances.

(ii) Persons conducting sound measurements shall coordinate with the pile driver operator and marine mammal observer(s) to determine which activities are occurring at the time measurements are taken and if any marine mammals are in the area.

9. Reporting Requirements

The holder of this Authorization is required to submit a report on all activities and visual and acoustic monitoring results to the Office of Protected Resources, NMFS, and the Pacific Islands Regional Administrator, NMFS, 90 days prior to the expiration of the IHA if a renewal is sought, or within 90 days of completion of pile driving.

a) The visual monitoring report must contain the following information:

(i) number of marine mammals observed and number taken, by species, and, if possible, sex and age class;

(ii) marine mammal behavior patterns observed;

(iii) marine mammal distances to pile driving activities;

(iv) time pile driving begins and ends and if pile driving was occurring during a sighting;

- (v) time and locations of all marine mammal sightings;
 - (vi) environmental conditions, including but not limited to visibility, tide level and state (i.e., slack, ebb, flood), and sea state; and
 - (vii) other human activity in the area (e.g., HSWAC's support vessel operation, recreational vessel operation).
- b) The acoustic monitoring report must contain the following:
- (i) type of equipment used to collect acoustic data including frequency range;
 - (ii) estimated water depth of pile being driven and depth at which measurements were taken;
 - (iii) distances to the source where acoustic data were collected;
 - (iv) maximum, minimum, and average dB_{RMS} levels received at each measured distance;
 - (v) the type of pile driving method (i.e., impact or vibratory) associated with each collected measurement;
 - (vi) estimated rate of attenuation or transmission loss (TL) based on collected measurements; and
 - (vii) estimated source levels based on TL rate.
- c) In the unanticipated event that pile driving activities clearly cause the take of a marine mammal in a manner prohibited by this Authorization, such as an injury (Level A harassment), serious injury, or mortality, HSWAC shall immediately cease pile driving activities and report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Michael.Payne@noaa.gov and Michelle.Magliocca@noaa.gov and the Pacific Islands Regional Stranding Coordinator at 808-944-2269 (David.Schofield@noaa.gov). The report must include the following information:
- (i) time, date, and location (latitude/longitude) of the incident;
 - (ii) the name and type of vessel involved;
 - (iii) the vessel's speed during and leading up to the incident;
 - (iv) description of the incident;
 - (v) status of all sound source use in the 24 hours preceding the incident;

- (vi) water depth;
- (vii) environmental conditions (e.g. wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- (viii) description of marine mammal observations in the 24 hours preceding the incident;
- (ix) species identification or description of the animal(s) involved;
- (x) the fate of the animal(s); and
- (xi) and photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with HSWAC to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. HSWAC may not resume their activities until notified by NMFS via letter, email, or telephone.

d) In the event that HSWAC 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 (i.e., in less than a moderate state of decomposition as described in the next paragraph), HSWAC will immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Michael.Payne@noaa.gov and Michelle.Magliocca@noaa.gov and the Pacific Islands Regional Stranding Coordinator at 808-973-2941 (David.Schofield@noaa.gov). The report must include the same information identified in Condition 9(c) above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with HSWAC to determine whether modifications in the activities are appropriate.

e) In the event that HSWAC 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 Condition 3 of this Authorization (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), HSWAC shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Michael.Payne@noaa.gov and Michelle.Magliocca@noaa.gov and the Pacific Islands Regional Stranding Coordinator at 808-944-2269 (David.Schofield@noaa.gov), within 24 hours of the discovery. HSWAC shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

14. A copy of this Authorization must be in the possession of the lead contractor on site and observers operating under the authority of this Incidental Harassment Authorization.

15. This Authorization may be modified, suspended, or withdrawn if the Holder fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.



Helen M. Golde,
Acting Director, Office of Protected Resources,
National Marine Fisheries Service.

SEP 25 2012

Date