



MARINE MAMMAL COMMISSION

6 May 2019

Ms. Jolie Harrison, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's application seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take marine mammals by harassment. The taking would be incidental to construction activities in association with modification of a dry dock and berths in Kittery, Maine. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 4 April 2019 notice (84 Fed. Reg. 13252) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

Background

The Navy plans to install and remove piles during modification of a dry dock and various berths at the Portsmouth Naval Shipyard (the Shipyard). This would be the third authorization for similar activities. The Navy could install up to 1,126 14- to 96-in steel piles using a vibratory and/or an impact hammer or by drilling rock sockets. The Navy could remove up to 32 14-in steel piles using a vibratory hammer. The proposed activities could occur for up to 212 days throughout the year. Activities would be limited to daylight hours only.

NMFS indicated that it had preliminarily determined that, at most, the proposed activities could cause Level A and/or B harassment of small numbers of four marine mammal species. It also anticipates that any impact on the affected species and stocks would be negligible. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for temporary or permanent hearing impairment would be at the least practicable level because of the proposed mitigation measures. The proposed mitigation, monitoring, and reporting measures include—

- conducting empirical sound source and sound propagation measurements during installation activities¹ and adjusting the Level A and B harassment zones, if necessary;
- using soft-start, delay, and shut-down procedures;
- using delay and shut-down procedures if a species for which authorization has not been granted or for which the authorized numbers of takes have been met approaches or is observed within the Level A or B harassment zone;
- using qualified protected species observers (PSOs; land- and/or pier-based) to monitor the Level A and B harassment zones for 15 minutes before, during, and for 30 minutes after pile driving and removal activities;
- ceasing other heavy machinery work if any marine mammal comes within 10 m of the vessel or equipment;
- reporting injured and dead marine mammals to NMFS and the Northeast/Greater Atlantic Regional Stranding Coordinator using NMFS's phased reporting approach and suspending activities, if appropriate; and
- submitting a draft and final acoustic and marine mammal monitoring report to NMFS.

General concerns and comments

The Commission had numerous questions and comments regarding the proposed incidental harassment authorization, application, and previous marine mammal and hydroacoustic monitoring reports. Those comments primarily involved insufficient or incomplete information in all those documents, including—

- omitting the fact that up to three hammers could be used simultaneously during the proposed activities²;
- omitting the required information in the two previous marine mammal monitoring reports³ and not sufficiently justifying the number of harbor seal takes⁴;

¹ The Commission informally noted that the Navy specified both an excessively high (e.g., 65 AZ sheet piles and 32 flat web sheet piles) and insufficiently low (e.g., 1 16-in pile and 1 96-in pile) number of piles that it planned to monitor this year. The Commission suggested that the Navy reduce the sheet piles it plans to monitor 10 pairs each during both vibratory and impact installation and increase the 16-in and 96-in piles to 4 each during impact, vibratory, and/or drilling installation. The Navy agreed to these suggestions. NMFS indicated the revisions would be included in the final authorization. Measurements also would be taken during 10 percent of concurrent installation activities.

² NMFS will have to justify in the preamble of the final authorization whether the Level A and B harassment zones would increase based on the concurrent use of three hammers and if not, why the zones would remain unchanged.

³ The incidental harassment authorizations issued to the Navy in 2017 and 2018 required that it provide information on the date and time that the monitored activity begins or ends, the species and number observed, a description of observed marine mammal behavior patterns (including bearing and direction of travel and distance from pile driving), distance from pile driving activities to marine mammals, distance from marine mammals to the observation point, locations of all marine mammal observations, Level A and Level B harassment takes of authorized species including extrapolated total take numbers based on observation of the Level B harassment zone on two-thirds of driving days, etc. In addition, the 2018 authorization required that the marine mammal monitoring report include associated marine mammal observation data sheets. None of this information was provided in either monitoring report that were sent to the Commission. The Navy did provide the 2018 data sheets after the Commission drafted this letter.

⁴ During the 2018 activities, the Navy requested a mid-authorization increase in both the number of days of authorized activities and the number of authorized harbor seal takes due to drilling activities taking much longer to complete than expected and harbor seals occurring in greater numbers than expected.

- failing to conduct empirical measurements of drilling activities⁵ and conducting measurements at inconsistent distances from the pile⁶; and
- omitting the number and location of PSOs that would be monitoring during the various activities⁷.

The Commission agrees that NMFS should include all the aforementioned modifications in the final incidental harassment authorization. Based on these issues, the Commission recommends that NMFS (1) ensure the Navy is aware of the requirements of the final incidental harassment authorization, particularly the reporting requirements for the marine mammal and hydroacoustic monitoring reports, and (2) require that the Navy provide the information that is missing but was required in both the 2017 and 2018 monitoring reports.

In addition, the Commission is not convinced that the number of harbor seal takes is sufficient. During the 2018 activities, more harbor seals were observed than expected such that NMFS had to increase the number of authorized takes mid-season. Moreover, the marine mammal monitoring reports provide no information on how many harbor seals were observed per day, at what distance from the pile(s) the seals were observed, whether individual harbor seals could be tracked such that double counting did not occur, whether the full extent of the Level B harassment zone was monitored during all activities, whether Level B harassment takes were extrapolated when the extent of the zone was not able to be monitored⁸, and whether PSOs or the construction operators were responsible for enumerating takes. The 2018 monitoring report only noted that, during a two-month timeframe, seals were sighted more frequently and in groups of up to five harbor seals at once. It is unclear if multiple groups were observed on a given day. In any case, the Commission maintains that a sufficient number of harbor seal takes should be authorized so that the Navy does not have to request an increase in the number of authorized takes during the project period again this year. As such, the Commission recommends that NMFS authorize at least five harbor seal takes per day partitioned in the same proportions for Level A and B harassment⁹ as included in Table 8 of the *Federal Register* notice.

Some of the Commission's comments on the proposed authorization are similar to those from the previous two authorizations. It is unclear why these issues are still present in these authorizations, but it is hoped that they will not recur in future authorizations or rulemakings for activities at the Navy's Shipyard.

⁵ The Navy was required to conduct measurements of drilling activities on at least one day. The 2018 monitoring report indicated that drilling occurred on 185 days during the installation of 35 piles. Measurements during those activities were not included in any of the hydroacoustic monitoring reports provided by the Navy.

⁶ The data in the hydroacoustic monitoring reports indicated that the hydrophone was placed from 25 to 132 ft from the pile. The hydrophone should be at 10 m with a far-field hydrophone placed sufficiently in the far field to determine propagation loss and range to effect. In addition, all measurements should be reported in metric not English units.

⁷ The Navy has clarified that two to four PSOs would be monitoring based on the various extents of the Level B harassment zone and at multiple potential locations to ensure the entire Level B harassment zone is observed.

⁸ This would include the requirement to monitor only during two-thirds of the activities and when monitoring the Level B harassment zone was curtailed due to inclement weather, as stated in the monitoring report.

⁹ Level A and B harassment accounted for 42 and 58 percent of the takes, respectively.

Mitigation and monitoring measure implementation

The proposed authorization would require PSOs to implement mitigation measures, validate take estimates, and document marine mammal responses during a portion of the proposed activities. Specifically, the *Federal Register* notice indicated that PSOs would monitor the Level A¹⁰ harassment zones during 100 percent and Level B harassment zones during 67 percent of the proposed activities¹¹. The Commission again believes that the proposed level of monitoring is insufficient.

Monitoring and reporting requirements adopted under section 101(a)(5) of the MMPA need to be sufficient to provide a reasonably accurate assessment of the manner of taking and the numbers of animals taken incidental to the specified activity, which includes Level B harassment as well. Since some of the species only rarely occur in the project area, their presence could be missed and any behavioral responses of those species would not be documented if monitoring of the Level B harassment zones was not occurring on that day. Further, accurate enumeration of takes is especially critical when only a small number of Level B harassment takes are authorized for certain species and when a species is known to occur in the area in larger numbers to ensure that the authorized numbers of takes are not exceeded. This is further exacerbated by the scant details provided in the monitoring reports as noted herein.

NMFS has indicated for similar construction authorizations (78 Fed. Reg. 2371, 79 Fed. Reg. 2422) that the extent of proposed work made it infeasible and costly for action proponents to implement marine mammal monitoring for Level B harassment zones at all times. However, the Commission notes that the maximum extent of the Level B harassment zone for vibratory pile driving and removal is about 1.4 km due to the presence of land¹²—a distance that the Commission notes is far smaller than other similar pile-driving authorizations. The Commission also notes that the Navy apparently conducted monitoring during 100 percent of the activities during the two previous authorizations, although the extent of the monitoring and the personnel that actually conducted the monitoring have not been specified¹³.

Monitoring during all pile-driving and -removal activities is necessary for NMFS and the Navy to be confident that mitigation measures are implemented as intended, the numbers of marine mammals taken are within the limits authorized, and the least practicable impact occurs. The Commission therefore again recommends that NMFS require the Navy to implement full-time monitoring of the various Level A and B harassment zones during all proposed activities.

Proposed one-year authorization renewals

NMFS has indicated that it may issue a second one-year¹⁴ incidental harassment

¹⁰ Including the shut-down zones.

¹¹ This information is not in the proposed authorization, but must be included. In addition, Level B harassment takes should be extrapolated to the full extent of the zone and/or to the days unobserved.

¹² With a sliver of area extending to approximately 2.4 km.

¹³ The Navy informally indicated that the construction contractor conducted monitoring during 100 percent of the activities in 2018. It is unclear if the 'construction contractor' was in fact the PSOs or the operators.

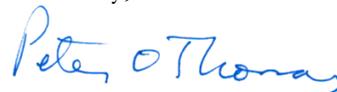
¹⁴ NMFS informed the Commission that the renewal would be issued as a one-time opportunity, after which time a new authorization application would be required. NMFS has yet to specify this in any *Federal Register* notice detailing the new proposed renewal process but should do so.

authorization renewal for this and other future authorizations if various criteria are met and after an expedited public comment period of 15 days (see 84 Fed. Reg. 13268 and the proposed authorization for details). The Commission agrees that NMFS should take appropriate steps to streamline the authorization process under section 101(a)(5)(D) of the MMPA to the extent possible. However, the Commission is concerned that the renewal process proposed in the *Federal Register* notice is inconsistent with the statutory requirements—section 101(a)(5)(D)(iii) clearly states that proposed authorizations are subject to a 30-day comment period¹⁵.

Another potentially significant issue with the proposed 15-day comment period is the burden that it places on reviewers, who will need to review the original authorization and supporting documentation¹⁶, the draft monitoring report(s), the renewal application or request¹⁷, and the proposed authorization and then formulate comments very quickly. Depending on how frequently NMFS invokes the renewal option, how much the proposed renewal or the information on which it is based deviates from the original authorization, and how complicated the activities and the taking authorization is, those who try to comment on all proposed authorizations and renewals, such as the Commission, would be hard pressed to do so within the proposed 15-day comment period. Therefore, the Commission recommends that NMFS refrain from using the proposed renewal process for the Navy's authorization. The renewal process should be used sparingly and selectively, by limiting its use only to those proposed incidental harassment authorizations that are expected to have the lowest levels of impacts to marine mammals and that require the least complex analyses. Notices for other types of activities, such as the Navy's construction activities, should not even include the possibility that a renewal might be issued using the proposed foreshortened 15-day comment period. If NMFS intends to use the renewal process frequently *or* for authorizations that require a more complex review (such as the Navy's authorization) or for which much new information has been generated (e.g., multiple or extensive monitoring reports), the Commission recommends that NMFS provide the Commission and other reviewers the full 30-day comment opportunity set forth in section 101(a)(5)(D)(iii) of the MMPA.

The Commission hopes its comments are useful. Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,



Peter O. Thomas, Ph.D.,
Executive Director

¹⁵ See also the legislative history of section 101(a)(5)(D), which states "...in some instances, a request will be made for an authorization identical to one issued the previous year. In such circumstances, the Committee expects the Secretary to act expeditiously in complying with the notice and comment requirements." (H.R. Rep. No. 439, 103d Cong., 2d Sess. 29 (1994)). The referenced "notice and comment requirements" specify a 30-day comment period.

¹⁶ Including the original application, hydroacoustic and marine mammal monitoring plans, take estimation spreadsheets, etc.

¹⁷ Including any proposed changes or any new information.