



INCIDENTAL HARASSMENT AUTHORIZATION

The National Oceanic and Atmospheric Administration (NOAA) 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 incidentally harass marine mammals, under the following conditions:

1. This incidental harassment authorization (IHA) is valid from February 1, 2024 through January 31, 2025.
2. This IHA authorizes take incidental to the specified construction activities in the NOAA's 2022 IHA application, associated with the relocation of NOAA vessels at Naval Station Newport, RI. 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 IHA must be in the possession of the Holder of the Authorization (Holder), supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this IHA at all times that activities subject to this IHA are being conducted.
 - (b) The species and/or stocks authorized for taking are listed in Table 1. Authorized take, by Level A and Level B harassment only, 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 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.
 - (d) The Holder must ensure that construction supervisors and crews, the monitoring team, and relevant NOAA staff are trained prior to the start of construction activity subject to this IHA, 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 IHA and the Marine Mammal Monitoring Plan. The holder must monitor the project area to the maximum extent possible based upon the required number of PSOs, required monitoring locations, and environmental conditions.



- (b) Monitoring must take place from 30 minutes prior to initiation of construction activities, including pile driving, down-the-hole hammering (DTH), rotary drilling, (hereafter referred to as “construction activities”) (*i.e.*, pre-start clearance monitoring) through 30 minutes of completion of post construction activity.
- (c) If a marine mammal is observed entering or within the shutdown zones indicated in Table 2, construction activities must be delayed or halted. Construction activities must be commenced or resume as described in condition 4 (e) of this IHA.
- (d) 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. Construction activities may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals.
- (e) If construction activities are delayed or halted due to the presence of a marine mammal, the activities may not commence or resume until the animal has voluntarily exited or been visually confirmed beyond the shutdown zone indicated in Table 2, or 15 minutes have passed without redetection of the animal.
- (f) Construction activities must be halted (as described in condition 4(c) of this IHA) upon observation of 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.
- (g) A minimum shutdown zone of 10 m must be established for all construction activities. If the Level A shutdown zone is too large to monitor, a shutdown zone will be established 200 m from the acoustic source.
- (h) The Holder must use soft start procedures when impact pile driving. Soft start requires contractors to provide an initial set of three strikes from the hammer at reduced energy, following 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) The Holder, construction supervisors and crews, PSOs, and relevant NOAA 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 interaction.

- (j) 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 construction activities until observers are confident marine mammals within the shutdown zone could be detected.

5. Monitoring

- (a) Marine mammal monitoring must be conducted in accordance with the conditions in this section, the Monitoring Plan, and this IHA. NOAA shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.
- (b) Monitoring must be conducted by qualified, NMFS-approved 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 IHA.
- (c) The Holder must establish monitoring locations with the best views of monitoring zones as described in the Marine Mammal Monitoring Plan. For all construction activities, a minimum of two PSOs must be assigned to each active pile driving/DTH/rotary drilling location to monitor shutdown zones.
- (d) PSOs must record all observations of marine mammals, regardless of distance from the pile being driven or the construction activity taking place (*i.e.*, DTH, rotary drilling, rock hammering), as well as the additional data indicated in Section 6 of this IHA.
- (e) Acoustic monitoring must be conducted in accordance with the Acoustic Monitoring Plan. NOAA must conduct hydroacoustic data collection (sound source verification and propagation loss) in accordance with an acoustic monitoring plan that must be approved by NMFS in advance of construction.

6. Reporting

- (a) The Holder must submit its draft report(s) on all monitoring conducted under the IHA within 90 calendar days of the completion of marine mammal and acoustic monitoring or 60 calendar days prior to the requested issuance of any subsequent IHA for construction activity at the same location, whichever comes first. A final report must be prepared and submitted within thirty days following receipt of any NMFS comments on the draft report. If no comments are received from NMFS within thirty calendar days, the report shall be considered final.
- (b) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.taylor@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 time (beginning 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 the method (e.g., impact, vibratory, rotary drill, DTH);
 - B. Total duration of driving time for each pile (vibratory driving) and number of strikes for each pile (impact driving); and
 - C. For DTH, duration of operation for both impulsive and non-pulse components.
 - (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. Distance and location of each observed marine mammal relative to the pile being driven 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 of any 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 implementation of any mitigation (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.
- (d) The Holder must submit all PSO datasheets and/or raw sighting data with the draft report, as specified in condition 6(a) of this IHA.
 - (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, energy), and total pile driving duration;
 - (iii) Whether a sound attenuation device is used and, if so, a detailed description of the device and the duration of its use per pile;
 - (iv) For impact pile driving (per pile) of DTH: 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 (SPL_{rms}), cumulative sound exposure level (SEL_{cum}), peak sound pressure level (SPL_{peak}), and single strike exposure sound level (SEL_{s-s});

- (v) For vibratory driving/removal (per pile), rotary drilling, and rock hammering: Duration of driving per pile; mean, median, and maximum sound levels (dB re: 1 μ Pa): root mean square sound pressure level (SPL_{rms}), cumulative sound exposure level (SEL_{cum}) (and timeframe over which the sound is averaged); and
 - (vi) One-third octave band spectrum and power spectral density plot.
 - (vii) Collect and evaluate acoustic sound record levels for 10 percent of the new rotary drilling, DTH excavation (DTH mono-hammer and cluster drill) activities.
 - (viii) Collect environmental data, including but not limited to, the following: wind speed and direction, air temperature, humidity, surface water temperature, water depth, wave height, weather conditions, and other factors that could contribute to influencing the airborne and underwater sound levels (*e.g.*, aircraft, boats, etc.).
- (f) Reporting injured or dead marine mammals:

In the event that personnel involved in 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.taylor@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 IHA. The Holder must not resume their activities until notified by NMFS.

The report must include the following:

- (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.
8. Renewals
On a case-by-case basis, NMFS may issue a one-time, one-year Renewal IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical, or nearly identical, activities are planned or (2) the specified activities would not be completed by the time this IHA expires and a Renewal would allow for completion of the activities, provided all of the following conditions are met:
- (a) A request for renewal is received no later than 60 days prior to the needed Renewal IHA effective date (the Renewal IHA expiration date cannot extend beyond one year from expiration of this IHA).
 - (b) The request for renewal must include the following:
 - (i) An explanation that the activities to be conducted under the requested Renewal IHA are identical to the activities analyzed for this IHA, are a subset of the activities, or include changes so minor (*e.g.*, reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take).
 - (ii) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.
 - (c) Upon review of the request for Renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings made in support of this IHA remain valid.

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

12/15/2022

Date

Table 1. Authorized Incidental Take

Common Name	Species Name	Stock	Level A Harassment	Level B Harassment
Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	0	16
Short-beaked common dolphin	<i>Delphinus delphis</i>	Western North Atlantic	0	39
Harbor porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/Bay of Fundy	2	40
Harbor seal	<i>Phoca vitulina</i>	Western North Atlantic	56	2,067
Gray seal	<i>Halichoerus grypus</i>	Western North Atlantic	11	437
Harp seal	<i>Pagophilus groenlandicus</i>	Western North Atlantic	4	164
Hooded seal	<i>Cystophora cristata</i>	Western North Atlantic	0	10

Table 2. Shutdown Zones and Level B harassment Zones by Activity

Pile type/size	Driving Method	Shutdown Zones (m)		Level B Harassment Zones (m)
		Cetaceans	Pinnipeds	All Marine Mammals
12" steel pipe	Vibratory extraction	10	10	2,600
12" timber	Vibratory extraction	15	10	1,359
16" steel pipe	Vibratory install/extract	20	10	6,400
18" steel pipe	Impact install	200	200	640
	Vibratory install	30	15	6,400
	Mono-hammer DTH	200	200	Maximum harassment zone ¹
18" steel pipe	Rotary drilling 18" holes	10	10	1,900
Z26-700 steel sheets	Vibratory install	15	10	2,600
30" steel pipe	Impact install	200	200	2,600
	Vibratory install	55	25	Maximum harassment zone ¹
	Rotary drilling	10	10	1,900
36" steel pipe	Impact install	200	200	3,400
	Vibratory install	90	40	Maximum harassment zone ¹
36" shafts	Mono-hammer DTH	200	200	Maximum harassment zone ¹

¹ Harassment zone will be truncated due to the presence of intersecting land masses and would encompass a maximum area of 3.31 km².