



## INCIDENTAL HARASSMENT AUTHORIZATION

Orsted Wind Power North America LLC (Orsted) and those persons it authorizes or funds to conduct activities on its behalf are 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 October 6, 2023 to October 5, 2024.
2. This IHA authorizes take incidental to marine site characterization surveys offshore from New York to Massachusetts as specified in Orsted's IHA application.
3. General Conditions
  - (a) A copy of this IHA must be in the possession of the Holder of the Authorization (Orsted), its designees, lead protected species observers (PSOs), and work crew personnel operating under the authority of this IHA.
  - (b) The species and/or stocks authorized for taking are listed in Table 1. Authorized take, by 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) Orsted shall instruct relevant vessel personnel with regard to the authority of the marine mammal monitoring team, and shall ensure that relevant vessel personnel and the marine mammal monitoring team participate in a joint onboard briefing (hereafter PSO briefing), led by the vessel operator and lead PSO, prior to beginning survey activities to ensure that responsibilities, communication procedures, marine mammal monitoring protocols, safety and operational procedures, and IHA requirements are clearly understood. This PSO briefing must be repeated when relevant new personnel (*e.g.*, PSOs, acoustic source operator) join the survey operations before work commences.
  - (e) The acoustic source must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Unnecessary use of the acoustic source must be avoided.
  - (f) Orsted must abide by the relevant Project Design Criteria (PDC 4, 5 and 7) of the



programmatic consultation completed by NMFS Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA).

4. Mitigation Requirements

- (a) Orsted must employ qualified, NMFS-approved visual PSOs (see Section 5 of this IHA). When specific acoustic sources (impulsive: sparkers; non-impulsive: non-parametric sub-bottom profilers-CHIRPs) are operating, a minimum of one PSO must be on duty, per source vessel, during daylight hours and two PSOs must be on duty, per source vessel, during nighttime hours.
- (b) Visual monitoring must begin no less than 30 minutes prior to initiation of specified acoustic sources (see condition 4a of this IHA) and must continue until 30 minutes after use of specified acoustic sources ceases. Visual monitoring must include all pre-clearance and shutdown zones as well as all visible waters surrounding the sound sources and the vessel.
- (c) PSOs must establish and monitor applicable shutdown zones (see below). These zones must be based upon the radial distance from the acoustic source (rather than being based around the vessel itself). See Table 2 (attached) for minimum radial distances required for shutdown zones.
- (d) Operational Shutdown Zones: PSOs must establish and monitor marine mammal Shutdown Zones. Distances to Shutdown Zone limits must be from any acoustic sources, not the distance from the vessel. Shutdown Zones must be as follows:
  - (i) A 500-meter (m) Shutdown Zone for North Atlantic right whales for use of impulsive acoustic sources (*e.g.*, boomers and/or sparkers) and non-impulsive, non-parametric sub-bottom profilers; and
  - (ii) A 100-m Shutdown Zone for all other marine mammals for use of impulsive acoustic sources (*e.g.*, boomers and/or sparkers), except for as noted in condition 4(f)(iv) of this IHA.
- (e) Pre-start clearance and ramp-up: A ramp-up procedure, involving a gradual increase in source level output, is required at all times as part of the activation of the acoustic source when technically feasible. Operators must ramp up sources to half power for 5 minutes and then proceed to full power. A 30-minute pre-start clearance observation period must occur prior to the start of ramp-up (or initiation of source use if ramp-up is not technically feasible). Pre-start clearance observation zones must be as follows: 500-m for all ESA-listed marine mammals and 100-m for all other marine mammals (Table 3). All operators must adhere to the follow pre-start clearance and ramp-up requirements:
  - (i) The operator must notify a designated PSO of the planned start of ramp-up

as agreed upon with the lead PSO: The notification time must not be less than 60 minutes prior to the planned ramp-up in order to allow the PSOs time to monitor the shutdown zones for 30 minutes prior to the initiation of ramp-up (pre-start clearance). During this 30 minute pre-start clearance period, the entire applicable shutdown zone must be visible, except as indicated in (viii) below.

- (ii) Ramp-ups must be scheduled so as to minimize the time spent with the source activated.
- (iii) A visual PSO conducting pre-start clearance operations must be notified immediately prior to initiating ramp-up procedures and the operator must receive confirmation from the PSO that the shutdown zone is clear prior to proceeding.
- (iv) Any PSO on duty has the authority to delay the start of survey operations if a marine mammal is detected within the applicable pre-start clearance zone.
- (v) The operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the acoustic source to ensure that mitigation commands are conveyed swiftly while allowing PSOs to maintain watch.
- (vi) Ramp-up may not be initiated if any marine mammal is within the applicable shutdown zone. If a marine mammal is observed within the applicable shutdown zone during the 30-minute pre-start clearance period, ramp-up may not begin until the animal(s) has been observed exiting the zones or until an additional time period has elapsed with no further sightings (15 minutes for small odontocetes and pinnipeds and 30 minutes for all other species).
- (vii) PSOs must monitor the shutdown zone 30 minutes before and during ramp-up, and ramp-up must cease and the source must be shut down upon observation of a marine mammal within the applicable shutdown zone.
- (viii) Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up. Acoustic source activation may only occur at night where operational planning cannot reasonably avoid such circumstances.
- (ix) If the acoustic source is shut down for brief periods (*i.e.*, less than 30 minutes) for reasons other than implementation of prescribed mitigation (*e.g.*, mechanical difficulty), it may be activated again without ramp-up if PSOs have maintained constant visual observation and no detections of

marine mammals have occurred within the applicable shutdown zone. For any longer shutdown, pre-clearance observation and ramp-up are required.

- (x) If any marine mammal species that are listed under the ESA are observed within the clearance zones, the 30-minute clock must be paused. If the PSO confirms the animal has exited the zone and headed away from the survey vessel, the 30-minute clock that was paused may resume. The pre-clearance clock will reset to 30 minutes if the animal dives or visual contact is otherwise lost.
  - (xi) Activation of survey equipment through ramp-up procedures must not occur when visual detection of marine mammals within the pre-clearance zone is not expected to be effective (*e.g.*, during inclement conditions such as heavy rain or fog).
- (f) Shutdown requirements:
- (i) Any PSO on duty has the authority to call for a shutdown of the acoustic source if a marine mammal is detected within the applicable shutdown zone.
  - (ii) The operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the acoustic source to ensure that shutdown commands are conveyed swiftly while PSOs are on watch.
  - (iii) When an acoustic source is active and a marine mammal appears within or enter the applicable shutdown zone, the acoustic source must be shut down (Table 3). When shutdown is instructed by a PSO, the acoustic source must immediately be deactivated and any dispute resolved only after deactivation.
  - (iv) The shutdown requirement is waived for small delphinids and pinnipeds.
    - (a) If a delphinid (individual belonging to the genera of the Family *Delphinidae* of one of the following genera: *Delphinus*, *Lagenorhynchus*, *Stenella*, or *Tursiops*) or pinniped is visually detected within the shutdown zone, no shutdown is required unless the PSO confirms the individual to be of a genus other than those listed above; in which case, a shutdown is required.
  - (v) If there is uncertainty regarding identification of a marine mammal species (*i.e.*, whether the observed marine mammal(s) belongs to one of the delphinid genera for which shutdown is waived or one of the species with a larger shutdown zone), PSOs may use best professional judgement

in making the decision to call for a shutdown.

- (vi) Upon implementation of shutdown, the source may be reactivated after the marine mammal has been observed exiting the applicable shutdown zone or following a clearance period (15 minutes for harbor porpoises and 30 minutes for all other marine mammals; Table 3) with no further detection of the marine mammal.
  - (vii) Shutdown of acoustic sources is required 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 Level B harassment zone (Table 2).
  - (viii) Shutdown, pre-start clearance, and ramp-up procedures are not required during HRG survey operations using only non-impulsive sources (*e.g.*, parametric sub-bottom profilers) other than non-parametric sub-bottom profilers (*e.g.*, CHIRPs). Pre-clearance and ramp-up, but not shutdown, are required when using non-impulsive non-parametric sub-bottom profilers.
- (g) Vessel Strike Avoidance- Vessel operators must comply with the below measures except under extraordinary circumstances when the safety of the vessel or crew is in doubt or the safety of life at sea is in question. These requirements do not apply in any case where compliance would create an imminent and serious threat to a person or vessel or to the extent that a vessel is restricted in its ability to maneuver, and, because of the restriction, cannot comply.
- (i) Vessel operators and crew must maintain a vigilant watch for all marine mammals and slow down, stop the vessel, or alter course, as appropriate and regardless of vessel size, to avoid striking any marine mammal. A single marine mammal at the surface may indicate the presence of additional submerged marine mammals in the vicinity of the vessel; therefore, precautionary measures must always be exercised. A visual observer aboard the vessel must monitor a vessel strike avoidance zone around the vessel (species-specific distances detailed below). Visual observers monitoring the vessel strike avoidance zone may be third-party observers (*i.e.*, PSOs) or crew members, but crew members responsible for these duties must be provided sufficient training to 1) distinguish marine mammals from other phenomena and 2) broadly identify a marine mammal as a right whale, other whale (defined in this context as a sperm whale or baleen whales other than right whales), or other marine mammals.
  - (ii) All vessels, regardless of size, must observe a 10-knot speed restriction in specific areas designated by NMFS for the protection of North Atlantic right whales from vessel strikes. These include all Seasonal

Management Areas (SMA) (when in effect) and Dynamic Management Areas (DMA) (when in effect). See [www.fisheries.noaa.gov/national/endangered-speciesconservation/reducing-ship-strikes-north-atlantic-right-whales](http://www.fisheries.noaa.gov/national/endangered-speciesconservation/reducing-ship-strikes-north-atlantic-right-whales) for specific detail regarding these areas.

- (iii) Vessel speeds must be reduced to 10 knots or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near a vessel.
- (iv) All vessels must maintain a minimum separation distance of 500-m from right whales and other ESA-listed species. If an ESA-listed species is sighted within the relevant separation distance, the vessel must steer a course away at 10-knots or less until the 500-m separation distance has been established (Table 3). If a whale is observed but cannot be confirmed as a species that is not ESA-listed, the vessel operator must assume that it is an ESA-listed species, and take appropriate action.
- (v) All vessels must maintain a minimum separation distance of 100-m from non-ESA-listed baleen whales (Table 3).
- (vi) All vessels must, to the maximum extent practicable, attempt to maintain a minimum separation distance of 50-m from all other marine mammal, with an understanding that at times this may not be possible (*e.g.*, for animals that approach the vessel; Table 3).
- (vii) When marine mammals are sighted while a vessel is underway, the vessel shall take action as necessary to avoid violating the relevant separation distance (*e.g.*, attempt to remain parallel to the animal's course, avoid excessive speed or abrupt changes in direction until the animal has left the area, reduce speed and shift the engine to neutral). This does not apply to any vessel towing gear or any vessel that is navigationally constrained.

## 5. Monitoring

- (a) Orsted must use independent, dedicated, trained PSOs, meaning that the PSOs must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant vessel crew with regard to the presence of marine mammal and mitigation requirements (including brief alerts regarding maritime hazards), and must have successfully completed an approved PSO training course for geophysical surveys. Visual monitoring must be performed by qualified, NMFS approved PSOs. PSO resumes must be provided to NMFS for review and approval prior to the start of survey activities.
- (b) PSO names must be provided to NMFS by the operator for review and confirmation of their approval for specific roles prior to commencement of the

survey. PSO-related inquiries should be directed to nmfs.psoreview@noaa.gov.

For prospective PSOs not previously approved, or for PSOs whose approval is not current, NMFS must review and approve PSO qualifications. Resumes should include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training.

- (c) NMFS may approve PSOs as conditional or unconditional. A conditionally approved PSO may be one who is trained but has not yet attained the requisite experience. An unconditionally-approved PSO is one who has attained the necessary experience. For unconditional approval, the PSO must have a minimum of 90 days at sea performing the role during a geophysical survey, with the conclusion of the most recent relevant experience not more than 18 months previous.
- (d) At least one of the visual PSOs aboard the vessel must be unconditionally approved. One unconditionally-approved visual PSO shall be designated as the lead for the entire PSO team. This lead should typically be the PSO with the most experience, would coordinate duty schedules and roles for the PSO team, and serve as primary point of contact for the vessel operator. Responsibility for coordination of duty schedules and roles may be delegated, such as to a shore-based monitoring coordinator employed by the third-party observer provider. To the maximum extent practicable, the duty schedule shall be planned such that unconditionally approved PSOs are on duty with conditionally-approved PSOs.
- (e) PSOs must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO has acquired the relevant skills through alternate experience. Requests for such a waiver shall be submitted to NMFS and must include written justification. Alternate experience that may be considered includes, but is not limited to (1) secondary education and/or experience comparable to PSO duties; (2) previous work experience conducting academic, commercial, or government sponsored marine mammal surveys; and (3) previous work experience as a PSO (PSO must be in good standing and demonstrate good performance of PSO duties).
- (f) PSOs must successfully complete relevant training, including completion of all required coursework and passing (80 percent or greater) a written and/or oral examination developed for the training program.
- (g) PSOs must coordinate to ensure 360° visual coverage around the vessel from the most appropriate observation posts and shall conduct visual observations

using binoculars or night-vision equipment and the naked eye while free from distractions and in a consistent, systematic, and diligent manner.

- (h) PSOs may be on watch for a maximum of four consecutive hours followed by a break of at least two hours between watches and may conduct a maximum of 12 hours of observation per 24-hour period.
- (i) Any observations of marine mammal by crew members aboard any vessel associated with the survey shall be relayed to the PSO team.
- (j) Orsted must work with the selected third-party PSO provider to ensure PSOs have all equipment (including backup equipment) needed to adequately perform necessary tasks, including accurate determination of distance and bearing to observed marine mammals, and to ensure that PSOs are capable of calibrating equipment as necessary for accurate distance estimates and species identification. Such equipment, at a minimum, shall include:
  - (i) At least one thermal (infrared) imaging device suited for the marine environment;
  - (ii) Reticle binoculars (e.g., 7 x 50) of appropriate quality (at least one per PSO, plus backups);
  - (iii) Global Positioning Units (GPS) (at least one plus backups);
  - (iv) Digital cameras with a telephoto lens that is at least 300 mm or equivalent on a full-frame single lens reflex (SLR) (at least one plus backups). The camera or lens should also have an image stabilization system;
  - (v) Equipment necessary for accurate measurement of distances to marine mammal;
  - (vi) Compasses (at least one plus backups);
  - (vii) Means of communication among vessel crew and PSOs; and
  - (viii) Any other tools deemed necessary to adequately and effectively perform PSO tasks.
- (k) Equipment specified in (i) through (viii) above may be provided by an individual PSO, the third-party PSO provider, or the operator, but Orsted is responsible for ensuring PSOs have the proper equipment required to perform the duties specified within this IHA.
- (l) During good conditions (*e.g.*, daylight hours; Beaufort sea state 3 or less), PSOs shall conduct observations when the specified acoustic sources (see condition 4(a) of this IHA) are not operating for comparison of sighting rates and behavior



with and without use of the specified acoustic sources and between acquisition periods, to the maximum extent practicable.

- (m) Orsted must consult the NMFS North Atlantic right whale reporting system and Whale Alert, daily and as able, for the presence of North Atlantic right whales before and throughout survey operations, and for the establishment of a DMA. If NMFS should establish a DMA in the Lease Areas during the survey, the vessels will abide by speed restrictions in the DMA per the lease conditions.

6. Reporting Requirements:

- (a) Orsted shall submit a draft comprehensive report on all activities and monitoring results within 90 days of the completion of the survey or expiration of the IHA, whichever comes sooner. The report must describe all activities conducted and sightings of marine mammals, must provide full documentation of methods, results, and interpretation pertaining to all monitoring, and must summarize the dates and locations of survey operations and all marine mammals sightings (dates, times, locations, activities, associated survey activities). The draft report shall also include geo-referenced, time-stamped vessel tracklines for all time periods during which acoustic sources were operating. Tracklines must include points recording any change in acoustic source status (e.g., when the sources began operating, when they were turned off, or when they changed operational status such as from full array to single gun or vice versa). GIS files shall be provided in ESRI shapefile format and include the UTC date and time, latitude in decimal degrees, and longitude in decimal degrees. All coordinates shall be referenced to the WGS84 geographic coordinate system. In addition to the report, all raw observational data shall be made available. The report must summarize the information submitted in interim monthly reports (if required) as well as additional data collected as described above in Data Collection. A final report must be submitted within 30 days following resolution of any comments on the draft report. All draft and final marine mammal and acoustic monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov*, *ITP.Lock@noaa.gov*, and *nmfs.gar.incidental-take@noaa.gov*.
- (b) PSOs must use standardized electronic data forms to record data. PSOs shall record detailed information about any implementation of mitigation requirements, including the distance of marine mammal to the acoustic source and description of specific actions that ensued, the behavior of the animal(s), any observed changes in behavior before and after implementation of mitigation, and if shutdown was implemented, the length of time before any subsequent ramp-up of the acoustic source. If required mitigation was not implemented, PSOs should record a description of the circumstances. At a minimum, the following information must be recorded:
  - (i) Vessel names (source vessel and other vessels associated with survey), vessel size and type, maximum speed capability of vessel;

- (ii) Dates of departures and returns to port with port name;
  - (iii) The lease number;
  - (iv) PSO names and affiliations;
  - (v) Date and participants of PSO briefings;
  - (vi) Visual monitoring equipment used;
  - (vii) PSO location on vessel and height of observation location above water surface;
  - (viii) Dates and times (Greenwich Mean Time) of survey on/off effort and times corresponding with PSO on/off effort;
  - (ix) Vessel location (decimal degrees) when survey effort begins and ends and vessel location at beginning and end of visual PSO duty shifts;
  - (x) Vessel location at 30-second intervals if obtainable from data collection software, otherwise at practical regular interval;
  - (xi) Vessel heading and speed at beginning and end of visual PSO duty shifts and upon any change;
  - (xii) Water depth (if obtainable from data collection software);
  - (xiii) Environmental conditions while on visual survey (at beginning and end of PSO shift and whenever conditions change significantly), including BSS and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon;
  - (xiv) Factors that may contribute to impaired observations during each PSO shift change or as needed as environmental conditions change (*e.g.*, vessel traffic, equipment malfunctions); and
  - (xv) Survey activity information (and changes thereof), such as acoustic source power output while in operation, number and volume of airguns operating in an array, tow depth of an acoustic source, and any other notes of significance (*i.e.*, pre-start clearance, ramp-up, shutdown, testing, shooting, ramp-up completion, end of operations, streamers, etc.).
- (c) Upon visual observation of any marine mammal, the following information must be recorded:
- (i) Watch status (sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform);

- (ii) Vessel/survey activity at time of sighting (*e.g.*, deploying, recovering, testing, shooting, data acquisition, other);
- (iii) PSO who sighted the animal;
- (iv) Time of sighting;
- (v) Initial detection method;
- (vi) Sightings cue;
- (vii) Vessel location at time of sighting (decimal degrees);
- (viii) Direction of vessel's travel (compass direction);
- (ix) Speed of the vessel(s) from which the observation was made;
- (x) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level or unidentified); also note the composition of the group if there is a mix of species;
- (xi) Species reliability (an indicator of confidence in identification);
- (xii) Estimated distance to the animal and method of estimating distance;
- (xiii) Estimated number of animals (high/low/best);
- (xiv) Estimated number of animals by cohort (adults, yearlings, juveniles, calves, group composition, etc.);
- (xv) Description (as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars, or markings, shape and size of dorsal fin, shape of head, and blow characteristics);
- (xvi) Detailed behavior observations (*e.g.*, number of blows/breaths, number of surfaces, breaching, spyhopping, diving, feeding, traveling; as explicit and detailed as possible; length of time observed in the harassment zone, note any observed changes in behavior before and after point of closest approach);
- (xvii) Mitigation actions; description of any actions implemented in response to the sighting (*e.g.*, delays, shutdowns, ramp-up, speed or course alteration, etc.) and time and location of the action;
- (xviii) Equipment operating during sighting;
- (xix) Animal's closest point of approach and/or closest distance from the center point of the acoustic source; and

- (xx) Description of any actions implemented in response to the sighting (e.g., delays, shutdown, ramp-up) and time and location of the action.
- (d) Reporting sightings of North Atlantic right whales:
  - (i) If a North Atlantic right whale is observed at any time by PSOs or personnel on any project vessels, during surveys or during vessel transit, Orsted must report the sighting information to the NMFS North Atlantic Right Whale Sighting Advisory System (866-755-6622) within two hours of occurrence, when practicable, or no later than 24 hours after occurrence.
  - (ii) North Atlantic right whale sightings in any location must also be reported to the U.S. Coast Guard via Channel 16 and through the WhaleAlert app (<http://www.whalealert.org/>).
- (e) Reporting injured or dead marine mammals:
  - (i) Sightings of any injured or dead marine mammal must be reported to NMFS, regardless of the cause of injury or death. In the event that personnel involved in the survey activities discover an injured or dead marine mammal, Orsted must report the incident to NMFS as soon as feasible by phone (866-755-6622) and by email (*nmfs.gar.incidental-take@noaa.gov* and *PR.ITP.MonitoringReports@noaa.gov*) as soon as feasible. The report must include the following information:
    1. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
    2. Species identification (if known) or description of the animal(s) involved;
    3. Condition of the animal(s) (including carcass condition if the animal is dead);
    4. Observed behaviors of the animal(s), if alive;
    5. If available, photographs or video footage of the animal(s); and
    6. General circumstances under which the animal was discovered.
  - (ii) Vessel Strike- In the event of a ship strike of a marine mammal by any vessel involved in the survey activities, Orsted must report the incident to NMFS by phone (866-755-6622) and by email (*nmfs.gar.incidental-take@noaa.gov*) and

*PR.ITP.MonitoringReports@noaa.gov*) as soon as feasible. The report must include the following information:

1. Time, date, and location (latitude/longitude) of the incident;
  2. Species identification (if known) or description of the animal(s) involved;
  3. Vessel's speed during and leading up to the incident;
  4. Vessel's course/heading and what operations were being conducted (if applicable);
  5. Status of all sound sources in use;
  6. Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;
  7. Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;
  8. Estimated size and length of animal that was struck;
  9. Description of the behavior of the marine mammal immediately preceding and following the strike;
  10. If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;
  11. Estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and
  12. To the extent practicable, photographs or video footage of the animal(s).
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.

---

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

---

Date

**Table 1. Authorized incidental take by Level B harassment**

<b>Taxonomic Group</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Stock</b>	<b>ESA-listed?</b>	<b>Marine mammal category as it applies to mitigation requirements in the IHA</b>	<b>Level B Harassment Takes</b>
Cetacean (mysticete)	North Atlantic Right Whale	<i>Eubalaena glacialis</i>	Western Atlantic	Y	North Atlantic right whale	17
	Fin Whale	<i>Balaenoptera physalus</i>	Western Atlantic	Y	Large Whale	14
	Sei Whale	<i>Balaenoptera borealis</i>	Nova Scotia	Y	Large Whale	3
	Minke Whale	<i>Balaenoptera acutorostrata</i>	Canadian East Coastal	N	Large Whale	13
	Humpback Whale	<i>Megaptera noveangliae</i>	Gulf of Maine	N	Large Whale	34
Cetacean (odontocete)	Sperm Whale	<i>Physeter macrocephalus</i>	North Atlantic	Y	Large Whale	2
	Long-finned Pilot Whale	<i>Globicephala melas</i>	Western North Atlantic	N	Large Odontocete	52
	Atlantic White-sided Dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	N	Small Odontocete	210
	Bottlenose Dolphin	<i>Tursiops truncatus</i>	Western North Atlantic Offshore	N	Small Odontocete	139
	Short-beaked Common Dolphin	<i>Delphinus delphis</i>	Western North Atlantic	N	Small Odontocete	6,000
	Atlantic Spotted Dolphin	<i>Stenella frontalis</i>	Western North Atlantic	N	Small Odontocete	29
	Risso's Dolphin	<i>Grampus griseus</i>	Western North Atlantic	N	Large Odontocete	30
	Striped Dolphin	<i>Stenella coeruleoalba</i>	Western North Atlantic	N	Small Odontocete	20
	Harbor Porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/Bay of Fundy	N	Small Odontocete	287

Pinniped (phocid)	Harbor Seal	<i>Phoca vitulina</i>	Western North Atlantic	N	Seal	118
	Gray Seal	<i>Halichoerus grypus</i>	Western North Atlantic	N	Seal	118

**Table 2. Level B harassment zones**

Authorized Marine Mammal Species	Level B Harassment Zone during Sparker Use	Level B Harassment Zone during Non-parametric Sub-bottom Profiler
North Atlantic Right Whale	141 m	56 m
Fin Whale		
Sei Whale		
Minke Whale		
Humpback Whale		
Sperm Whale		
Long-finned Pilot Whale		
Atlantic White-sided Dolphin		
Bottlenose Dolphin		
Short-beaked Common Dolphin		
Atlantic Spotted Dolphin		
Risso's Dolphin		
Striped Dolphin		
Harbor Porpoise		
Harbor Seal		
Gray Seal		

**Table 3. Distance/Times for Clearance, Shutdown, and Vessel Separation Zones**

Authorized Marine Mammal Species	ESA-listed?	Pre-Clearance Zone		Vessel Separation Zone	Shutdown Zone	
		Distance (m)	Duration (minutes)	Distance (m)	Distance (m)	Duration (minutes)
North Atlantic Right Whale	Y	500	30	500	500	30
Fin Whale					100	



Sei Whale						
Sperm Whale						
Humpback Whale				100		
Minke Whale					100	
Long-finned Pilot Whale						
Risso's Dolphin						
Harbor Porpoise						15
Gray Seal					Not required (see condition 4(f)(iv) in this IHA)	
Harbor Seal	No	100				
Atlantic White-sided Dolphin				50		
Bottlenose Dolphin						
Short-beaked Common Dolphin						
Atlantic Spotted Dolphin						
Striped Dolphin						