



MARINE MAMMAL COMMISSION

16 February 2021

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 request submitted by Chesapeake Tunnel Joint Venture (CTJV) seeking renewal of an authorization issued under section 101(a)(5)(D) of the Marine Mammal Protection Act (the MMPA) to take small numbers of marine mammals by harassment. The taking would be incidental to conducting construction activities for the Parallel Thimble Shoal Tunnel Bridge Project in Virginia. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 8 February 2021 notice (86 Fed. Reg. 8594) on its proposal to issue an authorization renewal, subject to certain conditions. The Commission last commented on CTJV's proposed activities in its [26 December 2019 letter](#). The Commission has additional comments on the appropriateness of the Level B harassment zones for down-the-hole (DTH) pile installation, as well as whether NMFS's criteria for issuing a renewal can be and have been met.

DTH pile installation and renewal criteria

When NMFS issued CTJV's incidental harassment authorization in spring 2020, it did not consider DTH pile installation to be an impulsive, *continuous* source. NMFS considered DTH pile installation to be an impulsive, *intermittent* source to which the 160-dB re 1 μ Pa threshold applied for Level B harassment (85 Fed. Reg. 16072). Thus, NMFS vastly underestimated the Level B harassment zone to be only 215 m (see Table 11; 85 Fed. Reg. 16072).

DTH hammers involve both percussive hammering and drilling actions. As such, NMFS has considered DTH pile installation to be an impulsive, continuous source since the summer of 2020 (e.g., 85 Fed. Reg. 48159), including for other projects that occur in the Chesapeake Bay (85 Fed. Reg. 48159, 86 Fed. Reg. 1610). If NMFS had used the 120-dB re 1 μ Pa threshold for continuous sources for CTJV's activities¹, the Level B harassment zone would be estimated to be approximately 11.7 km for activities involving a single DTH hammer (see Table 19, 86 Fed. Reg. 1618) and 18.5 km for two DTH hammers used simultaneously² (86 Fed. Reg. 1611–1612) rather than 215 m. If

¹ And the 166-dB re 1 μ Pa at 10 m source level from Denes et al. (2016) consistent with other incidental harassment authorizations (e.g., 86 Fed. Reg. 1610).

² Based on a combined source level of 169 dB re 1 μ Pa at 10 m.

CTJV used or plans to use two vibratory hammers simultaneously to install the 36- or 42-in piles³ or a vibratory hammer and DTH hammer simultaneously to install the piles⁴, the Level B harassment zones would be even larger.

It is unclear why NMFS is proposing to continue to mischaracterize DTH pile installation for CTJV's authorization renewal given that it began characterizing the source appropriately last summer, including for two incidental take authorizations issued or proposed to be issued to Hampton Roads Connector Partners (HRCP) in the same area as CTJV's activities within Chesapeake Bay (HRCP; 86 Fed. Reg. 1610 and 85 Fed. Reg. 48159). Inconsistencies aside, mischaracterization of DTH pile installation also has practical implications regarding the accuracy of the monitoring measures and any draft or final marine mammal monitoring report. For example, CTJV's preliminary monitoring report for 2020 activities indicated that six bottlenose dolphins were observed during DTH pile installation on 8 August at a distance of 800 m from the DTH hammer (CTJV 2020). Since the Level B harassment zone was estimated to be a mere 215 m for DTH pile installation, the dolphins were not reported as Level B harassment takes. Implementing a Level B harassment zone that is underestimated by more than 50-fold fails to ensure that the monitoring measures will result in the authorized level of taking or impacts on populations of marine mammals as required under NMFS's implementing regulations associated with section 101(a)(5)(D) of the MMPA (50 C.F.R. §216.104 (a)(13); 85 Fed. Reg. 16073).

In addition, it is unclear how many of the 100 bottlenose dolphins that CTJV observed were in fact taken by Level B harassment, as CTJV reported that none of the dolphins were taken during any of the activities conducted. The inaccurate Level B harassment zones for DTH pile installation are one issue. Some of information NMFS required CTJV to provide in its monitoring report (item 6(a) in CTJV's 2020 final authorization⁵) also does not appear to be included in CTJV's preliminary monitoring report or in the protected species sighting log forms. The information provided in those forms is scant and haphazard, making it unclear whether bottlenose dolphins should have been reported as being taken in the preliminary monitoring report.

For an authorization renewal to be issued, NMFS requires that—

- A request for renewal is received no later than 60 days prior to expiration of the current authorization.
- The request for renewal include the following:
 - An explanation that the activities to be conducted under the proposed authorization renewal are identical to the activities analyzed under the initial authorization, are a subset of the activities, or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of taking).
 - A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.

³ More than 34 km based on a combined source level of 173 dB re 1 µPa at 10 m.

⁴ More than 25 km based on a combined source level of 171 dB re 1 µPa at 10 m.

⁵ https://media.fisheries.noaa.gov/dam-migration/ctjvthimbleshoals_2020iha_issued_opr1.pdf.

Upon review of the renewal request, the status of the affected species or stocks, *and* any other pertinent information, if NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same *and appropriate*, and the findings in the initial authorization remain valid, it can issue an authorization renewal. NMFS's renewal criteria and overarching process place the burden on the agency, not the action proponent, for determining whether a renewal is appropriate. In this case, it is clear that the monitoring measures are not appropriate or consistent with other recently proposed and issued incidental take authorizations involving DTH pile installation. As such, it is unclear why NMFS proposed to issue an authorization renewal for CTJV's activities. The Commission recommends that NMFS deny CTJV's request to renew its incidental harassment authorization based on the inappropriate and vastly underestimated Level B harassment zones for multiple DTH pile installation scenarios and possibly the vibratory pile driving scenarios as well. The Commission recommends that NMFS ensure that CTJV is aware of the reporting requirements set forth in section 6(a) of CTJV's 2020 incidental harassment authorization for the draft and final monitoring reports.

Authorization renewals in general

The aforementioned issues regarding how NMFS has implemented its renewal process for CTJV's authorization adds to the Commission's ongoing concerns regarding the renewal process in general. As such, the Commission again recommends that NMFS refrain from issuing a renewal for any authorization unless it is consistent with the procedural requirements specified in section 101(a)(5)(D)(iii) of the MMPA.

Moreover, NMFS should not be promulgating incorrect Level B harassment zones into another incidental harassment authorization in an effort to increase efficiencies. CTJV and HRCP should be held to the same standards with regard to DTH pile installation—that includes ensuring that the Level B harassment zones are consistent and based on best available science for two action proponents conducting the same activities in the same area and during the same timeframe. NMFS's previous efforts to maximize efficiencies must be supplanted by efforts to ensure that its statutorily-required determinations are based on best available science and all processes, including NMFS's renewal process, abide by the requirements set forth under the MMPA, including those specified in section 101(a)(5)(D)(iii).

Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,



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

References

CTJV. 2020. Annual marine monitoring report Parallel Thimble Shoal Tunnel Project Virginia Beach, Virginia. CTJV, Virginia Beach, Virginia. 94 pages.

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Denes, S.L., G.J. Warner, M.E. Austin, and A.O. MacGillivray. 2016. Hydroacoustic pile driving noise study: Comprehensive report. Document 001285, Version 2.0. JASCO Applied Sciences, Anchorage, Alaska. 238 pages.