than 12 kg (26.5 lb), and shall not recommend booster seats for children of weights less than 18 kg (40 lb).

* * * * *

S7.1.2 * * *

(d) A child restraint system that is recommended by its manufacturer in accordance with S5.5 for use either by children in a specified weight range that includes any children having a weight greater than 13.6 kg (30 lb) but not greater than 18 kg (40 lb) regardless of height, or by children in a specified height range that includes any children whose height is greater than 870 mm but not greater than 1100 mm regardless of weight, is tested with a 49 CFR part 572, subpart P dummy (Hybrid III 3-year-old dummy).

(e) A child restraint system that is recommended by its manufacturer in accordance with S5.5 for use either by children in a specified weight range that includes any children having a weight greater than 18 kg (40 lb) but not greater than 22.7 kg (50 lb) regardless of height, or by children in a specified height range that includes any children whose height is greater than 1100 mm but not greater than 1250 mm regardless of weight, is tested with a 49 CFR part 572, subpart N dummy (Hybrid III 6- year-old dummy).

* * * * *

Issued under authority delegated in 49 CFR 1.95 and 501.5.

Sophie Shulman,

Deputy Administrator.

[FR Doc. 2024–22448 Filed 10–8–24; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

[Docket No. 241003–0261]

RIN 0648–BM74

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to U.S. Navy Repair and Replacement of the Q8 Bulkhead at Naval Station Norfolk

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS, upon request from the U.S. Navy (Navy), hereby issues regulations to govern the unintentional taking of marine mammals incidental to the Q8 Bulkhead repair and replacement project at Naval Station (NAVSTA) Norfolk in Norfolk, Virginia over the course of 5 years (*i.e.,* 2025–2029) (the Project). These regulations, which allow for the issuance of a Letter of Authorization (LOA) for the incidental take of marine mammals during the described activities and specified timeframes, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.

DATES: This rule is effective from January 1, 2025, through December 31, 2029.

ADDRESSES: A copy of the Navy's application and any supporting documents, as well as a list of the references cited in this document, may be obtained online at: *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navys-construction-activities-q8-bulkhead-naval-station.*

In case of problems accessing these documents, please call the contact listed below.

FOR FURTHER INFORMATION CONTACT: Craig Cockrell, Office of Protected Resources, NMFS, (301) 427–8401 or *craig.cockrell@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Purpose and Need for Regulatory Action

This rule establishes a framework under the authority of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq.*) to allow for the authorization of take of marine mammals incidental to the Navy's construction activities related to the Project at NAVSTA Norfolk.

We received an application from the Navy requesting 5-year regulations and authorization to take multiple species of marine mammals. Take is anticipated to occur incidental to impact and vibratory pile driving, by Level B harassment only. Please see Background below for definitions of harassment.

Legal Authority for the Action

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1371(a)(5)(A)) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region for up to 5 years if, after notice and public comment, the agency makes certain findings and issues regulations that set forth permissible methods of taking pursuant to that activity and other means of effecting the ''least practicable adverse impact'' on the affected species or stocks and their habitat (see the discussion below in the Mitigation section), as well as monitoring and reporting requirements. Section 101(a)(5)(A) of the MMPA, and the implementing regulations at 50 CFR part 216 subpart I, provide the legal basis for issuing this rule containing 5-year regulations, and for any subsequent letters of authorization (LOAs). As directed by this legal authority, this final rule contains mitigation, monitoring, and reporting requirements.

Summary of Major Provisions Within the Rule

Following is a summary of the major provisions of this final rule regarding Navy construction activities. These measures include:

- Required monitoring of the construction areas to detect the presence of marine mammals before beginning construction activities;
- Shutdown of construction activities under certain circumstances to avoid injury of marine mammals; and
- Soft start for impact pile driving to allow marine mammals the opportunity to leave the area prior to beginning impact pile driving at full power.

Background

The MMPA prohibits the ''take'' of marine mammals, with certain exceptions Section 101(a). Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are proposed or, if the taking is limited to harassment, a notice of a proposed IHA is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses, where relevant. Further, NMFS must prescribe the permissible methods of taking and other ''means of effecting the least practicable adverse impact'' on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of

similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to in shorthand as ''mitigation''); and requirements pertaining to the mitigation, monitoring and reporting of the takings are set forth (Section 101(5)(A)(i)(II)(aa)). The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

Summary of Request

On September 14, 2023, NMFS received a request from the Navy for authorization to take marine mammals incidental to repair and replacement of the Q8 Bulkhead at NAVSTA Norfolk in Norfolk, VA. Following NMFS' review of the application, the Navy submitted a revised version on December 18, 2024 and after review of that application a second revised version was submitted on January 16, 2024. The application was deemed adequate and complete on February 23, 2024. A notice of receipt of the Navy's application was published in the **Federal Register** on March 14, 2024 (89 FR 18605). No comments were received on the application during the 30-day comment period.

On July 3, 2024, NMFS published a notice of proposed rulemaking in the **Federal Register** (89 FR 55180). All comments were considered in development of this final rule (see Comments and Responses). Navy's request is for the take of four species by Level B harassment only. Neither Navy nor NMFS expect serious injury or mortality to result from this activity. The regulations will be valid for 5 years (2025–2029). No changes were made from the proposed to the final rule.

Description of the Activity

The Navy proposes to repair and replace the Q8 bulkhead at NAVSTA Norfolk, that has failed in multiple locations, creating sinkholes and unsafe conditions. Work on the bulkhead will be conducted from Piers 12 and 14 to restore function of this Navy dock system. Vibratory and impact hammers will be used for pile removal and installation. Sounds produced from these pile removal and installation activities may result in the incidental take of marine mammals, by Level B harassment only. Approximately 378 piles will be removed and 836 piles will be installed. Work will be conducted in 3 phases over 212 non-consecutive days to complete the pile removal and installation activities.

A detailed description of the planned construction project is provided in the **Federal Register** notice for the proposed rule (89 FR 55180, July 3, 2024). Since that time, no changes have been made to the planned activities. Therefore, a detailed description is not provided here. Please refer to that **Federal Register** notice for the description of the specific activity.

Comments and Responses

NMFS' notice of proposed rulemaking was published in the **Federal Register** on July 3, 2024 (89 FR 55180). That proposed rule described, in detail, the Navy's activities, the marine mammal species that may be affected by the activities, and the anticipated effects on marine mammals. In that proposed rule, we requested public input on the request for authorization described therein, our analyses, the proposed authorization, and any other aspect of the notice of proposed rulemaking, and requested that interested persons submit relevant information, suggestions, and comments. This proposed rule was available for a 30-day public comment period.

During the 30-day public comment period, NMFS received 2 substantive comment submissions, from members of the public. NMFS' responses to the comments are provided below, and all comments are available online at: *https://www.regulations.gov/document/NOAA-NMFS-2024-0055-0001/comment.*

Comment 1: A commenter stated that the sound propagation equation used by the Navy was simplistic and did not account for a variety of environmental factors that may affect the accuracy of the predicted harassment zones associated with pile driving. The comment stated that at a minimum both bottom composition and topography should be included in the acoustic modeling of the Level B harassment zones.

Response 1: NMFS agrees with the commenter that assuming practical spreading loss is a simplistic approach and excludes certain environmental factors that may be influential on real transmission loss. However, NMFS disagrees with the commenter that the acoustic modeling is inadequate and ''undermines the predictions of Level B harassment.'' The assumption of practical spreading loss is an approach that is readily accessible to all applicants, and while it does exclude certain relevant factors, it has been supported by hydroacoustic measurements in many locations, where measured transmission loss coefficients typically are between 10 and 30 depending on the site, measurement date, activity, and metric. Further, more complex modeling requires detailed knowledge of the source spectra, seabed composition and associated acoustic parameters, and the sound speed profile, all of which are often not readily available and introduce their own non-negligible uncertainty.

In addition, the Navy is among the leaders in hydroacoustic measurements of pile driving activities (Illingworth and Rodkin, 2017; NAVFAC Southwest, 2020) and continues to contribute to the scientific knowledge available on this topic. A relevant example can be found in the NAVFAC 2017 pile driving noise measurement report (Illingworth and Rodkin, 2017), wherein transmission loss coefficients were measured for a variety of pile driving activities at JEB Little Creek NAVSTA and NAVSTA Norfolk. Transmission loss coefficients varied significantly by activity and location and ranged from 12.2 to 31.9, but were often near 15. This shows that while practical spreading is not a perfect model, it is a good approximation in waters near the planned activity.

Notably, sophisticated propagation modeling has been performed for pile driving of concrete, composite, and timber piles in the Norfolk region. The Navy has completed this transmission loss modeling and can be reviewed in the following document: *https://media.fisheries.noaa.gov/dam-migration/nsn_pile_driving_final_loa_appendix_b_may_2020.pdf.* While estimated transmission loss coefficients are not provided in the report, the depth-averaged cumulative SEL is given as a function of range in figure 10 in the report, for the case of a constant water depth of 13 meters (m). This modeling scenario was included only for illustrative purposes but was deemed by the authors to be near the upper bound for expected ranges to thresholds for the study. By fitting several points from the unweighted curve, NMFS has determined that the best fit transmission loss coefficient for this model result is approximately 14.5, which agrees well with the practical spreading model.

Based on the above analyses and information, NMFS is confident that the analysis of the harassment zones reasonably assesses the potential impacts to marine mammals and has not changed that analysis or the reliance upon such analysis in this final rule.

Comment 2: A commenter urged NMFS to implement ''hard limits'' on the number of marine mammals that could be taken under an authorization granted to the Navy. Further, the commenter stated that if take of marine mammals exceeded those limits construction should be halted until NMFS is able to re-analyze the impacts of the project. The commenter also

urged NMFS to have a ''fair process'' for this authorization and to not give special exceptions to the Navy regarding their application for an LOA. The commenter also recommended that NMFS and the Navy consider the use of a sound producing device to deter marine mammals from the Project area in order to reduce the number of animals taken during construction activities.

Response 2: NMFS agrees with the commenter that takes should be limited in numbers for each incidental take authorization. In this rule and the proposed rule the Navy and NMFS estimated takes that were likely to occur during the course of this project (see Estimate Take section). Take numbers for each marine mammal species were estimated for each phase of construction. The maximum annual take numbers for each species may not be exceeded in any given year, and the total take level may not be exceeded over the 5-year period of effectiveness of this rule.

NMFS also agrees with the commenter that a fair process for the application and issuance of all incidental take authorizations should be adhered to. Once the application submitted by the Navy for this project was deemed adequate and complete, NMFS published a notice of receipt of the application in the **Federal Register** (89 FR 18605, March 14, 2024) with a 30-day comment period for the public to review and comment on the contents of the application. After the comment period concluded, NMFS developed a proposed rule (89 FR 55180, July 3, 2024) to further engage the public on the analyses of the project and the impacts to marine mammals in the Project area. That proposed rule process included a 30-day comment period for the public. NMFS reviewed and responded comments submitted on the proposed rule and determined if any changes were necessary in the final rule. This process is in accordance with the relevant requirements of the MMPA and of the Administrative Procedure Act, and is applied in the same fashion to all applicants for incidental take authorizations.

NMFS agrees that sound producing devices may be a useful tool for deterring marine mammals in certain circumstances and when warranted, *e.g.,* when deterrence may prevent mortality or serious injury. This project will only result in behavioral disturbance (Level B harassment) which may result in (1) changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; (2) reduced/increased vocal activities; (3) changing/cessation of certain behavioral activities (*e.g.,* socializing or feeding); (4) visible startle response or aggressive behavior (*e.g.,* tail/fluke slapping or jaw clapping); (5) avoidance of areas where sound sources are located (Thorson and Reyff, 2006) (see Behavioral Effects section for more information). Therefore, for this project NMFS disagrees with the use of acoustic deterrence devices since those devices would produce the same level of harassment as the construction activities of this project.

Changes From the Proposed Rule to Final Rule

On May 3, 2024, NMFS published (89 FR 36762) and solicited public comment on its draft updated Technical Guidance (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance*), which includes updated thresholds and weighting functions to inform auditory injury estimates, and is intended to replace the 2018 Technical Guidance referenced above, once finalized. NMFS completed a basic comparative analysis based on the updated Technical Guidance and has updated the Level A harassment and shutdown zones (see Estimated Take and Mitigation). This change is necessary because the authorization and regulations issued under this rule are effective for 5 years and the updated Technical Guidance will be effective before this rule expires. This updated analysis did not change the anticipated take numbers analyzed through this rule.

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history of the potentially affected species. NMFS fully considered all of this information, and we refer the reader to these descriptions, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS' Stock Assessment Reports (SARs; *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments*) and more general information about these species (*e.g.,* physical and behavioral descriptions) may be found on NMFS' website at: *https://www.fisheries.noaa.gov/find-species.*

Table 3 lists all species or stocks for which take is expected and proposed to be authorized for this activity, and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS' SARs) (section 3 (19)(A)). While no serious injury or mortality is anticipated or proposed to be authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species or stocks and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS' stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS' U.S. Atlantic SARs. All values presented in table 1 are the most recent available at the time of publication (including from the draft 2023 SARs) and are available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.*

TABLE 1—SPECIES LIKELY IMPACTED BY THE SPECIFIED ACTIVITIES [1]

Common name	Scientific name	Stock	ESA/ MMPA status; strategic (Y/N) [2]	Stock abundance (CV, N_{min}, most recent abundance survey) [3]	PBR	Annual M/SI [4]
Order Artiodactyla—Infraorder Cetacea—Mysticeti (baleen whales)						
Family Balaenopteridae (rorquals):						
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine	-,-, N	1,396 (0, 1380, 2016)	22	12.15
Odontoceti (toothed whales, dolphins, and porpoises)						
Family Physeteridae:						
Bottlenose dolphin	*Tursiops truncatus*	Northern Migratory Coastal	-, -, Y	6,639 (0.41, 4,759, 2016).	48	12.2–21.5
		Southern Migratory Coastal	-, -, Y	3,751 (0.6, 2,353, 2016)	24	0–18.3
		Northern NC Estuarine	-, -, N	823 (0.06, 782, 2017)	7.8	7.2–30
Family Phocoenidae (porpoises):						
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy	-, -, N	85,765 (0.53, 56,420, 2021).	649	145
Order Carnivora—Pinnipedia						
Family Phocidae (earless seals):						
Harbor Seal	*Phoca vitulina*	Western North Atlantic	-, -, N	61,336 (0.08, 57,637, 2018).	1,729	339

[1] Information on the classification of marine mammal species can be found on the web page for The Society for Marine Mammalogy's Committee on Taxonomy (*https://www.marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies/*).

[2] ESA status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

[3] NMFS marine mammal stock assessment reports online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports/*. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance. In some cases, CV is not applicable.

[4] These values, found in NMFS's SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, vessel strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range.

A detailed description of the species likely to be affected by the Navy's construction project, including brief introductions to the species and relevant stocks as well as available information regarding population trends and threats, and information regarding local occurrence, were provided in the **Federal Register** notice for the proposed rule (89 FR 55180, July 3, 2024); since that time, we are not aware of any changes in the status of these species and stocks; therefore, detailed descriptions are not provided here. Please refer to that **Federal Register** notice for these descriptions. Please also refer to NMFS' website (*https://www.fisheries.noaa.gov/find-species*) for generalized species accounts.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Not all marine mammal species have equal hearing capabilities (*e.g.,* Richardson *et al.,* 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007, 2019) recommended that marine mammals be divided into hearing groups based on directly measured (behavioral or auditory evoked potential techniques) or estimated hearing ranges (behavioral response data, anatomical modeling, *etc.*). Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.,* low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65 decibel (dB) threshold from the normalized composite audiograms, with the exception for lower limits for low-frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in table 2.

TABLE 2—MARINE MAMMAL HEARING GROUPS

[NMFS, 2018]

Hearing group	Generalized hearing range *
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 35 kHz.
Mid-frequency (MF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz.
High-frequency (HF) cetaceans (true porpoises, *Kogia,* river dolphins, Cephalorhynchid, *Lagenorhynchus cruciger* & *L. australis*).	275 Hz to 160 kHz.
Phocid pinnipeds (PW) (underwater) (true seals)	50 Hz to 86 kHz.

TABLE 2—MARINE MAMMAL HEARING GROUPS—Continued

[NMFS, 2018]

Hearing group	Generalized hearing range *
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 39 kHz.

* Represents the generalized hearing range for the entire group as a composite (*i.e.,* all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall *et al.* 2007) and PW pinniped (approximation).

The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.,* 2006; Kastelein *et al.,* 2009; Reichmuth and Holt, 2013).

For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information.

Effects of Specified Activities on Marine Mammals and Their Habitat

The effects of underwater noise from the Navy's construction activities have the potential to result in behavioral harassment of marine mammals in the vicinity of the Project area. The proposed rule (89 FR 55180, July 3, 2024) included a discussion of the effects of anthropogenic noise on marine mammals and the potential effects of underwater noise from the Navy's construction on marine mammals and their habitat. That information and analysis is referenced in this final rule and is not repeated here; please refer to the proposed rule (89 FR 55180, July 3, 2024).

Estimated Take of Marine Mammals

This section provides an estimate of the number of incidental takes that may be authorized, which will inform both NMFS' consideration of ''small numbers,'' and the negligible impact determinations.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines ''harassment'' as any act of pursuit, torment, or annoyance, which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment) (16 U.S.C. 1362(18)(A)(i)–(ii)).

Authorized takes would be by Level B harassment only, in the form of disruption of behavioral patterns for individual marine mammals resulting from exposure to sounds emitted from pile driving. Based on the nature of the activity and the anticipated effectiveness of the mitigation measures (*i.e.,* shutdown zones) discussed in detail below in the Mitigation section, Level A harassment is neither anticipated nor would be authorized.

As described previously, no serious injury or mortality is anticipated or authorized for this activity. Below we describe how the take numbers are estimated.

For acoustic impacts, generally speaking, we estimate take by considering: (1) acoustic thresholds above which NMFS believes the best available science indicates marine mammals will be behaviorally harassed or incur some degree of permanent hearing impairment; (2) the area or volume of water that will be ensonified above these levels in a day; (3) the density or occurrence of marine mammals within these ensonified areas; and (4) the number of days of activities. We note that while these factors can contribute to a basic calculation to provide an initial prediction of potential takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.,* previous monitoring results or average group size). Below, we describe the factors considered here in more detail and present the take estimates.

Acoustic Thresholds

NMFS recommends the use of acoustic thresholds that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur permanent threshold shift (PTS) of some degree (equated to Level A harassment).

Level B Harassment—Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source or exposure context (*e.g.,* frequency, predictability, duty cycle, duration of the exposure, signal-to-noise ratio, distance to the source), the environment (*e.g.,* bathymetry, other noises in the area, predators in the area), and the state of the receiving animals (*e.g.,* hearing, motivation, experience, demography, life stage, depth) and can be difficult to predict (*e.g.,* Southall *et al.,* 2007, 2021, Ellison *et al.,* 2012). Based on what the available science indicates and the practical need to use a threshold based on a metric that is both predictable and measurable for most activities, NMFS typically uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS generally predicts that marine mammals are likely to be behaviorally harassed in a manner considered to be Level B harassment when exposed to underwater anthropogenic noise above root-mean-squared pressure received levels (RMS SPL) of 120 dB (referenced to one micropascal (re one µPa)) for continuous (*e.g.,* vibratory pile driving) and above RMS SPL 160 dB re one µPa for non-explosive impulsive (*e.g.,* seismic airguns) or intermittent (*e.g.,* scientific sonar) sources. Generally speaking, Level B harassment take estimates based on these behavioral harassment thresholds are expected to include any likely takes by temporary threshold shift (TTS) as, in most cases, the likelihood of TTS occurs at distances from the source less than those at which behavioral harassment is likely. TTS of a sufficient degree can manifest as behavioral harassment, as reduced hearing sensitivity and the potential reduced opportunities to detect important signals (*i.e.,* conspecific communication, predators, and prey) may result in changes in behavior patterns that would not otherwise occur.

The Navy's activity includes the use of continuous (*e.g.,* vibratory pile driving and removal) and impulsive (*e.g.,* impact pile driving) sources, and therefore the RMS SPL thresholds of 120 and 160 dB re one µPa are applicable.

The ensonified area associated with Level A harassment is more technically challenging to predict due to the need

to account for a duration component. Therefore, NMFS developed an optional User Spreadsheet tool to accompany the Technical Guidance that can be used to relatively simply predict an isopleth distance for use in conjunction with marine mammal density or occurrence to help predict potential takes. We note that because of some of the assumptions included in the methods underlying this optional tool, we anticipate that the resulting isopleth estimates are typically going to be overestimates of some degree, which may result in an overestimate of potential take by Level A harassment. However, this optional tool offers the best way to estimate isopleth distances when more sophisticated modeling methods are not available or practical. For stationary sources impact or vibratory pile driving and removal, the optional User Spreadsheet tool predicts the distance at which, if a marine mammal remained at that distance for the duration of the activity, it would be expected to incur PTS. Inputs used in the optional User Spreadsheet tool, and the resulting estimated isopleths, are reported below. For concurrent activities where combined impact and vibratory hammer scenarios shown in table 9, the estimated Level A harassment distances reflect the impact driving activity and the estimated Level B harassment distances reflect the combined vibratory source levels for that activity.

On May 3, 2024, NMFS published (89 FR 36762) and solicited public comment on its draft updated Technical Guidance (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance*), which includes updated thresholds and weighting functions to inform auditory injury estimates, and is intended to replace the 2018 Technical Guidance referenced above, once finalized. The public comment period ended on June 17, 2024, and although the updated Technical Guidance is not final, we expect the updated Technical Guidance to represent the best available science once it is. To best ensure we have considered an appropriate estimate of take by Level A harassment, in consideration of the best available science, we have conducted basic comparative calculations using the draft updated Technical Guidance for the purposes of understanding the number of takes by Level A harassment (auditory injury) that would be predicted if the draft updated Technical Guidance were finalized with no changes. The relevant draft updated thresholds and weighting functions may be found in the executive summary of the draft updated Technical Guidance, on pages 3 and 4. We have also considered whether modifications to mitigation zones would be appropriate in light of the draft updated Technical Guidance. Based on the outcome of these comparisons/analyses using the draft updated Technical Guidance, NMFS has made changes as appropriate to the required shutdown zones necessary to avoid Level A harassment. These updates to the estimated harassment zones (see table 8 and table 9) and resulting changes to the required shutdown zones (see table 11 and table 12) are minor and do not result in any changes to the take levels as described in the proposed rule and analyzed through this final rule.

These thresholds are provided in table 3 and table 4 below. The references, analysis, and methodology used in the development of the thresholds are described in NMFS' 2018 Technical Guidance and the draft NMFS' 2024 Technical Guidance, both of which may be accessed at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance.*

TABLE 3—THRESHOLDS IDENTIFYING THE ONSET OF AUDITORY INJURY

[NMFS 2018]

Hearing group	PTS onset acoustic thresholds* (received level)	
	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	*Cell 1:* $L_{pk,flat}$: 219 dB; $L_{E,LF,24h}$: 183 dB	*Cell 2:* $L_{E,LF,24h}$: 199 dB.
Mid-Frequency (MF) Cetaceans	*Cell 3:* $L_{pk,flat}$: 230 dB; $L_{E,MF,24h}$: 185 dB	*Cell 4:* $L_{E,MF,24h}$: 198 dB.
High-Frequency (HF) Cetaceans	*Cell 5:* $L_{pk,flat}$: 202 dB; $L_{E,HF,24h}$: 155 dB	*Cell 6:* $L_{E,HF,24h}$: 173 dB.
Phocid Pinnipeds (PW) (Underwater)	*Cell 7:* $L_{pk,flat}$: 218 dB; $L_{E,PW,24h}$: 185 dB	*Cell 8:* $L_{E,PW,24h}$: 201 dB.
Otariid Pinnipeds (OW) (Underwater)	*Cell 9:* $L_{pk,flat}$: 232 dB; $L_{E,OW,24h}$: 203 dB	*Cell 10:* $L_{E,OW,24h}$: 219 dB.

* Dual metric acoustic thresholds for impulsive sounds: Use whichever results in the largest isopleth for calculating PTS onset. If a non-impulsive sound has the potential of exceeding the peak sound pressure level thresholds associated with impulsive sounds, these thresholds should also be considered.

Note: Peak sound pressure (L_{pk}) has a reference value of one µPa, and cumulative sound exposure level (L_E) has a reference value of 1µPa^{2}s. In this table, thresholds are abbreviated to reflect American National Standards Institute standards (ANSI 2013). However, peak sound pressure is defined by ANSI as incorporating frequency weighting, which is not the intent for this Technical Guidance. Hence, the subscript "flat" is included to indicate peak sound pressure should be flat weighted or unweighted within the generalized hearing range. The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, MF, and HF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The cumulative sound exposure level thresholds could be exceeded in a multitude of ways (*i.e.,* varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these acoustic thresholds will be exceeded.

TABLE 4—UPDATED THRESHOLDS IDENTIFYING THE ONSET OF AUDITORY INJURY (AUD INJ)

[NMFS 2024]

Hearing group	AUD INJ Onset Thresholds* (received level)	
	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	*Cell 1:* $L_{p,0\text{-}pk,flat}$: 222 dB; $L_{E,p,\ LF,24h}$: 183 dB	*Cell 2:* $L_{E,p,\ LF,24h}$: 197 dB.
High-Frequency (HF) Cetaceans	*Cell 3:* $L_{p,0\text{-}pk,flat}$: 230 dB; $L_{E,p,\ HF,24h}$: 193 dB	*Cell 4:* $L_{E,p,\ HF,24h}$: 201 dB.
Very High-Frequency (VHF) Cetaceans	*Cell 5:* $L_{p,0\text{-}pk,flat}$: 202 dB; $L_{E,p,VHF,24h}$: 159 dB	*Cell 6:* $L_{E,p,\ VHF,24h}$: 181 dB.
Phocid Pinnipeds (PW) (Underwater)	*Cell 7:* $L_{p,0\text{-}pk,flat}$: 223 dB; $L_{E,p,PW,24h}$: 183 dB	*Cell 8:* $L_{E,p,PW,24h}$: 195 dB.

TABLE 4—UPDATED THRESHOLDS IDENTIFYING THE ONSET OF AUDITORY INJURY (AUD INJ)—Continued
[NMFS 2024]

Hearing group	AUD INJ Onset Thresholds* (received level)	
	Impulsive	Non-impulsive
Otariid Pinnipeds (OW) (Underwater)	*Cell 9:* $L_{p,0\text{-}pk,flat}$*:* 230 dB; $L_{E,p,OW,24h}$*:* 185 dB	*Cell 10:* $L_{E,p,OW,24h}$*:* 199 dB.

*Dual metric thresholds for impulsive sounds: Use whichever results in the largest isopleth for calculating AUD INJ onset. If a non-impulsive sound has the potential of exceeding the peak sound pressure level thresholds associated with impulsive sounds, these thresholds are recommended for consideration.

Note: Peak sound pressure level ($L_{p,0\text{-}pk}$) has a reference value of 1 μPa, and weighted cumulative sound exposure level ($L_{E,p}$) has a reference value of 1μPa^{2}s. In this table, thresholds are abbreviated to be more reflective of International Organization for Standardization standards (ISO 2017). The subscript "flat" is being included to indicate peak sound pressure are flat weighted or unweighted within the generalized hearing range of marine mammals (*i.e.,* 7 Hz to 165 kHz). The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, HF, and VHF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The weighted cumulative sound exposure level thresholds could be exceeded in a multitude of ways (*i.e.,* varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these thresholds will be exceeded.

Ensonified Area

Here, we describe operational and environmental parameters of the activity that are used in estimating the area ensonified above the acoustic thresholds, including source levels and transmission loss coefficient.

The sound field in the Project area is the existing background noise plus additional construction noise from the Project. Marine mammals are expected to be affected via sound generated by the primary components of the Project (*i.e.,* impact pile driving and vibratory pile driving and removal). The maximum underwater area ensonified above the thresholds for individual activities of behavioral harassment referenced above is 93.5 square kilometers (km^2)(36.1 miles (mi^2)) and will consist of an area reaching the opposite shoreline of the river (see figures 6.6, 6.8, and 6.10 in the Navy's application for the Incidental Take Authorization for the Q8 bulkhead Project). The maximum (underwater) area ensonified above the thresholds for concurrent activities of behavioral harassment referenced above is 97.9 km^2 (37.8 mi^2) and will consist of a similar area reaching the opposite shoreline of the river as individual activities (see figures 6.11–6.16 in the Navy's application). Additionally, vessel traffic and other commercial and industrial activities in the Project area may contribute to elevated background noise levels which may mask sounds produced by the Project.

Transmission loss (*TL*) is the decrease in acoustic intensity as an acoustic pressure wave propagates out from a source. *TL* parameters vary with frequency, temperature, sea conditions, current, source and receiver depth, water depth, water chemistry, and bottom composition and topography. The general formula for underwater *TL* is:

$$TL = B * \mathrm{Log}_{10}(R_1/R_2)$$

Where

TL = transmission loss in dB
B = transmission loss coefficient
R_1 = the distance of the modeled SPL from the driven pile, and
R_2 = the distance from the driven pile of the initial measurement

This formula neglects loss due to scattering and absorption, which is assumed to be zero here. The degree to which underwater sound propagates away from a sound source is dependent on a variety of factors, most notably the water bathymetry and presence or absence of reflective or absorptive conditions including in-water structures and sediments. Spherical spreading occurs in a perfectly unobstructed (*i.e.,* free-field) environment not limited by depth or water surface, resulting in a 6-dB reduction in sound level for each doubling of distance from the source (20*log[range]). Cylindrical spreading occurs in an environment in which sound propagation is bounded by the water surface and sea bottom, resulting in a reduction of three dB in sound level for each doubling of distance from the source (10*log[range]). A practical spreading value of 15 is often used under conditions, such as the Project site, where water increases with depth as the receiver moves away from the shoreline, resulting in an expected propagation environment that will lie between spherical and cylindrical spreading loss conditions. Practical spreading loss is assumed here.

The intensity of pile driving sounds is greatly influenced by factors such as the type of piles, hammers, and the physical environment in which the activity takes place. In order to calculate the distances to the Level A harassment and the Level B harassment sound thresholds for the methods and piles being used in this Project, the Navy and NMFS used acoustic monitoring data from other locations to develop proxy source levels for the various pile types, sizes, and methods. The Project includes vibratory and impact installation of prestressed concrete and composite piles and vibratory removal of existing concrete piles. Steel sheet piles to make up the wall of the bulkhead will be installed with vibratory hammers. Source levels for each pile size and driving method for individual activities are presented in table 5. For concurrent activities where two noise sources have overlapping sound fields, there is potential for higher sound levels than for non-overlapping sources because the isopleth of one sound source encompasses the sound source of another isopleth. In such instances, the sources are considered additive and combined using the rules of decibel addition. For addition of two simultaneous sources, the difference between the two sound source levels is calculated, and: (1) if that difference is between zero and one dB, three dB are added to the higher sound source level; (2) if the difference is between two or three dB, two dB are added to the highest sound source level; (3) if the difference is between four to nine dB, one dB is added to the highest sound source level; and (4) with differences of 10 dB or more, there is no addition. Source levels for each pile size and vibratory driving for concurrent activities are presented in table 6.

TABLE 5—PROXY SOUND SOURCE LEVELS FOR PILE SIZES AND DRIVING METHODS

Pile size	Method	Proxy source level			Literature source
		dB RMS re 1μPa	dB SEL re 1μPa²sec	dB peak re 1μPa	
56-in sheet pile	Vibratory	168	N/A	N/A	Illingworth and Rodkin, 2017.
18-in concrete	Vibratory	162	N/A	N/A	Caltrans, 2020.
16-in composite	Vibratory	158	N/A	N/A	Illingworth and Rodkin, 2017.
18-in concrete	Impact	170	160	185	e4sciences, 2023.
16-in composite	Impact	169	157	177	Illingworth and Rodkin, 2017.

TABLE 6—PROXY SOUND SOURCE LEVELS FOR CONCURRENT ACTIVITIES

Pile size and type	Vibratory installation source 1 [dB RMS]	Vibratory extract source 2 [dB RMS]	Revised SL to be used [dB RMS]
Source 1: Vibratory hammer 56-in steel sheet pile; Source 2: Vibratory extraction of 18-in concrete pile	168	162	169
Source 1: Vibratory hammer 18-in concrete pile; Source 2: Vibratory extraction of 18-in concrete pile	162	162	165
Source 1: Vibratory hammer 56-in steel sheet pile; Source 2: 16 in composite pile	168	158	168

TABLE 7—USER SPREADSHEET INPUT PARAMETERS USED FOR CALCULATING LEVEL A HARASSMENT ISOPLETHS

Phase (year)	Pile size and installation method	Spreadsheet tab used	Weighting factor adjustment (kHz)	Number of strikes per pile	Number of piles per day	Activity duration (minutes)
Phase 1 (Year 1)	18-in concrete impact installation.	E.1 Impact pile driving	2	307	6	N/A
	18-in concrete vibratory extraction.	A.1 Vibratory pile driving	2.5	N/A	6	14
	56-in sheet pile vibratory installation.	A.1 Vibratory pile driving	2.5	N/A	6	24
Phase II (Year 2)	18-in concrete impact installation.	E.1 Impact pile driving	2	499	6	N/A
	18-in concrete vibratory extraction.	A.1 Vibratory pile driving	2.5	N/A	6	26
	56-in sheet pile vibratory installation.	A.1 Vibratory pile driving	2.5	N/A	6	28
Phase III (Year 3)	16-in composite impact installation.	E.1 Impact pile driving	2	540	6	N/A
	18-in concrete vibratory installation.	E.1 Impact pile driving	2	540	6	N/A
	16-in composite vibratory extraction.	A.1 Vibratory pile driving	2.5	N/A	6	20
	56-in sheet pile vibratory installation.	A.1 Vibratory pile driving	2.5	N/A	6	38

TABLE 8—CALCULATED LEVEL A AND LEVEL B HARASSMENT ISOPLETHS FOR INDIVIDUAL ACTIVITIES

Phase (year)	Activity	Level A harassment zone (m) [1]				Level B harassment zone(m)
		LF-cetaceans	HF (MF)-cetaceans	VHF (HF)-cetaceans	Phocids	
Phase 1 (Year 1)	18-in concrete impact installation	43.9 (43.6)	5.6 (1.6)	67.8 (52.3)	38.9 (23.5)	46.4
	18-in concrete vibratory extraction	13.5 (10.0)	5.2 (0.9)	11.0 (14.7)	17.3 (6.1)	6,310
	56-in sheet pile vibratory installation	48.4 (35.9)	18.6 (3.2)	39.5 (53.0)	62.3 (21.8)	15,849
Phase II (Year 2)	18-in concrete impact installation	60.8 (60.8)	7.7 (2.2)	93.7 (72.4)	53.8 (32.5)	46.4
	18-in concrete vibratory extraction	20.3 (15.1)	7.8 (1.3)	16.6 (22.3)	26.2 (9.2)	6,310
	56-in sheet pile vibratory installation	53.7 (39.7)	20.6 (3.2)	43.8 (58.7)	69.1 (24.2)	15,849
Phase III (Year 3)	16-in composite impact installation	40.4 (40.4)	5.1 (1.4)	62.3 (48.1)	35.8 (21.6)	39.8
	18-in concrete impact installation	64.0 (64.0)	8.1 (2.3)	98.7 (76.3)	56.7 (34.3)	46.4
	16-in composite vibratory extraction	9.2 (6.8)	3.5 (0.6)	7.5 (10.1)	11.9 (4.2)	3,415
	56-in sheet pile vibratory installation	65.8 (48.7)	25.3 (4.3)	53.7 (72.0)	84.7 (29.6)	15,849

[1] Harassment zones shown in parentheticals are based on the 2018 technical guidance and were presented in the proposed rule.

TABLE 9—CALCULATED LEVEL A AND LEVEL B HARASSMENT ISOPLETHS FOR CONCURRENT ACTIVITIES

Phase (year)	Activity	Level A harassment zone (m) [1]				Level B harassment zone (m)
		LF-cetaceans	MF (HF)-cetaceans	HF (VHF)-cetaceans	Phocids	
Phase 1 (Year 1)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	56.4 (41.8)	21.7 (3.7)	46.1 (61.8)	72.7 (25.4)	18,478
	Vibratory extract 18-in concrete piles; vibratory install 56-in steel sheet piles; impact install 18-in concrete piles.	43.9 (43.9)	5.6 (1.6)	67.8 (52.3)	38.9 (23.5)	18,478
Phase II (Year 2)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	62.6 (46.3)	24.0 (4.1)	51.1 (68.5)	80.5 (28.2)	18,478
	Vibratory install 56-in steel sheet piles and impact install 18-in concrete piles.	60.8 (60.8)	7.7 (2.2)	93.7 (72.4)	53.8 (32.5)	15,849
Phase III (Year 3)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	65.8 (56.8)	25.3 (5.0)	53.7 (84.0)	84.7 (34.5)	18,478
	Vibratory install 56-in steel sheet piles and impact install 16-in composite piles.	40.4 (40.4)	5.1 (1.4)	62.3 (48.1)	35.8 (21.6)	15,849

[1] Harassment zones shown in parentheticals are based on the 2018 technical guidance and were presented in the proposed rule.

The maximum distance to the Level A harassment threshold during construction will be during the vibratory driving of 56-inch (in) concrete piles during Phase III of individual activities (*i.e.,* 84.7 m for harbor seals) and during the concurrent vibratory extraction of 18-in concrete piles and vibratory installation of 56-in steel sheet piles for concurrent activities of Phase III (*i.e.,* 84.7 m for harbor seals). Given these relatively small isopleths, if a marine mammal enters the shutdown zone during vibratory or impact pile driving it is expected that the construction activity will be shut down before any marine mammal would incur PTS. Therefore, no take by Level A harassment is expected during the construction activities associated with the Q8 bulkhead. The largest calculated Level B harassment isopleth extends out to 18,478 m, which will result from concurrent pile driving of the scenarios presented in table 9. The largest Level B harassment zone of 18,478 m is not an attainable observable distance in all directions, but in some areas the distance is smaller due to the zone being cut off by landmasses. The Level B harassment zone will be monitored to the maximum extent possible.

Marine Mammal Occurrence and Take Estimation

In this section we provide information about the occurrence of marine mammals, including density or other relevant information which will inform the take calculations. We describe how the information provided is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and may be authorized.

Humpback Whale

Humpback whales occur in the mouth of the Chesapeake Bay and nearshore waters of Virginia during winter and spring months. Several satellite tagged humpback whales were detected west of the Chesapeake Bay Bridge Tunnel, including two individuals with locations near NAVSTA Norfolk and Joint Expeditionary Base Little Creek (Aschettino *et al.,* 2017). Group size was not reported in these surveys; however, most whales detected were juveniles. Although two individuals were detected in the vicinity of the Project area during shipboard surveys conducted in 2020, there is no evidence that they lingered for multiple days (Aschettino, 2020). Because no density estimates are available for the species in this area, the Navy estimated, and NMFS concurs, that one potential sighting of an average size group (*i.e.,* two individuals) could occur every 60 days of pile driving. Therefore, given the number of Project days expected in each year, NMFS will authorize a total of 16 takes by Level B harassment of humpback whale over the 5-year authorization, with no more than four takes by Level B harassment in a given year.

The largest Level A harassment zone for low-frequency cetaceans extends approximately 65.8 m from the source during concurrent activities for the vibratory extraction of 18-in concrete piles and vibratory install 56-in steel sheet piles (table 9). The Navy plans to shut down if a humpback whale is sighted within any of the Level A harassment zones for all activities. Therefore, NMFS will not authorize take by Level A harassment of humpback whales.

Bottlenose Dolphins

The expected number of bottlenose dolphins in the Project area was estimated using inshore seasonal densities provided in Engelhaupt *et al.* (2016) from vessel line-transect surveys near NAVSTA Norfolk and adjacent areas near Virginia Beach, Virginia, from August 2012 through August 2015. This density includes sightings inshore of the Chesapeake Bay from NAVSTA Norfolk west to the Thimble Shoals Bridge and is the most representative density for the Project area. To calculate potential Level B harassment takes of bottlenose dolphin, NMFS conservatively multiplied the density of 1.38 dolphin/km^2 (from Engelhaupt *et al.,* 2016) by the largest Level B harassment isopleth for each activity (tables 7 and 8), and then by the number of days associated with that activity. For example, to calculate Level B harassment takes associated with work at the Q8 bulkhead in Phase I for the vibratory removal of 18-in concrete piles, NMFS multiplied the density (*i.e.,* 1.38 dolphins/km^2) by the Level B harassment zone for that activity (*i.e.,* 43.3 km^2) by the proportional number of pile driving days for that activity (*i.e.,* 24 days) for a total of 1,437 Level B harassment takes for that activity during Phase I. Takes by Level B harassment were calculated for both individual pile driving activities and concurrent pile driving activities, as authorized takes are conservatively based on the scenario that produces more takes by Level B harassment (table 9). Therefore, NMFS will authorize 14,191 takes by Level B

harassment of bottlenose dolphin across all 5 years, with no more than 6,168 takes in a given year.

The largest Level A harassment zone for mid-frequency cetaceans extends approximately 25.3 m from the source during individual and concurrent activities during Phase III (table 8 and table 9). The Navy plans to shut down all activities if a bottlenose dolphin is sighted within the shutdown zones for mid-frequency cetaceans. Therefore, NMFS will not authorize take by Level A harassment of bottlenose dolphins.

Harbor Porpoise

Harbor porpoises are known to occur in the coastal waters near Virginia Beach (Hayes *et al.,* 2019). Density data for this species within the Project vicinity do not exist or were not calculated because sample sizes were too small to produce reliable estimates of density. Harbor porpoise sighting data collected by the Navy near NAVSTA Norfolk and Virginia Beach from 2012 to 2015 (Engelhaupt *et al.* 2014; 2015; 2016) did not produce enough sightings to calculate densities. One group of two harbor porpoises was seen during spring 2015 (Engelhaupt *et al.* 2016). Elsewhere in their range, harbor porpoises typically occur in groups of two to three individuals (Carretta *et al.* 2001; Smultea *et al.* 2017).

Due to there being no density estimates for the species in the Project area, the Navy conservatively estimated one exposure of two porpoises for every 60 days of pile driving. Total pile driving days for Phase I will be 74 days, Phase II will be 37 days, and Phase III will be 101 days. Takes by Level B harassment were calculated for both individual pile driving activities and concurrent pile driving activities, as authorized takes are conservatively based on the scenario that produced the larger exposure estimate (table 11). Using the above methodology, NMFS calculated an exposure estimate of eight incidents of take for harbor porpoises.

NMFS does not expect any Level A harassment of harbor porpoise during this Project. The largest Level A harassment zone for high-frequency cetaceans extends approximately 98.7 m from the source during individual activities during Phase III (table 8). The Navy plans to shut down all activities if a harbor porpoise is sighted within the shutdown zones for high-frequency cetaceans. Therefore, NMFS will not authorize take by Level A harassment of harbor porpoise.

Harbor Seal

The expected number of harbor seals in the Project area was estimated using systematic land- and vessel-based survey data for in-water and hauled out seals collected by the Navy at the CBBT rock armor and portal islands from 2014 through 2019 (Jones *et al.,* 2020). The average daily seal count from the field season ranged from eight to 23 seals, with an average of 13.6 harbor seals across all the field seasons.

NMFS expects that harbor seals are likely to be present from November to April and, consistent with other recent projects (88 FR 31633, May 18, 2023; 87 FR 15945, March 31, 2022; 86 FR 24340; May 6, 2021, and 86 FR 17458; April 2, 2021), NMFS calculated take by Level B harassment by multiplying 13.6 seals by the maximum number of pile driving days expected to occur from November through April. Therefore, we expect the total number of takes by Level B harassment for harbor seals to be 2,882.

NMFS does not expect any Level A harassment of harbor seals during this Project. The largest Level A harassment zone for phocids extends approximately 84.7 m from the source during individual and concurrent activities during Phase III (table 8 and table 9). The Navy plans to shut down all activities if a harbor porpoise is sighted within the shutdown zones for phocids. Therefore, NMFS will not authorize take by Level A harassment of harbor seals.

TABLE 10—TAKES BY LEVEL B HARASSMENT BY SPECIES AND STOCK IN COMPARISON TO STOCK ABUNDANCE

LOA construction phase (year)	Species	Level B (individual activities)	Level B (concurrent activities)	Total	Stock abundance	Percentage of stock
Phase 1	Humpback	2	2	2	1,396	<1
	Bottlenose dolphin—Northern Migratory (NM) [1 2].	5,414	2,888	2,607	6,639	39.27
	Bottlenose dolphin—Southern Migratory (SM) [1 2].			2,607	3,751	69.50
	Bottlenose dolphin—NC Estuarine [1 2].			200	823	24.30
	Harbor porpoise	4	2	4	85,765	<1
	Harbor seal	1,006	408	1,006	61,336	1.64
Phase 2	Humpback	2	2	2	1,396	<1
	Bottlenose dolphin—NM [1 2]	2,609	2,179	1,205	6,639	18.15
	Bottlenose dolphin—SM [1 2]			1,205	3,751	32.12
	Bottlenose dolphin—NC Estuarine [1 2].			200	823	24.30
	Harbor porpoise	2	2	2	85,765	<1
	Harbor seal	503	653	653	61,336	1.06
Phase 3	Humpback	4	2	4	1,396	<1
	Bottlenose dolphin—NM [1 2]	6,168	6,712	3,256	6,639	49.04
	Bottlenose dolphin—SM [1 2]			3,256	3,751	85.80
	Bottlenose dolphin—NC Estuarine [1 2].			200	823	24.30
	Harbor porpoise	4	2	4	85,765	<1
	Harbor seal	1,236	625	1,373	61,336	2.24

[1] Take estimates are weighted based on the assumed percentages of population for each distinct stock, those percentages were also used to predict the proportion of animals present in the Project area from each stock. Please see Small Numbers section for additional information.

[2] Assumes multiple repeated takes of the same individuals. Please see Small Numbers section for additional information.

Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance. NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, NMFS considers two primary factors:

(1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat. This considers the nature of the potential adverse impact being mitigated (*e.g.,* likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned); and

(2) The practicability of the measures for applicant implementation, which may consider such things as cost, impact on operations.

In addition to the measures described later in this section, the Navy will employ the following mitigation measures:

- The Navy will conduct briefings between construction supervisors and crews, the marine mammal monitoring team, and Navy staff prior to the start of all pile driving activity and when new personnel join the work, to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures;
- If a marine mammal comes within 10 m of construction activities, including in-water heavy machinery work, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions; and
- Pile driving activity must be halted 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 is within the harassment zone.

The following mitigation measures apply to the Navy's in-water construction activities.

Establishment of Shutdown Zones—The Navy will establish shutdown zones for all pile driving and removal activities. The purpose of a shutdown zone is generally to define an area within which shutdown of the activity will occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones will vary based on the activity type and marine mammal hearing group (table 11 and table 12).

Protected Species Observers (PSO)—The placement of PSOs during all pile driving and removal activities (described in the Monitoring and Reporting section) will ensure that the entire shutdown zone is visible. A minimum of two PSOs will be used during all activities.

Monitoring for Level A and B Harassment—The Navy will monitor the Level B harassment zones (*i.e.,* areas where SPLs are equal to or exceed the 160 dB rms threshold for impact pile driving, and the 120 dB rms threshold during vibratory pile driving and removal) to the extent practicable, and all of the Level A harassment zones and shutdown zones, during all pile driving days. Monitoring zones provide utility for observing by establishing monitoring protocols for areas adjacent to the shutdown zones. Monitoring zones enable observers to be aware of and communicate the presence of marine mammals in the Project area outside the shutdown zone and thus prepare for a potential cessation of activity should the animal enter the shutdown zone.

Pre-Activity Monitoring—Prior to the start of daily in-water construction activity, or whenever a break in pile driving/removal of 30 minutes or longer occurs, PSOs will observe the shutdown and monitoring zones for a period of 30 minutes. Pile driving may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals. If a marine mammal is observed within the shutdown zones listed in table 11 or table 12, pile driving activity must be delayed or halted. 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 zones or 15 minutes have passed without re-detection of the animal. If work ceases for more than 30 minutes, the pre-activity monitoring of the shutdown zones will commence. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.,* the entire shutdown zone and surrounding waters must be visible to the naked eye).

Soft Start—Soft start procedures are used to provide additional protection to marine mammals by providing warning and/or giving marine mammals a chance to leave the area prior to the hammer operating at full capacity. For impact pile driving, contractors will be required to provide an initial set of three strikes from the hammer at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets. Soft starts will 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.

TABLE 11—SHUTDOWN AND MONITORING ZONES FOR INDIVIDUAL ACTIVITIES

Phase (year)	Activity	Shutdown zones (m) [1]			Level B monitoring zones all marine mammals
		LF-cetaceans	VHF (HF)-cetaceans	All other marine mammals	
Phase 1 (Year 1)	18-in concrete impact installation	50 (50)	70 (60)	40 (30)	50
	18-in concrete vibratory extraction	20 (10)	20 (20)	20 (10)	6,310
	56-in sheet pile vibratory installation	50 (40)	40 (60)	60 (30)	15,850
Phase II (Year 2)	18-in concrete impact installation	70 (70)	100 (80)	60 (40)	50
	18-in concrete vibratory extraction	20 (20)	20 (30)	30 (10)	6,310

TABLE 11—SHUTDOWN AND MONITORING ZONES FOR INDIVIDUAL ACTIVITIES—Continued

Phase (year)	Activity	Shutdown zones (m) [1]			Level B monitoring zones all marine mammals
		LF-cetaceans	VHF (HF)-cetaceans	All other marine mammals	
Phase III (Year 3)	56-in sheet pile vibratory installation	60 (40)	50 (60)	70 (30)	15,850
	16-in composite impact installation	50 (50)	70 (50)	40 (30)	40
	18-in concrete impact installation	70 (70)	100 (80)	60 (40)	50
	16-in composite vibratory extraction	10 (10)	10 (20)	20 (10)	3,415
	56-in sheet pile vibratory installation	70 (50)	60 (80)	90 (30)	15,850

[1] Shutdown zones shown in parentheticals are based on the 2018 technical guidance and were presented in the proposed rule.

TABLE 12—SHUTDOWN AND MONITORING ZONES FOR CONCURRENT ACTIVITIES

Phase (year)	Activity	Shutdown zones (m) [1]			Level B monitoring zones all marine mammals
		LF-cetaceans	HF-cetaceans	All other marine mammals	
Phase 1 (Year 1)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	60 (50)	50 (70)	80 (30)	18,480
	Vibratory extract 18-in concrete piles; vibratory install 56-in steel sheet piles; impact install 18-in concrete piles.	50 (70)	70 (90)	40 (40)	18,480
Phase II (Year 2)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	70 (50)	60 (70)	80 (30)	18,480
	Vibratory install 56-in steel sheet piles and impact install 18-in concrete piles.	70 (50)	100 (80)	60 (30)	15,850
Phase III (Year 3)	Vibratory extract 18-in concrete piles and vibratory install 56-in steel sheet piles.	70 (50)	60 (70)	90 (30)	18,480
	Vibratory install 56-in steel sheet piles and impact install 16-in composite piles.	60 (50)	50 (80)	40 (30)	15,850

[1] Shutdown zones shown in parentheticals are based on the 2018 technical guidance and were presented in the proposed rule.

Based on our evaluation of the applicant's mitigation measures, as well as other measures considered by NMFS, NMFS has determined that the mitigation measures provide the means of effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Monitoring and Reporting

In order to issue an IHA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present while conducting the activities. Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.,* presence, abundance, distribution, density);
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.,* source characterization, propagation, ambient noise); (2) affected species (*e.g.,* life history, dive patterns); (3) co-occurrence of marine mammal species with the activity; or (4) biological or behavioral context of exposure (*e.g.,* age, calving or feeding areas);
- Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors;
- How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks;
- Effects on marine mammal habitat (*e.g.,* marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat); and
- Mitigation and monitoring effectiveness.

Visual Monitoring

Marine mammal monitoring during pile driving and removal must be conducted by qualified, NMFS approved PSOs, in accordance with the following:

- PSOs must be independent of the activity contractor (*e.g.,* employed by a subcontractor) and have no other assigned tasks during monitoring periods;
- 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;
- Other PSOs may substitute other relevant experience, education (*i.e.,* a 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;

- PSOs must be approved by NMFS prior to beginning any activity subject to an LOA issued under this final rule; and
- 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.

PSOs must have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
- Writing skills sufficient to prepare a report of observations including but not limited to: (1) The number and species of marine mammals observed; (2) dates and times when in-water construction activities were conducted; (3) dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and (4) marine mammal behavior; and
- Ability to communicate orally, by radio or in person, with Project personnel to provide real-time information on marine mammals observed in the area as necessary.

Given the configuration of the harassment zones, which vary depending on the pile type/size and the pile driver type (tables 9 and 10), it is assumed that 2 PSOs will be sufficient to monitor the zones for impact drivers, and 3 to 4PSOs will be sufficient to monitor the zones for vibratory drivers given the placement of the observers in the vicinity of the Project area. However, additional monitors may be added if warranted by the level of marine mammal activity in the area. PSOs will be placed at the best vantage point(s) practicable (figure 1) to monitor for marine mammals and implement shutdown/delay procedures when applicable by calling for the shutdown by the pile driver operator. PSOs will be deployed on the Green Mile Fishing Pier during vibratory driving of piles when monitoring zones are exceptionally large.

Monitoring will be conducted 30 minutes before, during, and after all in water construction activities. In addition, observers shall record all incidents of marine mammal occurrence, regardless of distance from activity, and shall document any behavioral reactions in concert with distance from piles being driven or removed. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than 30 minutes.

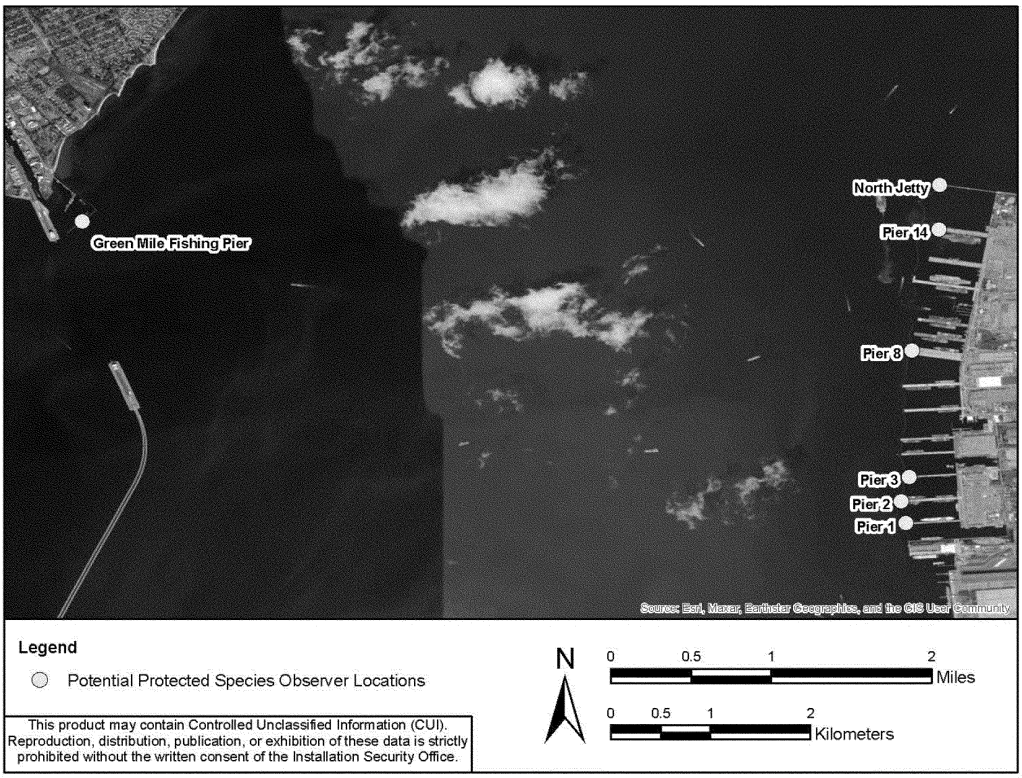

Figure 1 Protected Species Observer Locations at NAVSTA Norfolk at Norfolk, Virginia

Acoustic Monitoring

The Navy will implement *in situ* acoustic monitoring efforts to measure SPLs from in-water construction activities for pile types and methods that have not been previously collected at NAVSTA Norfolk (table 13). The Navy will collect and evaluate acoustic sound recording levels during pile driving activities. The Navy will collect data on 10 percent of the number of total piles driven for each pile type. Hydrophones will be placed at locations 33 feet (ft) from the noise source and, where the potential for Level A (PTS onset) harassment exists, at a second representative monitoring location that is a distance of 20 times the depth of water at the pile location, to the maximum extent practicable. For the pile driving events acoustically measured, 100 percent of the data will be analyzed. Please see the Navy's

Acoustic Monitoring Plan and section 13.2 in the application for additional detail.

TABLE 13—NUMBER OF PILES FOR HYDROACOUSTIC MONITORING

Pile type	Total piles	Method of install of removal	Number monitored
18-in concrete	200	Vibratory	20
18-in concrete	184	Impact	18
56-in steel sheet	547	Vibratory	55
16-in composite	178	Vibratory	18
16-in composite	105	Impact	11

Environmental data shall be collected and will include, but will not be limited to, the following: (1) wind speed and direction; (2) air temperature; (3) humidity; (4) surface water temperature; (5) water depth; (6) wave height; (7) weather conditions; and (8) other factors that could contribute to influencing underwater sound levels (*e.g.,* aircrafts, boats, *etc.*).

Reporting

The Navy is required to submit an annual report on all activities and marine mammal monitoring results to NMFS within 90 days following the end of each construction year. Additionally, a draft comprehensive 5-year summary report must be submitted to NMFS within 90 days of the end of the Project. The annual reports will include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring;
- Construction activities occurring during each daily observation period, including: (a) how many and what type of piles were driven or removed and the method (*i.e.,* impact or vibratory); and (b) the total duration of time for each pile (vibratory driving) or number of strikes for each pile (impact driving);
- PSO locations during marine mammal monitoring; and
- 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.

Upon observation of a marine mammal the following information must be reported:

- Name of PSO who sighted the animal(s) and PSO location and activity at the time of the sighting;
- Time of the sighting;
- 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;
- Distance and bearing of each observed marine mammal relative to the pile being driven or removed for each sighting;
- Estimated number of animals (min/max/best estimate);
- Estimated number of animals by cohort (*e.g.,* adults, juveniles, neonates, group composition, *etc.*);
- 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);
- Number of marine mammals detected within the harassment zones, by species; and
- Detailed information about implementation of any mitigation (*e.g.,* shutdowns and delays), a description of specified actions that ensured, and resulting changes in behavior of the animal(s), if any.

The acoustic monitoring report must contain the informational elements described in the Acoustic Monitoring Plan and, at minimum, must include:

- Hydrophone equipment and methods: (1) recording device, sampling rate, distance (m) from the pile where recordings were made; and (2) the depth of water and recording device(s);
- 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;
- 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;
- For impact pile driving: (1) number of strikes and strike rate; (2) depth of substrate to penetrate; (3) pulse duration and mean, median, and maximum sound levels (dB re: one µPa): (4) root mean square sound pressure level (SPLrms); and (5) cumulative sound exposure level (SELcum), peak sound pressure level (SPLpeak), and single-strike sound exposure level (SELs-s); and
- For vibratory driving/removal: (1) duration of driving per pile; and 2) mean, median, and maximum sound levels (dB re: one µPa): SPLrms, SELcum (and timeframe over which the sound is averaged).

If no comments are received from NMFS within 30 days, the draft reports will constitute the final reports. If comments are received, a final report addressing NMFS' comments must be submitted within 30 days after receipt of comments. All PSO datasheets and/or raw sighting data must be submitted with the draft marine mammal report.

Reporting Injured or Dead Marine Mammals

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the LOA (if issued) and the regulations (*e.g.,* an injury, serious injury, or mortality) the Navy shall report the incident to Office of Protected Resources, NMFS, and the Greater Atlantic Region New England/Mid-Atlantic Stranding Coordinator. The report must include the following information:

- Description of the incident;
- Environmental conditions (*e.g.,* Beaufort sea state, visibility);
- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

Activities will not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with the Navy to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The Navy will not

be able to resume their activities until notified by NMFS.

In the event that the Navy discovers an injured or dead marine mammal, and the lead PSO 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 as described in the next paragraph), the Navy will immediately report the incident to the Office of Protected Resources, NMFS, and the Greater Atlantic Region New England/Mid-Atlantic Stranding Coordinator. The report will include the same information identified in the paragraph above. Activities will be able to continue while NMFS reviews the circumstances of the incident. NMFS will work with the Navy to determine whether modifications in the activities are appropriate.

In the event that the Navy discovers an injured or dead marine mammal and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the LOA (*e.g.,* previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), the Navy will report the incident to the Office of Protected Resources, NMFS, and the NMFS Greater Atlantic Region New England/Mid-Atlantic Stranding Coordinator, within 24 hours of the discovery. The Navy will provide photographs, video footage (if available), or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network.

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.,* population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be ''taken'' through harassment, NMFS considers other factors, such as the likely nature of any impacts or responses (*e.g.,* intensity, duration), the context of any impacts or responses (*e.g.,* critical reproductive time or location, foraging impacts affecting energetics), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS' implementing regulations (54 FR 40338, September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the baseline (*e.g.,* as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

To avoid repetition, this introductory discussion of our analysis applies to all the species listed in table 3, given that many of the anticipated effects of this Project on different marine mammal stocks are expected to be relatively similar in nature. Where there are meaningful differences between species or stocks, or groups of species, in anticipated individual responses to activities, impact of expected take on the population due to differences in population status, or impacts on habitat, they are described independently in the analysis below.

Construction activities associated with the Project, as outlined previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level B harassment from underwater sounds generated by pile driving and removal. Potential takes could occur if marine mammals are present in zones ensonified above the thresholds for Level B harassment, identified above, while activities are underway.

Level A harassment is unlikely considering the small Level A harassment zones (tables 9 and 10) and corresponding shutdown zones (tables 12 and 13) where activities will cease if animals were present in those zones. Also, pile driving and removal activities are of relatively short duration and an animal will have to remain within the area estimated to be ensonified above the Level A harassment threshold for multiple hours to incur PTS. This is highly unlikely given marine mammal movement throughout the area, especially for small, fast-moving species such as small cetaceans and pinnipeds. Therefore, NMFS is not proposing to authorize take by Level A harassment during any portion of the Navy's activities.

The nature of activities included in the Navy's pile driving Project precludes the likelihood of serious injury or mortality. For all species and stocks, take will occur within a limited, confined area (*i.e.,* immediately surrounding NAVSTA Norfolk in the Chesapeake Bay area) of the stock's range. Level B harassment will be reduced to the level of least practicable adverse impact through use of mitigation measures described herein. Furthermore, the number of individuals expected to be taken is extremely small relative to the stock abundance for all species.

Effects on individuals that are taken by Level B harassment, on the basis of reports in the literature as well as monitoring from other similar activities, will likely be limited to reactions such as increased swimming speeds, increased surfacing time, decreased foraging (if such activity were occurring), or avoidance (*e.g.,* Thorson and Reyff 2006; Hampton Roads Connector Partners 2023; W.F. Magann Corporation 2023). Individual animals, even if taken multiple times, will most likely move away from the sound source and be temporarily displaced from the areas of pile driving, although even this reaction has been observed primarily only in association with impact pile driving. The pile driving activities analyzed here are similar to, or less impactful than, numerous other construction activities conducted along both Atlantic and Pacific coasts, which have taken place with no known long-term adverse consequences from behavioral harassment. Furthermore, many Projects similar to this one are also believed to result in multiple takes of individual animals without any documented long-term adverse effects. Level B harassment will be minimized through use of mitigation measures described herein and, if take does occur the impacts would be expected to be minimal, particularly as the Project is located on a busy waterfront with high amounts of vessel traffic and other ambient noise.

An unusual mortality event (UME) has been declared for humpback whales in the U.S. Atlantic. However, we do not expect authorized takes to exacerbate or compound upon these ongoing UMEs. As noted previously, no injury, serious injury, or mortality is expected or authorized, and the impact of Level B harassment takes of humpback whale will be minimized through the incorporation of the mitigation measures. The UME does not yet provide cause for concern regarding population-level impacts. Despite the UME, the relevant population of humpback whales (the West Indies breeding population, or distinct population segment) remains healthy.

The Project is also not expected to have significant adverse effects on affected marine mammals' habitats. The

Project activities will not modify existing marine mammal habitat for a significant amount of time. The activities may cause some fish to leave the area of disturbance, thus temporarily impacting marine mammals' foraging opportunities in a limited portion of the foraging range; however, because of the short duration of the activities and the relatively small area of the habitat that may be affected (with no known particular importance to marine mammals), the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

In summary and as described above, the following factors primarily support our determination that the impacts resulting from this activity are not expected to adversely affect any of the species or stocks through effects on annual rates of recruitment or survival:

- No serious injury or mortality is anticipated or authorized;
- The intensity of anticipated takes by Level B harassment is relatively low for all stocks;
- The specified activity and associated ensonified areas are very small relative to the overall habitat ranges of all species and do not include habitat areas of special significance, including any pinniped haulouts;
- The lack of anticipated significant or long-term negative effects to marine habitat;
- The presumed efficacy of the mitigation measures in reducing the effects of the taking incidental to the specified activity; and
- Monitoring reports from similar work in the Chesapeake Bay have documented little to no effect on individuals of the same species impacted by similar activities.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat and taking into consideration the implementation of the monitoring and mitigation measures, NMFS finds that the total marine mammal take from the activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

As noted previously, only take of small numbers of marine mammals may be authorized under sections 101(a)(5)(A) and (D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the maximum number of individuals taken in any year to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the predicted maximum annual number of individuals to be taken is fewer than one-third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

The maximum annual take NMFS authorizes for the four marine mammal stocks is below one-third of the estimated stock abundance for all species except for the western north Atlantic (WNA) southern coastal migratory stock and the WNA northern coastal migratory stock of bottlenose dolphins (see table 10).

There are three bottlenose dolphin stocks that could occur in the Project area. Therefore, the largest estimated annual take by Level B harassment of 6,712 bottlenose dolphin will likely be split among the northern migratory coastal stock, the southern migratory coastal stock, and the northern North Carolina estuarine stock (NNCES). Based on the stocks' respective occurrence in the area, NMFS estimates that there will be no more than 200 takes from the NNCES stock during each phase of construction, representing 24 percent of that population, with the remaining takes split evenly between the northern and southern coastal migratory stocks. Based on the consideration of various factors as described below, we have determined that the number of individuals taken will comprise less than one-third of the best available population abundance estimate of either coastal migratory stock. Detailed descriptions of the stocks' ranges have been provided in the Description of Marine Mammals in the Area of Specified Activities section.

Both the WNA northern migratory stock and the WNA southern migratory stock have expansive ranges and they are the only dolphin stocks thought to make broad scale, seasonal migrations in coastal waters of the WNA. Given the large ranges associated with these two stocks, it is unlikely that large segments of either stock will approach the Project area and enter into the Chesapeake Bay. The majority of both stocks are likely to be found widely dispersed across their respective habitat ranges and unlikely to be concentrated in or near the Chesapeake Bay.

Furthermore, the Chesapeake Bay and nearby offshore waters represent the boundaries of the ranges of each of the two coastal stocks during migration. The WNA northern migratory stock is found during warm water months from coastal Virginia, including the Chesapeake Bay and Long Island, New York. The stock migrates south in the late summer and fall. During cold-water months, dolphins may be found in coastal waters from Cape Lookout, North Carolina, to the North Carolina/Virginia border. During January-March, the WNA southern migratory stock appears to move as far south as northern Florida. From April-June, the stock moves back north to North Carolina. During the warm water months of July-August, the stock is presumed to occupy the coastal waters north of Cape Lookout, North Carolina, to Assateague, Virginia, including the Chesapeake Bay. There is likely some overlap between the stocks during spring and fall migrations, but the extent of overlap is unknown.

In summary and as described above, the following factors primarily support our determination regarding the incidental take of small numbers of the affected stocks of a species or stock:

- The maximum annual take of marine mammal stocks for authorization comprises less than three percent of any stock abundance (with the exception of the three bottlenose dolphin stocks);
- Potential bottlenose dolphin takes in the Project area are likely to be allocated among three distinct stocks;
- Bottlenose dolphin stocks in the Project area have extensive ranges and it will be unlikely to find a high percentage of the individuals of any one stock concentrated in a relatively small area such as the Project area or the Chesapeake Bay;
- The Chesapeake Bay represents the migratory boundary for each of the specified dolphin stocks and it will be unlikely to find a high percentage of any stock concentrated at such boundaries; and
- Many of the takes will likely be repeats of the same animals, including from a resident population of the Chesapeake Bay.

Based on the analysis contained herein of the activity (including the mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS finds that small numbers of marine mammals will be taken relative to the population size of the affected species or stocks.

Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks will not have an unmitigable

adverse impact on the availability of such species or stocks for taking for subsistence purposes.

National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216–6A, NMFS must review our action (*i.e.,* the promulgation of regulations and subsequent issuance of incidental take authorization) with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA 216–6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that will preclude this categorical exclusion. Accordingly, NMFS has determined that the action qualifies to be categorically excluded from further review under NEPA.

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally whenever NMFS authorizes take for endangered or threatened species.

No incidental take of ESA-listed species is authorized or expected to result from this activity. Therefore, NMFS has determined that formal consultation under section 7 of the ESA is not required for this action.

Classification

Pursuant to the procedures established to implement Executive Order 12866, the Office of Management and Budget has determined that this rule is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration at the proposed rule stage that this action will not have a significant economic impact on a substantial number of small entities. The Navy is the sole entity that will be subject to the requirements in these regulations, and the Navy is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. No comments were received regarding this certification or on the economic impacts of the rule more generally. As a result, a regulatory flexibility analysis is not required and none has been prepared.

This rule does not contain a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act because the applicant is a Federal agency.

List of Subjects in 50 CFR 217

Acoustics, Administrative practice and procedure, Construction, Endangered and threatened species, Marine mammals, Mitigation and Monitoring requirements, Reporting requirements, Wildlife.

Dated: October 4, 2024.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For reasons set forth in the preamble, NMFS amends 50 CFR part 217 as follows:

PART 217—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.,* unless otherwise noted.

■ 2. Add subpart X to read as follows

Subpart X—Taking and Importing Marine Mammals Incidental to Navy Construction of the Q8 Bulkhead Repair and Replacement Project at Naval Station Norfolk at Norfolk, Virginia

Sec.

217.230 Specified activity and geographical region.
217.231 Effective dates.
217.232 Permissible methods of taking.
217.233 Prohibitions.
217.234 Mitigation requirements.
217.235 Requirements for monitoring and reporting.
217.236 Letters of Authorization.
217.237 Renewals and modifications of Letters of Authorization.

Subpart X—Taking and Importing Marine Mammals Incidental to Navy Construction of the Q8 Bulkhead Repair and Replacement Project at Naval Station Norfolk at Norfolk, Virginia

§ 217.230 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction activities related to the repair and replacement of the Q8 bulkhead at Naval Station Norfolk at Norfolk, Virginia.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at Naval Station Norfolk, Norfolk, Virginia.

§ 217.231 Effective dates.

Regulations under this subpart are effective from January 1, 2025, through December 31, 2029.

§ 217.232 Permissible methods of taking.

Under an LOA issued pursuant to §§ 216.106 of this chapter and 217.236, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.230(b) by harassment associated with construction activities related to the repair and replacement of the Q8 bulkhead, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 217.233 Prohibitions.

(a) Except for the takings contemplated in § 217.232 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.236, it is unlawful for any person to do any of the following in connection with the activities described in § 217.230:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.236;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA after NMFS determined such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 217.234 Mitigation requirements.

(a) When conducting the activities identified in § 217.230(a), the mitigation measures contained in this subpart and

any LOA issued under §§ 216.106 of this chapter and 217.236 must be implemented by the Navy. These mitigation measures include:

(1) A copy of any issued LOA must be in the possession of the Navy, supervisory construction personnel, lead protected species observers (PSO), and any other relevant designees of the Navy operating under the authority of the LOA at all times that activities subject to the LOA are being conducted;

(2) The Navy must ensure that construction supervisors and crews, the monitoring team, and relevant Navy staff are trained prior to the start of activities subject to any issued 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;

(3) The Navy, construction supervisors and crews, and relevant Navy staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 meters (m) 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;

(4) The Navy must employ PSOs and establish monitoring locations as described in the NMFS-approved Marine Mammal Monitoring Plan. The Navy must monitor the Project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions;

(5) For all pile driving activities, the Navy shall implement shutdown zones with radial distances as identified in a LOA issued under § 217.236. If a marine mammal is observed entering or within the shutdown zone, such operations must be delayed or halted.

(6) Monitoring must take place from 30 minutes prior to initiation of a pile driving activity (*i.e.,* pre-start clearance monitoring) through 30 minutes post-completion of a pile driving activity.

(7) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones 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.

(8) If a marine mammal is observed entering or within the shutdown zones, pile driving activity must be delayed or halted.

(9) 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 or 15 minutes have passed without re-detection of the animal.

(10) Pile driving activity must be halted 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.

(11) The Navy must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of 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.

(b) [Reserved]

§ 217.235 Requirements for monitoring and reporting.

(a) The Navy shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction. Marine mammal monitoring must be conducted in accordance with the conditions in this section and the NMFS-approved Marine Mammal Monitoring Plan.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

(1) PSOs must be independent of the activity contractor (*e.g.,* employed by a subcontractor) and have no other assigned tasks during monitoring periods;

(2) At least one PSO must have prior experience performing the duties of an observer during construction activity pursuant to a NMFS-issued incidental take authorization;

(3) Other observers may substitute other relevant experience, education (*i.e.,* degree in biological science or related field), or training for prior experience performing the duties of an observer during construction activity pursuant to a NMFS-issued incidental take authorization;

(4) One observer must be designated as lead observer or monitoring coordinator. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization;

(5) Observers must be approved by NMFS prior to beginning any activity subject to any issued LOA;

(6) For all pile driving activities, a minimum of two observers shall be stationed at the best vantage points practicable. One of these observers must be positioned to monitor for marine mammals and implement shutdown/delay procedures;

(7) The Navy shall monitor the harassment zones to the maximum extent practicable and the entire shutdown zones. The Navy shall monitor at least a portion of the Level B harassment zone on all pile driving days;

(8) The Navy shall conduct hydroacoustic data collection in accordance with an Acoustic Monitoring Plan that must be approved by NMFS in advance of construction;

(9) The shutdown/monitoring zones may be modified with NMFS' approval following NMFS' acceptance of an acoustic monitoring report;

(10) The Navy must submit a draft monitoring report to NMFS within 90 calendar days of the completion of each construction year. A draft comprehensive five-year summary report must also be submitted to NMFS within 90 days of the end of the Project. The reports must detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports and the final comprehensive report 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. The reports must at minimum contain the informational elements described below (as well as any additional information described in the Marine Mammal Monitoring Plan), including:

(i) Dates and times (begin and end) of all marine mammal monitoring;

(ii) Construction activities occurring during each daily observation period, including the number and type of piles that were driven or removed and by what method (*i.e.,* impact or vibratory), total duration of driving time for each pile (vibratory) and number of strikes for each pile (impact);

(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; and

(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 implementation of any mitigation (*e.g.,* shutdown and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

(11) The Holder must submit all PSO data electronically in a format that can be queried such as a spreadsheet or database (*i.e.,* digital images of data sheets are not sufficient);

(12) The Navy must report hydroacoustic data collected as required by a LOA issued under §§ 216.106 of this chapter and 217.236 and as discussed in the Navy's Acoustic Monitoring Plan approved by NMFS;

(13) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy shall report the incident to the Office of Protected Resources (OPR), NMFS, and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy must immediately cease the specified activities until NMFS 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 the authorization. The Navy 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.

§ 217.236 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 217.236.

(e) The LOA must set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.,* mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA must be published in the **Federal Register** within 30 days of a determination.

§ 217.237 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.236 for the activity identified in § 217.230(a) may be renewed or modified upon request by the applicant, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under §§ 216.106 of this chapter and 217.236 for the activity identified in § 217.230(a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS must publish a notice of proposed LOA in the **Federal Register** and solicit public comment;

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in

a LOA issued pursuant to § 216.106 of this chapter and § 217.236, a LOA may be modified without prior notice or opportunity for public comment. Notification will be published in the **Federal Register** within 30 days of the action.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 240919–0246]

RTID 0648–XR137

Endangered and Threatened Wildlife and Plants; Technical Correction for the Coral Fimbriaphyllia paradivisa

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Direct final rule.

SUMMARY: We, NMFS, announce the revised taxonomy of the coral *Euphyllia paradivisa* (no common name) under the Endangered Species Act of 1973, as amended (ESA). We are revising the Enumeration of threatened marine and anadromous species for *Euphyllia paradivisa* to reflect the scientifically accepted taxonomy and nomenclature of this species. We revise the scientific name of the species to *Fimbriaphyllia paradivisa.* The changes to the taxonomic classification and nomenclature do not affect the species' listing status under the ESA or any protections and requirements arising from its listing.

DATES: The rule is effective December 9, 2024 without further action, unless significnt adverse comment is received by November 8, 2024. If significant adverse comments are received, the NMFS will publish a timely withdrawal of the rule in the **Federal Register**.

ADDRESSES: You may submit comments on this document, identified by NOAA–NMFS–2024–0078, by the following method:

- *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to *https://www.regulations.gov* and enter NOAA–NMFS–2024–0078 in the Search box. Click on the ''Comment'' icon, complete the required fields, and enter or attach your comments.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *https://www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address, *etc.*), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter ''N/A'' in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Lance Smith, NMFS, Pacific Islands Regional Office, 808–725–5131, *Lance.Smith@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Purpose of This Rule

The purpose of our direct final rule is to notify the public that we are revising the Enumeration of threatened marine and anadromous species (50 CFR 223.102(e)) to reflect the scientifically accepted taxonomy and nomenclature of one coral species, *Euphyllia paradivisa,* listed under section 4 of the ESA in 2014 (16 U.S.C. 1531 *et seq.*). The change reflects the most recently accepted scientific name in accordance with 50 CFR 223.102(b).

We are publishing this rule as a direct final rule because this is a noncontroversial action that reflects decisions already taken in the scientific community, such that prior notice and an opportunity to comment is unnecessary. This rule does not change the listing status of the species under the ESA and does not alter any protections afforded the species or any other legal requirements arising from the species' listing under the ESA. This change should be undertaken in as timely a manner as possible. This rule will be effective, as published in this document on the effective date specified in **DATES**, unless we receive significant adverse comments on or before the comment due date specified in **DATES**. Significant adverse comments are comments that provide strong scientific justification as to why the taxonomic and nomenclature changes to the Enumeration of the listed entity should not be adopted or why the rule should be changed. Please include sufficient scientific information with your comments that will allow us to verify the basis for any significant adverse comments.

If we receive significant adverse comments, we will publish a notification in the **Federal Register** withdrawing this rule before the effective date, and we will engage in notice and comment rulemaking under the applicable requirements of the Administrative Procedure Act to promulgate these changes to 50 CFR 223.102(e).

Background

Under 50 CFR 223.102(b), we use the most recently accepted scientific name of any species that we have determined to be threatened under the ESA, relying to the extent practicable on the International Code of Zoological Nomenclature (ICZN). The ESA likewise requires that listing decisions be based solely on the best scientific and commercial data available (see 16 U.S.C. 1533(b)(1)(A)). Using the best available scientific information, our direct final rule documents a taxonomic change (scientific name) to *Euphyllia paradivisa.* This change is supported by studies published in peer-reviewed journals, acceptance by the World Register of Marine Species, our 5-year Review of the species (NMFS 2024), and broad acceptance by scientists around the world. We revise the scientific name of *Euphyllia paradivisa* listed under section 4 of the ESA (16 U.S.C. 1531 *et seq.*) as follows: *Fimbriaphyllia paradivisa.* We make this change to the Enumeration of threatened marine and anadromous species (50 CFR 223.102(e)) to reflect the most recently accepted scientific name in accordance with 50 CFR 223.102(b).

Taxonomy Classification

Fimbriaphyllia paradivisa

Based on colony growth form, Veron & Pichon (1980) established two subgenera within the genus *Euphyllia,* namely *Euphyllia* and *Fimbriaphyllia.* Veron (1990) described the species *Euphyllia paradivisa,* placing it in *Euphyllia* instead of *Fimbriaphyllia* based on skeletal and tentacle morphological characteristics. More recently, molecular data showed that the species traditionally ascribed to the genus *Euphyllia* could be separated into two major lineages that were distinct enough to fall within two separate genera (Luzon *et al.* 2017, Arrigoni *et al.* 2023). Luzon *et al.* (2017) demonstrated that these two major lineages, can be distinguished based on the polyp morphology and reproductive traits. As such, Luzon *et al.* (2017) elevated *Fimbriaphyllia* from a subgenera within the genus *Euphyllia* to a separate genus to be composed of five species, namely *F. ancora, F. divisa, F. paraancora, F. paradivisa,* and *F. yaeyamensis;* this taxonomic change was supported by the results of Arrigoni *et al.* (2023). There has been broad acceptance among scientists around the world of the taxonomic change suggested by these