



LETTER OF AUTHORIZATION

The U.S. Navy (Navy) and their designees are hereby authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(A)) to take marine mammals incidental to construction activities at Naval Station Newport, Rhode Island subject to the provisions of the MMPA and the Regulations Governing Taking Marine Mammals Incidental to U.S. Navy Construction Activities at Naval Station Newport, Rhode Island (50 CFR Part 217, Subpart R) (Regulations).

1. This modified Letter of Authorization (LOA) is valid from the date of issuance through May 14, 2027.
2. This LOA authorizes take incidental to the specified construction activities in the Navy LOA August 2021 application and the December 2022 modification request, associated with Bulkhead Replacement/Repairs at Naval Station Newport, Rhode Island, and described in the preamble to the Regulations. Hereafter (unless otherwise specified) the term “pile driving” is used to refer to both pile installation and pile removal.
3. General Conditions
 - (a) A copy of this LOA must be in the possession of the Holder of the Authorization (Holder or Navy), supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.
 - (b) The species and/or stocks authorized for taking are listed in Table 1. Authorized take, by Level A and B harassment, is limited to the species and numbers listed in Table 1.
 - (c) The taking by serious injury or death of any of the species listed in Table 1 or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this LOA. Any taking exceeding the authorized amounts listed in Table 1 is prohibited and may result in the modification, suspension, or revocation of this LOA.
 - (d) The Holder must ensure that construction supervisors and crews, the monitoring team, and relevant Navy staff are trained prior to the start of all activities subject to this LOA, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work.



4. Mitigation Requirements

- (a) The Holder must employ PSOs and establish monitoring locations as described in section 5 of this LOA and the Marine Mammal Monitoring Plan. The Holder must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.
- (b) Monitoring must take place from 30 minutes prior to initiation of pile driving or DTH activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of pile driving activity.
- (c) If a marine mammal is observed entering or within the shutdown zones indicated in Table 2, pile driving or DTH activity must be delayed or halted. Pile driving or DTH drilling must be commenced or resumed as described in condition 4(g) of this LOA.
- (d) The Holder must establish shutdown zones for all pile driving and DTH activities (Table 2). Shutdown zones are limited to 150 m from the point of noise generation. Any remaining area within estimated Level A harassment zones shall be considered part of the “disturbance zone,” *i.e.*, the Level B harassment zone and, where present, the Level A harassment zone (PTS onset) beyond 150 m from the point of noise generation. For activities where the estimated Level A (PTS onset) harassment zones are smaller than 150 m, the disturbance zone shall include the entire region of influence (ROI), *i.e.*, estimated Level A and Level B harassment zones). Work may proceed without cessation while marine mammals are in the disturbance zone and marine mammal behavior within the disturbance zone shall be monitored and documented.
- (e) The Navy will conduct monitoring to include the area within the Level B harassment zones (areas where SPLs are equal to or exceed the 160 dB rms threshold for impact driving and the 120 dB rms threshold during vibratory pile driving and DTH drilling) (see Disturbance Zones in Table 2).
- (f) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones indicated in Table 2 are clear of marine mammals. Pile driving may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals.
- (g) If pile driving is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone indicated in Table 2 or 15 minutes have passed without re-detection of the animal.

- (h) The Holder must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-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 30 minutes or longer.
- (i) Pile driving and DTH activity must be halted (as described in condition 4(c) of this LOA) upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone (as shown in Table 2).
- (j) The Holder, construction supervisors and crews, PSOs, and relevant Navy staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 meters of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary to avoid direct physical interaction.
- (k) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Holder shall delay pile driving and removal until observers are confident marine mammals within the shutdown zone could be detected.

5. Monitoring Requirements

- (a) Marine Mammal monitoring must be conducted in accordance with the conditions in this section and the Marine Mammal Monitoring Plan. The Navy shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.
- (b) Monitoring must be conducted by qualified PSOs, in accordance with the following conditions:
 - (i) PSOs must be independent (*i.e.*, not construction personnel) and have no other assigned tasks during monitoring periods.
 - (ii) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
 - (iii) Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience

performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

- (iv) Where a team of three or more PSOs is required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
 - (v) PSOs must be approved by NMFS prior to beginning any activity subject to this LOA.
- (c) The Holder must establish the following monitoring locations. For all pile driving activities, a minimum of one PSO must be assigned to each active pile driving location to monitor the shutdown zones. Trained PSOs will be placed at the best vantage point(s) practicable such as on nearby breakwaters, Gould Island, Coddington Point, or Taylor Point. Visual monitoring will be conducted by, at a minimum, by two PSOs. It is assumed that two to three PSOs would be sufficient to monitor the respective ROIs given the abundance of suitable vantage points. Any activity that would result in threshold exceedance at or more than 1,000 m would require a minimum of three PSOs to effectively monitor the entire ROI. However, additional monitors may be added if warranted by site conditions and/or the level of marine mammal activity in the area.
- (d) PSOs must record all observations of marine mammals, regardless of distance from the pile being driven, as well as the additional data indicated in section 6 of this LOA.
- (e) Acoustic monitoring must be conducted in accordance with the Acoustic Monitoring Plan. The Navy must conduct hydroacoustic data collection (sound source verification and propagation loss) in accordance with a hydroacoustic monitoring plan that must be approved by NMFS in advance of construction.
- (f) Acoustic monitoring at the S45 Bulkhead location must include monitoring of vibratory installation of two 30-in steel pile piles and up to eight DTH holes (if required for pile installation).
- (g) The shutdown/disturbances zones (Table 2) may be modified with NMFS' approval following NMFS' acceptance of an acoustic monitoring report.

6. Reporting Requirements

- (a) The Holder must submit its annual draft report(s) on all monitoring conducted under this LOA within 90 calendar days of the completion of monitoring as well

as the 5-year comprehensive summary report at the end of the project. The report(s) will detail the monitoring protocol and summarize the data recorded during monitoring of each bulkhead section of the project. Final annual reports (each portion of the project and comprehensive) must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments.

- (b) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*.
- (c) The marine mammal report must contain the informational elements described in the Monitoring Plan and, at minimum, must include:
 - (i) Dates and times (begin and end) of all marine mammal monitoring;
 - (ii) Construction activities occurring during each daily observation period, including:
 - A. the number and type of piles that were driven or removed and by what method (*i.e.*, impact, vibratory, or DTH);
 - B. Total duration of driving time for each pile (vibratory driving and DTH) and number of strikes for each pile (impact driving) and strikes per minute (DTH); and
 - (iii) PSO locations during marine mammal monitoring;
 - (iv) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
 - (v) Upon observation of a marine mammal, the following information:
 - A. Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting;
 - B. Time of sighting;
 - C. Identification of the animal(s) (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

- D. Distances and location of each marine mammal observed relative to the pile being driven or removed for each sighting;
 - E. Estimated number of animals (min/max/best estimate);
 - F. Estimated number of animals by cohort (adults, juveniles, neonates, group composition, etc.);
 - G. Animal's closest point of approach and estimated time spent within the harassment zone;
 - H. Description of any marine mammal behavioral observations (e.g., observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (e.g., no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);
- (vi) Number of marine mammals detected within the harassment zones, by species; and
 - (vii) 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;
- (d) The Holder must submit all PSO datasheets and/or raw sighting data with the draft reports referenced in condition 6(a) of this LOA.
 - (e) The acoustic monitoring report must contain the informational elements described in the Acoustic Monitoring Plan and, at minimum, must include:
 - (i) Hydrophone equipment and methods: recording device, sampling rate, distance (m) from the pile where recordings were made; depth of water and recording device(s);
 - (ii) Type and size of pile being driven, substrate type, method of driving during recordings (e.g., hammer model and energy), and total pile driving duration;
 - (iii) Whether a sound attenuation device is used and, if so, a detailed description of the device used and the duration of its use per pile;
 - (iv) For impact pile driving (per pile): Number of strikes and strike rate; depth of substrate to penetrate; pulse duration and mean, median, and maximum sound levels (dB re: 1 μ Pa): root mean square sound pressure level

(SPLrms); cumulative sound exposure level (SELcum), peak sound pressure level (SPLpeak), and single-strike sound exposure level (SELS-s);

- (v) For vibratory driving/removal (per pile): Duration of driving per pile; mean, median, and maximum sound levels (dB re: 1 μ Pa): root mean square sound pressure level (SPLrms), cumulative sound exposure level (SELcum) (and timeframe over which the sound is averaged);
 - (vi) For DTH driving (per hole): Duration of driving per hole; strike rate; depth of substrate to penetrate; mean, median, and maximum sound levels (dB re: 1 μ Pa): root mean square sound pressure level (SPLrms); cumulative sound exposure level (SELcum), peak sound pressure level (SPLpeak), and single-strike sound exposure level (SELS-s); and
 - (vii) One-third octave band spectrum and power spectral density plot.
- (f) Reporting injured or dead marine mammals:

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Holder must report the incident to the Office of Protected Resources (OPR), NMFS (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*) and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator (978-282-8478 or 978-281-9291) as soon as feasible. If the death or injury was clearly caused by the specified activity, the Holder must immediately cease the activities until NMFS OPR is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this LOA. The Holder must not resume their activities until notified by NMFS.

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.

7. This Authorization may be modified, suspended or revoked if the Holder fails to abide by the conditions prescribed herein (including, but not limited to, failure to comply with monitoring or reporting requirements), or if NMFS determines: (1) the authorized taking is likely to have or is having more than a negligible impact on the species or stocks of affected marine mammals or (2) the prescribed measures are likely not or are not effecting the least practicable adverse impact on the affected species or stocks and their habitat.

Kimberly Damon-Randall,
 Director, Office of Protected Resources
 National Marine Fisheries Service

Table 1. Authorized Incidental Take.

Common Name	Scientific Name	Stock	Level A Harassment	Level B Harassment
Atlantic White-sided Dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	0	48
Common Dolphin	<i>Delphinus delphis</i>	Western North Atlantic	0	140
Harbor Porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/Bay of Fundy	4	21
Harbor Seal	<i>Phoca vitulina</i>	Western North Atlantic	78	956
Gray Seal	<i>Halichoerus grypus</i>	Western North Atlantic	17	386
Harp Seal	<i>Pagophilus groenlandicus</i>	Western North Atlantic	6	78
Hooded Seal	<i>Cystophora cristata</i>	Western North Atlantic	0	20

Table 2. Shutdown and Harassment Zones.

Pile Type	Installation Method	Pile Diameter	Shut Down Zone For Cetaceans	Shut Down Zone for Pinnipeds	Disturbance Zone
Steel pipe	Vibratory	30-in	30 m	10m	ROI
	Impact	30-in	150 m	150 m	2,500 m
	Impact	42-in	150 m	50 m	2,500 m
Steel H	Vibratory	14-in	10 m	10 m	ROI
Z-Shaped Steel Sheet	Vibratory	22.5-in	30 m	10 m	ROI
	Impact	22.5-in	150 m	150 m	2,500 m
	Vibratory	31.5-in	20 m	10 m	ROI
	Impact	31.5-in	150 m	150 m	2,500 m
DTH	DTH	10-in holes	150 m	150 m	ROI

*ROI = region of influence and is the full extent of potential underwater noise impact (Level A and Level B calculated harassment zones).