



MARINE MAMMAL COMMISSION

10 February 2020

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 application submitted by Halibut Point Marine Services (HPMS) seeking authorization 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 expansion of its dock facility in Sitka, Alaska. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 22 January 2020 notice (84 Fed. Reg. 7023) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

HPMS plans to remove and install piles during expansion of the Old Sitka Dock. Operators would (1) install and remove up to 8 30-in temporary steel pipe piles using a vibratory and/or impact hammer and (2) install up to 10 48-in permanent steel pipe piles using vibratory, impact, and down-the-hole (DTH) hammers. HPMS's activities could occur on up to 19 days, weather permitting. It would limit pile-driving and -removal activities to daylight hours and to the timeframe from 1 October 2020 through 28 February 2021.

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

- installing all piles with a vibratory hammer until achieving a desired depth or refusal prior to using an impact hammer;
- implementing standard soft-start, delay, and shut-down procedures;
- ceasing activities if any marine mammal comes within 10 m of any heavy equipment (including barges) and reducing vessel speed to the minimum level required to maintain steerage and safe working conditions;

- using three qualified protected species observers to monitor the Level A and B harassment zones¹ for 30 minutes before, during, and for 30 minutes after the proposed activities;
- using delay and shut-down procedures, if a species for which authorization has not been granted or if a species for which authorization has been granted but the authorized takes are met, approaches or is observed within the Level A and/or B harassment zone;
- reporting injured and dead marine mammals to the Office of Protected Resources and the Alaska Regional Stranding Coordinator; and
- submitting a draft and final report.

In addition, HPMS contacted the Sitka Tribe of Alaska. The Sitka Tribe did not raise any concerns regarding impacts on subsistence use. Based on the proposed activities and mitigation measures, NMFS has preliminarily determined that the proposed taking would not have an unmitigable adverse impact on the availability of marine mammals for subsistence use by Alaska Natives. The Commission concurs with NMFS's preliminary findings and recommends that NMFS issue the incidental harassment authorization, subject to the inclusion of the proposed mitigation, monitoring, and reporting measures.

Source levels in general

The Commission informally noted that the proxy source levels for impact pile driving of the 48-in piles were incorrect. HPMS based its proxy source levels on measurements obtained by Austin et al. (2016). Specifically, HPMS used the median source levels for a single pile, IP5, to estimate the extents of the Level A and B harassment zones but inadvertently assumed that the source levels were referenced to 10 m. All metrics² were referenced to 11 rather than 10 m (see Tables 7 through 9 in Austin et al. 2018). HPMS also inadvertently used 212 rather than 212.5 dB re 1 μ Pa for SPL_{peak} (Table 7 in Austin et al. 2016). Those errors resulted in the underestimation of the various Level A³ and B⁴ harassment zones noted in Tables 9 and 7 of the *Federal Register* notice⁵, respectively, and the underestimation of the shut-down zone for LF cetaceans⁶ in Table 11 of the notice⁷. NMFS indicated that it would rectify these issues in the *Federal Register* notice and final authorization.

There have been ongoing issues with the appropriateness of the source levels used by NMFS in various authorizations. In this instance, NMFS proposed to use median proxy source levels from a single pile, IP5, based on Austin et al. (2016). For another authorization that was available

¹ The Commission informally noted that measure 4(e) in the draft authorization had an erroneous clause about adjusting the zones based on hydroacoustic monitoring results. NMFS indicated that hydroacoustic monitoring would not be required and plans to remove the clause for the final authorization.

² Including root-mean-square sound pressure level (SPL_{rms}), single strike sound exposure level (SEL_{s-s}), and peak SPL (SPL_{peak}).

³ The Level A harassment zones should be (1) 809.8 rather than 736.2 m for low-frequency (LF) cetaceans, 28.8 rather than 26.2 m for mid-frequency (MF) cetaceans, 964.8 rather than 876.9 m for high-frequency (HF) cetaceans, 433.4 rather than 394.0 m for phocids, and 31.6 rather than 28.7 for otariids for SEL_{cum} thresholds and (1) 4.1 rather than 3.4 m for LF cetaceans, 55.1 rather than 46.4 m for HF cetaceans, and 4.7 rather than 4.0 m for phocids for SPL_{peak} thresholds.

⁴ The Level B harassment zone should be 3,699 rather than 3,363 m.

⁵ And Table 2 of the draft authorization.

⁶ The shut-down zone should be 825 rather than 750 m.

⁷ And Table 3 of the draft authorization.

simultaneously for public comment, NMFS proposed to use median proxy source levels based on Austin et al. (2016) for the Port of Alaska's (POA) proposed authorizations. Rather than use source levels from a single pile, the average of the median source levels of piles IP1 and IP5 were used for POA (Table 6; 84 Fed. Reg. 72173), resulting in different proxy source levels⁸. It is unclear how NMFS can deem two different sets of source levels best available when they originate from the same underlying data.

To improve consistency and appropriateness of proxy source levels, the Commission has recommended since 2016 that NMFS compile source level data into a central database. Those issues have involved NMFS using inappropriate proxy source levels⁹, source level metrics for a given pile type and size that have originated from different referenced datasets¹⁰, and different source level metrics that have originated from the same referenced datasets¹¹. The Commission firmly believes that NMFS should be using appropriate and consistent proxy source levels when in-situ measurements are lacking for the relevant pile type/size and installation/removal method at the project site. Therefore, the Commission again recommends that NMFS finish its review and finalize its recommended proxy source levels for both impact and vibratory installation of the various pile types and sizes. If the proxy source levels for impact pile driving are finalized prior to those for vibratory pile driving and removal, they should be made available to action proponents and the public when completed and should not be retained until the vibratory source levels are finalized.

DTH drilling

Similar to issues delineated in the Commission's [9 January 2020 letter](#), NMFS's characterization of DTH drilling for HPMS's authorization is inconsistent with other recent authorizations. NMFS characterized DTH drilling as a *non-impulsive*, continuous source rather than an *impulsive*¹², continuous source¹³ as referenced in other recent authorizations (City of Astoria, 84

⁸ HPMS's revised source levels are 197.9 dB re 1 μ Pa, 186.7 dB re 1 μ Pa²-sec, and 212.5 dB re 1 μ Pa at 11 m; while POA's source levels were 200 dB re 1 μ Pa, 187 dB re 1 μ Pa²-sec, and 215 dB re 1 μ Pa at 10 m.

⁹ See the Commission's [3 February 2020](#) and [18 December 2019](#) letters.

¹⁰ See the Commission's [9 January 2020](#) letter regarding NMFS using source levels based on SPL_{peak} and SEL_{s-s} from one reference and the source level based SPL_{rms} from another reference for a given pile type and size and the Commission's [18 December 2019](#) letter regarding NMFS using two different source levels based on SPL_{rms} from two different projects to represent vibratory installation of sheet piles in the same authorization.

¹¹ As discussed herein and as noted in the summary of source levels used for various Alaska Department of Transportation authorizations on page 4 of the Commission's [3 February 2020](#) letter.

¹² Chesapeake Tunnel Joint Venture (CTJV) assumed that impulsive, thus intermittent, characteristics predominated at its site when the DTH hammer was used and in-situ measurements were obtained by Denes et al. (2019; 84 Fed. Reg. 64854-64855). Denes et al. (2019) determined that approximately 7 pulses occurred during a 1-sec waveform and CTJV assumed that one hour for each of two piles to be installed per day was equivalent to 25,200 pulses. The resulting Level A harassment zones extended up to more than 860 m depending on the functional hearing group of the affected species. AML expects that DTH drilling would occur for up to 8 hours per day. Thus, the Level A harassment zones would be even greater.

¹³ In-situ measurements obtained by the Federal Aviation Administration (FAA) at Bioka Island (Guan pers. comm.) and White Pass and Yukon Route (Reyff and Heyvaert 2019) also have confirmed *impulsive*, continuous aspects of DTH drilling, as depicted in the spectrograms and time-series waveform data. The Commission understands that NMFS's acoustic expert has consulted with acousticians who have conducted measurements of DTH drilling and indicated that DTH drilling has impulsive characteristics and that source levels do increase with increasing pile size, similar to impact pile driving. Furthermore, if one were to assume that DTH drilling was *non-impulsive*, the sound exposure level (SEL) source levels would need to be adjusted for the number of pulses per second, which have ranged from 7 pulses for CTJV to 13 or 14 pulses for FAA (Guan pers. comm.). The latter resulted in an SEL source level that was 11 dB greater

Fed. Reg. 68133). In addition to the mischaracterization of the source, NMFS used an underestimated and inappropriate source level¹⁴ to represent the impulsive characteristics of DTH drilling compared to other recent authorizations¹⁵ (City of Astoria, 84 Fed. Reg. 68139¹⁶ and CTJV, 84 Fed. Reg. 64863¹⁷). To estimate the Level A harassment zones and determine whether and how many Level A harassment takes should be authorized, the sound source must be characterized correctly to ensure the appropriate Level A harassment threshold¹⁸ is used and the source level must be sufficiently accurate.

As stated previously regarding this matter, NMFS must take a precautionary approach to estimating the harassment zones and associated numbers of takes during DTH drilling. As described in the three most recent in-situ monitoring data and reports noted herein, and alluded to by Denes et al. (2016) and Dazey et al. (2012)¹⁹, DTH drilling has impulsive characteristics. Those characteristics are especially prevalent when used in areas where rock is present—which was the case for all three monitoring datasets and was noted to be the case for HPMS’s project site. HPMS’s application indicated that the 48-in piles would be seated into bedrock with an impact hammer and the shaft would be drilled using a top head drive (THD)²⁰/DTH hammer combination. HPMS specifically stated that it would use a Holte 100,000 feet-pounds top head drive with a DTH hammer and bit to drill the shaft. The THD/DTH hammer is comparable to the Delmag D46 impact hammer, which would emit a maximum energy of 107,280 feet-pounds (see section 1.2.4.1 of HPMS’s application). Both THD²¹ and DTH drilling²² emit impulsive sounds²³ (e.g., Song et al. 2018). Song et al. (2018) described the two methods as, simply put, the *percussive* drilling mechanism

than the SEL_{s-s} source level, which was adjusted for the number of pulses per second. For non-impulsive, continuous sources, NMFS routinely assumes that source levels based on SPL_{rms} are comparable to SEL, which is not the case for DTH drilling.

¹⁴ NMFS assumed a source level of 166.2 dB re 1 $\mu\text{Pa}_{\text{root-mean-square (rms)}}$ at 10 m.

¹⁵ And as referenced in other monitoring reports. Reyff and Heyvaert (2019) indicated that the source levels were 199 dB 1 $\mu\text{Pa}_{\text{peak}}$, 184 dB 1 $\mu\text{Pa}_{\text{rms}}$, and 179 dB re 1 $\mu\text{Pa}^2\text{-sec}_{\text{single-strike (s-s)}}$ at 10 m

¹⁶ In which the source level for impact installation of 24-in piles and the related Level A harassment zones were used as proxies for the Level A harassment zones for DTH drilling. NMFS used source levels of 200 dB 1 $\mu\text{Pa}_{\text{peak}}$, 187 dB 1 $\mu\text{Pa}_{\text{rms}}$, and 171 dB re 1 $\mu\text{Pa}^2\text{-sec}_{\text{s-s}}$ at 10 m.

¹⁷ In which the in-situ measured source levels of 190 dB 1 $\mu\text{Pa}_{\text{peak}}$, 180 dB 1 $\mu\text{Pa}_{\text{rms}}$, and 164 dB re 1 $\mu\text{Pa}^2\text{-sec}_{\text{s-s}}$ at 10 m were used for DTH drilling.

¹⁸ A point to note, Level A harassment thresholds are based on whether the source is considered *impulsive* or *non-impulsive*. The Level B harassment thresholds are based on whether the source is considered *intermittent* or *continuous*. Level A harassment thresholds for impulsive sources are 13 to 18 dB greater than non-impulsive sources based on the relevant functional hearing group (see Table 5 of the *Federal Register* notice).

¹⁹ The Commission only knows of one other reference that includes source levels for DTH drilling. Dazey et al. (2012) indicated that the pneumatic percussive drilling aspects of DTH drilling occurred closer to shore where fewer underwater obstacles were encountered. Thus, the substrate likely was sandier and the source levels were lower and more comparable to auger drilling that occurred farther offshore where more underwater obstacles (likely rock) were encountered.

²⁰ HPMS indicated that this was a ‘top drive’ hammer in its application, while Holte specified it to be a ‘top head drive’ (<https://drilling.com/drilling-items/rotary-top-head-drives/>). Song et al. (2018) termed it a ‘drifter’ used during ‘top-hammer drilling’. Although the terms differ between the references, the equipment, installation method, and mechanism by which it operates are the same and considered as such herein.

²¹ In which the percussive force of the top drive hammer is produced by the piston of the pump in the hydraulic drilling rig and transmitted to the drill bit via the shank adaptor and drill pipe itself.

²² In which the drive hammer is directly behind the drill bit and is fed by compressed air in the drill pipe.

<https://www.robingroup.com/products/dth-drilling/>

²³ <https://medium.com/@qdbonmach/the-difference-between-3-rock-drilling-methods-rotary-drilling-dth-drilling-and-top-hammer-efe5789a08e2>.

utilizes the *percussive* energy resulting from the *repeated impact* of the drifter (THD rigs) *or* the DTH hammer (DTH rigs) and the feed and rotation forces that are transmitted to the drill bit through the drill rod (see Figure 1).

It is unclear why NMFS is ignoring the fact that DTH drilling has impulsive characteristics²⁴ and that recent in-situ measurements have indicated that HPMS's presumed source level has the potential to be underestimated by 14 to nearly 18 dB, which would result in a vast underestimation of the Level A harassment zones for DTH drilling and has the potential to result in additional Level A harassment takes. The perceived paucity of available data should not dissuade NMFS from using them. NMFS has previously based proxy source levels on fewer datasets or on methods and pile types that are not the same as those proposed for use by the action proponent. Thus, the perceived paucity of available data should not hinder NMFS from using them. For Level B harassment, portions of the Level B harassment zone are clipped by land²⁵ and re-estimating the extent of that zone may be unnecessary from a practical standpoint. However, from a completeness standpoint, NMFS could re-estimate it as well. Consistent with other recent authorizations and recent in-situ monitoring reports, the Commission recommends that NMFS (1) re-estimate the Level A harassment zones for DTH drilling based on source levels provided either by Reyff and Heyvaert (2019) or Denes et al. (2019) and NMFS's Level A harassment thresholds for impulsive sources and (2) increase the numbers of Level A harassment takes accordingly. If NMFS does not revise the Level A harassment zones based a more appropriate proxy source level and the Level A harassment thresholds for impulsive sources, the Commission recommends that NMFS justify why it does not consider a THD/DTH hammer to be an *impulsive*, continuous sound source.

If NMFS believes that sufficient data are not available to characterize DTH drilling appropriately at this time, then the Commission recommends that NMFS require all applicants that propose to use a DTH hammer to install piles, including HPMS, to conduct in-situ measurements and adjust the Level A and B harassment zones accordingly. A few years ago only a few action proponents proposed to conduct DTH drilling. However, in recent years and particularly in Alaska, numerous action proponents are using the method. Thus, it is imperative that this sound source be characterized appropriately and the associated source levels be provided accordingly.

Numbers of takes

The Commission informally noted that the numbers of takes were inappropriate or underestimated for five of the seven marine mammal species. Specifically—

- For killer whales, NMFS assumed that a pod of eight animals could be taken weekly by Level B harassment during the three-week period of proposed activities. The Commission informally noted that the number of weeks of activities is four, not three, weeks based on a five-day work week and 19 days of activities. This would result in an increase in the Level B harassment takes for killer whales from 24 to 32. NMFS agreed to include the revised number of takes in the final authorization.
- For minke whales, NMFS assumed that a group of three minke whales could be taken by

²⁴ As noted in each of the five available datasets and/or described with regard to its pneumatic percussive attributes in the associated reports and references, as well as in the plethora of references in the mining and drilling literature.

²⁵ Based on the 120-dB re 1 μ Pa threshold being used for continuous sources.

- Level B harassment once during the proposed activities. The Commission informally noted that average group size of minke whales in Alaska is one not three, and a minke whale could occur weekly based on previous sightings in Sitka Sound during construction activities in 2018. This would result in an increase in the Level B harassment takes for minke whales from 3 to 4. NMFS agreed to include the revised number of takes in the final authorization.
- For harbor seals, NMFS assumed that three groups of three seals could be taken by Level B harassment on each of the 19 days of activities and that a single harbor seal could be taken by Level A harassment on the five days that impact pile driving would occur.
 - For Level B harassment, the Commission informally noted that three harbor seal haul-out sites²⁶ appear to be within the Level B harassment zone and estimates based on those haul-out sites may be more useful than NMFS's current approach for estimating the number of harbor seal takes. The Commission also noted that, if haul-out counts are not available, the numbers of Level B harassment takes could easily be exceeded. For example, if only one of the three PSOs observes a single harbor seal on a given day, the extrapolated take of a single harbor seal within 5 km² of the three PSOs²⁷ would equate to 11 takes for the entire 55-km² Level B harassment zone, which is greater than 9 takes per day. NMFS indicated that MML documented up to 28 harbor seals at the three haul-out sites in 2011 and that it would increase the number of takes from 171 to 532. Given that the haul-out counts are outdated and that a harbor seal could be observed by each PSO on any given day, at least 33 harbor seals could be taken by Level B harassment daily resulting in 627 harbor seal takes.
 - For Level A harassment, a single harbor seal could be taken when each of the 10 48-in piles is driven with the impact hammer²⁸ based on the extents of the revised Level A harassment zone and the 100-m shut-down zone. The revised Level A harassment zones are 433 m for two piles and 273 m for one pile²⁹. Harbor seals can easily mill around within those zones for the few minutes that impact pile driving would occur³⁰. Regardless, PSOs can't distinguish with any certainty how long an animal(s) is within the Level A harassment zone and any seal observed within the zone would be enumerated as a Level A harassment take. Thus, at least 10 harbor seals could be taken by Level A harassment during impact pile driving.
 - For harbor porpoises, NMFS assumed that a group of five harbor porpoises could be taken by Level B harassment on each of the 19 days of activities and that a single harbor porpoise could be taken by Level A harassment on the five days that impact pile driving would occur.
 - For Level B harassment, the Commission informally noted that the numbers of takes could be exceeded once the observed Level B harassment takes are extrapolated to the full extent of the zone similar to harbor seals. For example, if one of the three PSOs observes only a pair of harbor porpoises every four days, the extrapolated number of takes for the entire 55-km² Level B harassment zone³¹ on 5 of the 19 days

²⁶ Haul-out sites CE49A, B, and C that are recognized and surveyed by the Marine Mammal Laboratory (MML).

²⁷ Assuming that each of the three PSOs can observe harbor seals effectively out to 1 km. This same assumption was used for harbor porpoises and Steller sea lions.

²⁸ The 30-in piles may need to be installed using an impact hammer as well.

²⁹ The Commission notes that NMFS did not propose two different zones. These were included for illustrative purposes, HPMS would be required to implement the Level A harassment zone associated with installation of two piles.

³⁰ Approximately 4 and 2 minutes, respectively.

³¹ Which is 22 takes.

of activities would be 110, exceeding the 95 takes proposed to be authorized. The Commission agrees that harbor porpoises may not be observed on each of the 19 days but believes that they could occur on more than two days³² since they are common in Southeast Alaska. Based on NMFS's acknowledgement that harbor porpoises typically are observed in groups of five in the project area (85 Fed. Reg. 3638) and assuming they are observed every four days³³, at least 275 harbor porpoises could be taken by Level B harassment.

- For Level A harassment, the Commission informally noted that harbor porpoises are not likely to be observed as single animals, and that a group size of at least three should have been used for the Level A harassment take estimate on each of the five days that impact pile driving would occur. NMFS responded that, even if a group of three porpoises was observed within the Level A harassment zone³⁴, it would not expect that all three would be taken by Level A harassment due to the duration component associated with the Level A harassment zone and the unlikelihood that the three animals would remain in the same proximity to the sound source for the same amount of time. The revised Level A harassment zone is 965 m for two piles and 608 m for one pile²⁹. Based on the size of those zones, three harbor porpoises³⁵ could remain within those zones for the few minutes during which impact pile driving would occur. Since PSOs can't distinguish with any certainty how long animals are within the Level A harassment zone, any observation within the zone would be enumerated as a Level A harassment take. Thus, at least 15 harbor porpoises could be taken by Level A harassment during impact pile driving.
- For Steller sea lions, NMFS assumed that two groups of eight sea lions could be taken by Level B harassment on each of the 19 days of activities. Similar to harbor seals and harbor porpoises, the Commission informally noted that the number of Level B harassment takes could be exceeded once HPMS extrapolates the observed takes to the full extent of the Level B harassment zone. If only two Steller sea lions are observed by PSOs on a given day, 22 takes would be enumerated for the entire Level B harassment zone, which is greater than the 16 takes proposed to be authorized per day by NMFS. As noted in the *Federal Register* notice, Steller sea lions are common in the project area and have been observed during each previous construction project (85 Fed. Reg. 3638 and 3639). Thus, at least as many, if not more, Steller sea lion takes should be authorized as harbor seal takes.

NMFS noted that HPMS's take estimates for harbor porpoises and Steller sea lions were conservative (85 Fed. Reg. 3638 and 3639). Those estimates, as well as the others delineated herein, are not conservative when one considers the extents of the various harassment zones. To ensure that the numbers of takes are sufficient and that HPMS does not have to cease its activities if the numbers of takes are met, the Commission agrees that NMFS should increase the number of Level B harassment takes of killer and minke whales as agreed upon and further recommends that NMFS increase the numbers of (1) Level A harassment takes from 5 to at least 10 for harbor seals and from 5 to at least 15 for harbor porpoises, notwithstanding the previous recommendation to revise the

³² Assuming five porpoises are observed on one day and four are observed on another, the proposed number of takes would still be exceeded (99 vs. 95 takes).

³³ Or on approximately 25 percent of the days.

³⁴ The shut-down zone is only 100 m for harbor porpoises.

³⁵ In addition, harbor porpoises do remain in close proximity to one another when traveling or feeding in a group.

Level A harassment takes accordingly for DTH drilling, and (2) Level B harassment takes from NMFS's revised 532 to 627 for harbor seals, from 95 to 275 for harbor porpoises, and from 304 to no fewer than 627 for Steller sea lions.

Although it is unclear whether HPMS will be keeping a running tally of the total Level A and B harassment takes, including observed and extrapolated takes, it is imperative that HPMS do so to ensure the takes are within the authorized limits and the authorized numbers of takes are not exceeded, particularly if NMFS does not increase the numbers of takes as recommended, and to implement effectively requirement 4(h) of the draft authorization. The Commission recommends that NMFS ensure HPMS keeps a running tally of the total takes, based on observed and extrapolated takes, for both Level A and B harassment.

Mitigation, monitoring and reporting measures

Daylight and periods of low visibility—NMFS specified in the *Federal Register* notice that activities would occur during daylight hours only (85 Fed. Reg. 3624) but did not include that requirement in the mitigation measures in the notice (85 Fed. Reg. 3640) or sections 3 or 4 of the draft authorization. NMFS indicated that it conducts its analyses with the understanding that the applicant would conduct its activities in a manner consistent with what is proposed in the application. Thus, the requirement did not need to be included in the draft authorization. The Commission questions that justification based on NMFS including other standard mitigation measures specified in the application in the authorization as well, even when HPMS proposed to conduct the activities in the specified manner. If NMFS does not want to include the requirement to conduct activities only during daylight hours in the mitigation portion of the authorization, it can include it in section 3 of the authorization that includes general conditions—that approach is consistent with other recently issued authorizations for construction activities in Alaska³⁶.

Additionally, NMFS would require HPMS to delay or cease its pile driving and removal if environmental conditions deteriorate (e.g., in fog, heavy rain) and marine mammals would not be visible within the entire shut-down zone (85 Fed. Reg. 3640 and measure 4(f) in the draft authorization). Darkness is missing from that measure but was included in another recently proposed authorization for construction activities in Alaska³⁷. It is imperative that activities be delayed or cease if the shut-down zone(s) is obscured by darkness, rain, fog, etc. and the activities not begin until the extents of the zones are visible to ensure that HPMS is effecting the least practicable adverse impact on the various marine mammal species or stocks. It is unclear why NMFS is inconsistently including what are considered standard measures³⁸, particularly since doing so would not change the manner in which HPMS plans to conduct its activities. Thus, the measures are practicable. As such, the Commission recommends that NMFS include in (1) section 3 of the final authorization the requirement that HPMS conduct pile-driving and -removal activities during daylight hours only and (2) section 4 of the final authorization the requirement that, if the entire shut-down zone(s) is not visible due to darkness, fog, or heavy rain, HPMS delay or cease pile-driving and -removal activities until the zone(s) is visible.

³⁶ See condition 3(e) in <https://www.fisheries.noaa.gov/webdam/download/100355602> and <https://www.fisheries.noaa.gov/webdam/download/100355601>.

³⁷ <https://www.fisheries.noaa.gov/webdam/download/100686718>.

³⁸ As they have been included in numerous incidental harassment authorizations.

Unauthorized taking—The Commission had recommended for many years that action proponents, in addition to reporting injured and dead marine mammals, be required to cease activities if the activities caused the injury or death until NMFS determines what modifications or additional mitigation measures need to be implemented to avoid additional injuries or deaths. Approximately eight years ago and presumably in response to the Commission’s repeated recommendations, NMFS began requiring action proponents to report injured and dead marine mammals using its phased approach and cease activities, if appropriate (details of which can found at 85 Fed. Reg. 72181³⁹). NMFS attempted to simplify that measure for HPMS’s and future authorizations. However, in simplifying the measure, NMFS would require the action proponent only to report the injured or dead marine mammal—it would not explicitly require the action proponent to cease activities if the activities caused an injury or death. NMFS informally indicated that, because the authorization includes the general condition that serious injury and death is prohibited in general condition 3(d) of the draft authorization, it is unnecessary to include additional prescription to state a condition already required. The Commission supports simplifying the measure but disagrees with NMFS’s legal interpretation of its general condition.

Condition 3(d) of the draft authorization states that—

The taking by serious injury or death of any of the species listed in condition 3(b) of this IHA or any taking of any other species of marine mammal is prohibited and *may result* in the modification, suspension, or revocation of this IHA. Any taking exceeding the authorized amounts listed in Table 1 is prohibited and may result in the modification, suspension, or revocation of this IHA.

Although NMFS considers the requirement to cease activities to be implied, a plain reading of the condition includes no legally-binding requirement for the action proponent to cease its activities. Depending on when an injured or dead marine mammal is discovered, immediate reporting to NMFS may not be possible, particularly for activities that occur on the west coast of the United States outside of normal business hours on the east coast or on weekends. The action proponents would not be directed verbally by NMFS to cease the activities until the circumstances can be reviewed and additional mitigation measures be required if necessary. It is unclear why NMFS would include less transparent conditions and requirements, particularly when previous circumstances have shown that action proponents are more apt to follow clear and concise requirements.

In December 2010, a dead harbor seal was discovered entangled in buoy lines used to mark which piles were to be removed during construction activities in Washington. The necropsy showed that the animal likely died of drowning. At that time, action proponents were not required to report injured or dead marine mammals to NMFS or cease activities. For the following year of activities, the Commission recommended⁴⁰ that the action proponent immediately report all injured or dead marine mammals to NMFS and the local stranding network and suspend the construction activities if a marine mammal was seriously injured or killed and the injury or death could have been caused by those activities (e.g., a fresh carcass is discovered). NMFS concurred with the Commission and included the requirement (76 Fed. Reg. 67421). In July 2013, a live pregnant harbor seal became

³⁹ See section 6(e) in <https://www.fisheries.noaa.gov/webdam/download/100337105>.

⁴⁰ See the Commission’s [11 October 2011 letter](#).

stuck in an action proponent's work boat and subsequently died of hyperthermia. NMFS had included the phased reporting requirements in that authorization and the action proponent appeared to have followed them.

In addition to unauthorized injuries and mortalities, unauthorized taking by harassment has occurred under previous authorizations. To minimize any question by the action proponent of what measures should be implemented, if a species for which authorization has not been granted, or if a species for which authorization has been granted but the authorized takes are met approaches or is observed within the Level A and/or B harassment zone, the Commission began a number of years ago to recommend informally and formally that NMFS specifically require action proponents to delay or cease activities a number of years ago. That measure has been included in HPMS's draft authorization. However, NMFS has made similar arguments that the general conditions, including condition 3(d), are sufficient and it is unnecessary to include additional prescription to state a condition already required. The Commission reiterates that the standard prohibitions do not explicitly state that action proponents would be required to delay or cease activities, it is merely assumed or implied that it would in order to avoid violating the authorization. Those are not legally-binding requirements.

The Commission understands that unanticipated events occur. However, it is imperative that the authorizations include clear, concise, explicit measures to minimize any ambiguity of what action proponents should do in those circumstances. As such, the Commission recommends that NMFS continue to include in all draft and final incidental harassment authorizations, as it has in the last eight years, the explicit requirements to (1) cease activities until NMFS reviews the circumstances involving any injury or death that has been attributed to the activity and determines what additional measures are necessary to minimize additional injuries or deaths⁴¹ and (2) delay or cease pile-driving and -removal activities, if a species for which take has not be authorized or for which the authorized number of takes has been met is observed approaching or within the Level A and/or B harassment zone.

Proposed one-year authorization renewals

NMFS has indicated that it may issue a one-year incidental harassment authorization renewal for this and other future authorizations if various criteria are met and after an expedited public comment period of 15 days. The Commission and various other entities (e.g., 84 Fed. Reg. 31035 and 52466) have asserted and continue to consider that the renewal process is inconsistent with the statutory requirements under section 101(a)(5)(D) of the MMPA. As such, the Commission recommends that NMFS refrain from issuing renewals for any authorization and instead use its abbreviated *Federal Register* notice process. That process, as was used for AK DOT's proposed authorization, is similarly expeditious and fulfills NMFS's intent to maximize efficiencies.

Over the past few years, NMFS has informed the Commission that a renewal would be issued as a one-time opportunity, after which time a new authorization application would be required. NMFS also has included such verbiage in its response to comments regarding renewals. Specifically, NMFS indicated that it had modified the language for future proposed incidental

⁴¹ This requirement can be retained in section 6(c) similar to all previous authorizations or it could be inserted into general condition 3(d).

harassment authorizations to clarify that all authorizations, including renewal authorizations, are valid for no more than one year and that the agency will consider *only one renewal* for a project at this time (e.g., 84 Fed Reg. 36892 from 30 July 2019). However, NMFS has yet to stipulate that the agency will consider *only one renewal* or that a renewal is a *one-time opportunity* in any *Federal Register* notice requesting comments on the possibility of a renewal, on its webpage detailing the renewal process⁴², or in any draft or final authorization that includes a term and condition for a renewal (including section 8 of HPMS's draft authorization).

In response to the Commission's 29 November 2019 letter recommending that NMFS stipulate those specifics in the relevant documents and on its webpage, NMFS indicated that, in the 'summary' portion of its notices, it requests comments on a possible *one-year renewal* that could be issued under certain circumstances and if all requirements are met (84 Fed. Reg. 68131). However, neither the notices nor the webpage or final authorizations state that *one-year renewals* are *one-time opportunities*. NMFS also indicated that, for notices involving proposed renewals, it has not included an option of an additional renewal (84 Fed. Reg. 68131). Absent specifics regarding one-year renewals being a one-time opportunity in the *Federal Register* notices, on NMFS's webpage, and more importantly as a term and condition in its draft and final authorizations, NMFS appears to knowingly allow that door to remain open. If NMFS chooses to continue proposing to issue renewals, the Commission recommends that it (1) stipulate that a renewal is a *one-time opportunity* (a) in all *Federal Register* notices requesting comments on the possibility of a renewal, (b) on its webpage detailing the renewal process, and (c) in all draft and final authorizations that include a term and condition for a renewal and, (2) if NMFS refuses to stipulate a renewal being a one-time opportunity, justify why it will not do so in its *Federal Register* notices, on its webpage, and in all draft and final authorizations.

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

Sincerely,



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

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