



INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Navy (Navy), Naval Station Mayport, Florida, 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 the Wharf C-2 Recapitalization Project at Mayport, FL.

1. This Incidental Harassment Authorization (IHA) is valid from September 1, 2014 through August 31, 2015.
2. This IHA is valid only for pile driving activities associated with the Wharf C-2 Recapitalization Project at Naval Station Mayport, Florida.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of this IHA.
 - (b) The species authorized for taking are the bottlenose dolphin (*Tursiops truncatus truncatus*) and the Atlantic spotted dolphin (*Stenella frontalis*).
 - (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 item 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) The Navy shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, acoustical monitoring team, and Navy 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 monitoring protocol, and operational procedures.

4. Mitigation Measures

In order to ensure the least practicable impact on the species listed in condition 3(b), the holder of this Authorization is required to implement the following mitigation measures:

- (a) The Navy shall implement shutdown zones sufficient to encompass the estimated distances to the 180 dB rms (re 1 μ Pa) threshold for cetaceans, in order to prevent unauthorized Level A harassment. The minimum shutdown zone for all pile driving shall be of 15 m radius. If a marine mammal comes within these zones, operations shall cease. For impact driving, the minimum shutdown zone shall be of 40 m radius.

- (b) The Navy shall establish monitoring locations as described below. Please also refer to the Marine Mammal Monitoring Plan (Monitoring Plan; attached).
- (i) For all pile driving activities, a minimum of two observers shall be deployed, with one positioned to achieve optimal monitoring of the shutdown zone and the second positioned to achieve optimal monitoring of surrounding waters of the turning basin, the entrance to that basin, and portions of the Atlantic Ocean. If practicable, the second observer should be deployed to an elevated position, preferably opposite Wharf C-2 and with clear sight lines to the wharf and out the entrance channel.
 - (ii) For three of the days on which vibratory pile driving activities are conducted, a third observer shall be positioned for visual observation of waters outside the turning basin, including the entrance to that basin and portions of the Atlantic Ocean that are within the predicted area of ensonification and are visible with binoculars and the naked eye.
 - (iii) These observers shall record all observations of marine mammals, regardless of distance from the pile being driven, as well as behavior and potential behavioral reactions of the animals. Observations within the turning basin shall be distinguished from those in the entrance channel and nearshore waters of the Atlantic Ocean.
 - (iv) All observers shall be equipped for communication of marine mammal observations amongst themselves and to other relevant personnel (e.g., those necessary to effect activity delay or shutdown).
- (c) Monitoring shall take place from 15 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 15 minutes to ensure that the shutdown zone is clear of marine mammals, and 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, animals shall be allowed to remain in the shutdown zone (i.e., must leave of their own volition) and their behavior shall be monitored and documented. Monitoring shall occur throughout the time required to drive a pile. The shutdown zone must be determined to be clear during periods of good visibility (i.e., the entire shutdown zone and surrounding waters must be visible to the naked eye).
- (d) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. If pile driving is halted or delayed due to the presence of a marine mammal, the activity 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 re-detection of the animal.
- (e) Monitoring shall be conducted by qualified observers, as described in the Monitoring Plan. Trained observers shall be placed from the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.

Observer training must be provided prior to project start and in accordance with the monitoring plan, and shall include instruction on species identification (sufficient to distinguish the species listed in 3(b)), description and categorization of observed behaviors and interpretation of behaviors that may be construed as being reactions to the specified activity, proper completion of data forms, and other basic components of biological monitoring, including tracking of observed animals or groups of animals such that repeat sound exposures may be attributed to individuals (to the extent possible).

- (f) The Navy shall use soft start techniques recommended by NMFS for impact pile driving. The soft start requires contractors to provide an initial set of strikes from the impact hammer at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy strike sets. Soft start shall 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 30 minutes or longer.
- (g) Pile driving shall only be conducted during daylight hours.

5. Monitoring

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

- (a) The Navy shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity. All observers shall be trained in marine mammal identification and behaviors, and shall have no other construction related tasks while conducting monitoring.
- (b) For all marine mammal monitoring, the information shall be recorded as described in the Monitoring Plan.
- (c) The Navy shall conduct acoustic monitoring for representative scenarios of pile driving activity. Minimum requirements are described in Section 5 of the Monitoring Plan.

6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft report on all monitoring conducted under the IHA within 90 days of the completion of marine mammal monitoring. A final report shall be prepared and submitted within 30 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 (see attached), and shall also include:
 - (i) Detailed information about any 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.

- (ii) 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 within turning basin.
 - (iii) A refined take estimate based on the number of marine mammals observed during the course of construction activities.
- (b) Submit a report summarizing the acoustic monitoring data within 75 days of the completion of monitoring. A final report shall be prepared and submitted within 30 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 (see attached).
- (c) 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, Navy shall immediately cease the specified activities and report the incident to the Chief of the Permits and Conservation Division (301-427-8425), Office of Protected Resources, NMFS, and the Southeast Regional Stranding Coordinator (305-361-4586), 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 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 will work with Navy to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Navy may not resume their activities until notified by NMFS.

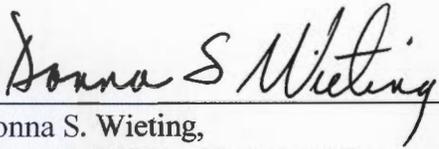
- (ii) In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate

state of decomposition), Navy shall immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southeast 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 will work with Navy to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that Navy 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), Navy shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, and the Southeast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Navy shall provide photographs or 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 the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.



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

MAY 06 2014

Date

Table 1. Authorized take numbers, by species

Species	Authorized Take
Bottlenose dolphin (<i>Tursiops truncatus</i>)	365
Atlantic spotted dolphin (<i>Stenella frontalis</i>)	95

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