



MARINE MAMMAL COMMISSION

20 May 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 Crowley Fuels, LLC (Crowley) 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 upgrading a dock in Kotzebue, Alaska. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 29 April 2020 notice (85 Fed. Reg. 23766) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

Crowley plans to install and remove piles during construction of a new dock wall in Kotzebue. Operators would (1) install and remove up to 170 18-in steel pipe piles or 14-in Hpiles, (2) install up to 15 14-in steel anchor piles, and (3) install up to 650 sheet piles using a vibratory hammer. Crowley's activities could occur on up to 87 days, weather permitting, during daylight hours only¹.

NMFS preliminarily has determined that, at most, the proposed activities could cause Level B harassment of small numbers of eight marine mammal species². 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—

- ceasing in-water heavy machinery activities if any marine mammal comes within 10 m of the equipment and reducing vessel speed to the minimum level required to maintain steerage and safe working conditions;

¹ The Commission informally noted that the *Federal Register* notice included incorrect or unclear source level references, indicated incorrectly that the source levels were referenced to 10 ft rather than 10 m, and erroneously included notations of impact pile driving and drilling that was not proposed to occur. NMFS indicated all issues would be fixed in the notice of authorization issuance.

² The Commission informally noted that the bearded seal takes during installation of template piles were incorrect in Table 10 of the notice based on NMFS's take estimation method. The Level B harassment takes should have been 301 rather than 385, resulting in a decrease in the total number of takes from 1,199 to 1,115. NMFS indicated the takes would be revised in the notice of authorization issuance and the final authorization.

- using delay and shut-down procedures;
- using up to three land-based qualified protected species observers to monitor the Level A³ and B harassment zones 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 ceasing activities, if appropriate; and
- submitting a draft and final report.

Availability of marine mammals for subsistence use

Based on the timing and location of the proposed activities and of subsistence hunting in the project area, NMFS preliminarily has determined that the proposed mitigation measures provide the means of effecting the least practicable impact on the availability of marine mammals for subsistence use by Alaska Natives. Crowley provided the affected communities with a draft plan of cooperation (POC) in November 2019 identifying measures that it is taking and would take to minimize adverse effects on the availability of marine mammals for subsistence purposes. The POC was provided to 31 Native Alaskan entities, cities, or councils. It also summarizes the multiple meetings and concerns provided to date. Measures to reduce the likelihood of impacts on marine mammals or subsistence hunting include many of the measures previously referenced, as well as providing regular communications via public radio and email throughout the project period⁴.

Beluga whale takes

NMFS proposed to authorize up to 100 beluga takes on each of the 87 days of activities based on sightings data from Frost et al. (1983). Beluga whales in Kotzebue Sound have declined considerably since that time⁵. Alaska Department of Fish and Game (ADFG) conducted aerial surveys in Kotzebue Sound in 1987, observing a maximum of 51 beluga whales⁶ (ABWC 2008). ABWC conducted aerial surveys in 1996–98 and observed fewer than 15 whales per day, but those surveys were conducted likely too late in the season to provide an accurate assessment (ABWC 2008). Aerial surveys have not been conducted since that time. Thus, the ADFG data represent the best available. Based on NMFS's take estimation method, the Commission recommends that NMFS reduce the number of Level B harassment takes from 100 to 51 on each of the 87 activity days, equating to 4,437 rather than 8,700 Level B harassment takes of beluga whales.

³ And shut-down zones.

⁴ The Commission informally noted that this information was not included in the *Federal Register* notice but should have been. NMFS indicated that it would be included in the notice for authorization issuance.

⁵ The Commission notes that beluga whales also could originate from the Kotzebue Sound stock, which is genetically distinct from the Beaufort Sea and Eastern Chukchi Sea stocks (Alaska Beluga Whale Committee (ABWC) 2008, O'Corry-Crowe et al. 2016, North Atlantic Marine Mammal Commission (NAMMCO) 2018).

⁶ This point similarly was made by the peer review panel that NMFS convened to review Crowley's marine mammal monitoring plan.

Sufficiency of shut-down zones and Level A harassment takes

Although the Level A harassment zones for high-frequency (HF) cetaceans during vibratory installation of sheet piles was 13 m, NMFS proposed to require Crowley to implement a 10-m shut-down zone. The Commission informally noted that NMFS should increase the shut-down zone to 15 m, as that minor increase would not cause unnecessary shut downs for HF cetaceans. NMFS indicated that Crowley preferred to have a single 10-m shut-down zone for all activities and that NMFS did not expect that an animal would remain in the Level A harassment zone⁷ long enough to incur permanent threshold shift (PTS). That argument has been provided both when the shut-down zones don't encompass the Level A harassment zones and Level A harassment takes are not proposed to be authorized, as well as when NMFS has proposed to authorize Level A harassment takes (e.g., see 85 Fed. Reg. 16224). This dichotomy in not expecting an animal to remain in the zone long enough for Level A harassment or PTS to occur, while also authorizing Level A harassment takes⁸ could lead one to question the utility of the thresholds and necessity of shut-down zones in general—which clearly is not NMFS's intent.

As the Commission has noted in previous letters, unless implementation of a shut-down zone is impracticable⁹, it should encompass the extent of the associated Level A harassment zone. In this instance, a 5-m increase in the shut-down zone to only 15 m would not cause unnecessary shut downs and is practicable to implement. Further, Crowley would be implementing only two different shut-down zones during its activities. Many action proponents are implementing multiple different-sized shut-down zones for numerous different activities and scenarios. As such, it is not impracticable for Crowley to implement a 15-m shut-down zone for HF cetaceans only during installation of sheet piles. Until NMFS revises the manner in which it estimates Level A harassment zones using its SEL_{cum} thresholds¹⁰, the Commission recommends that NMFS increase the shut-down zone from 10 to 15 m for HF cetaceans during vibratory installation sheet piles.

Location of PSOs

Crowley proposed to have three land-based PSOs monitor the Level B harassment zones during the activities. The extents of the Level B harassment zones range from 3.4 to 5.2 km. Based on Crowley's monitoring plan, there would be a gap in observations between the southernmost PSO¹¹ and the on-site PSO (see page 21 in the plan). The peer review panel recommended that the southernmost PSO be moved to the roof of the Nullagvik Hotel for better visibility and to avoid a gap in visual coverage between the PSOs. The Commission agrees that elevated platforms are ideal for conducting marine mammal observations and that gaps in coverage should be minimized. However, the Nullagvik Hotel is approximately 1 km from the fuel dock. If the PSO would be moved to that location, there would be a large gap in coverage to the south of that PSO, particularly during installation of sheet piles that comprise the majority of the activity days. The Commission recommends that NMFS require Crowley to position its southernmost PSO farther north along

⁷ Based on cumulative sound exposure level (SEL_{cum}) thresholds.

⁸ Or requiring action proponents to implement shut-down zones.

⁹ Or Level A harassment takes are proposed for authorization.

¹⁰ Which currently includes either the time necessary to install/remove a pile for vibratory pile driving or the number of strikes per pile for impact pile driving and the number of piles installed/removed in a given day.

¹¹ And the southernmost PSOs presumed range of view would extend beyond the farthest extent of the Level B harassment zones (see page 21 vs pages 17–19 in the monitoring plan).

Beach Trail, while minimizing the gap between the observers and maximizing the extent of the Level B harassment zone(s) observed, and position the PSOs on elevated platforms, if feasible. Location of the PSOs should be stipulated in the final authorizations.

The Commission also notes that the peer review report was not available when NMFS composed its *Federal Register* notice or draft authorization. As such, it is unclear which of the panel's recommendations NMFS plans to implement. The Commission recommends that NMFS include all of the peer review panel's recommendations in the *Federal Register* notice of authorization issuance and specify which recommendations were implemented, as well as the rationale for those that were not implemented.

In-water heavy machinery activities

NMFS indicated in the *Federal Register* notice that in-water heavy machinery activities included movement of the barge to the pile location and positioning of the pile on the substrate (85 Fed. Reg. 23785). However, condition 4(a) in the draft authorization specified that in-water heavy machinery activities included use of barge-mounted excavators or dredging as examples. The Commission has informally and formally¹² noted that in-water heavy machinery activities generally always include movement of a barge to the pile location and positioning of the pile on the substrate, while few activities actually involve barge-mounted excavators and dredging. As such, the Commission recommends that NMFS revise its standard condition for ceasing in-water heavy machinery activities to include, as examples, movement of the barge to the pile location, positioning of the pile on the substrate, use of barge-mounted excavators, and dredging in *all* draft and final incidental take authorizations involving pile driving and removal.

Daylight hours

NMFS indicated that pile installation would occur during daylight hours only¹³ in the *Federal Register* notice (85 Fed. Reg. 23767). However, NMFS did not stipulate in the draft authorization that activities must occur during daylight hours only. Those standard conditions have been included in other recently-issued authorizations¹⁴ and in other draft authorizations¹⁵. It is unclear why NMFS did not include them for the Crowley's draft authorization, particularly since Crowley indicated it would abide by the constraints in its monitoring plan, the Native Alaskan communities had concerns about activities occurring at night¹⁶, and the measure would help to ensure that Crowley is effecting the least practicable adverse impact on the affected species¹⁷. The Commission recommends that NMFS include in the final authorization the requirements that Crowley conduct pile-driving activities during daylight hours only.

¹² e.g., see the Commission's [28 April 2020 letter](#).

¹³ Crowley indicated as much in its monitoring plan as well.

¹⁴ e.g., see the Chesapeake Tunnel Joint Venture final authorization; <https://www.fisheries.noaa.gov/webdam/download/104970969>.

¹⁵ e.g., see the Gastineau Historical Channel Society draft authorization; <https://www.fisheries.noaa.gov/webdam/download/105647341>.

¹⁶ See the POC.

¹⁷ As Crowley did not request Level A harassment takes.

Tally of takes

Although it is unclear from both the preamble and the draft authorization whether Crowley will keep a running tally of the total Level B harassment takes, including observed and extrapolated takes, it is imperative that Crowley do so to ensure that the takes are within the authorized limits and the authorized numbers of takes are not exceeded to implement effectively condition 4(h) in the draft authorization. The Commission recommends that NMFS ensure that Crowley keeps a running tally of the total takes, based on observed and extrapolated takes, for Level B harassment consistent with condition 4(h) of the final authorization.

Proposed one-year authorization renewals

The Commission has ongoing concerns regarding NMFS's renewal process, which can be reviewed in its [10 February 2020](#) letter. Based on those concerns, the Commission again recommends that NMFS refrain from issuing renewals for any authorization and instead use its abbreviated *Federal Register* notice process, which is similarly expeditious and fulfills NMFS's intent to maximize efficiencies. If NMFS continues to propose 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 declines to adopt this recommendation, explain fully its rationale for not doing so. This second set of recommendations has been included in numerous Commission letters since December 2019, but they have yet to be followed. Further, NMFS has not responded to those recommendations in a detailed or accurate manner, despite the directive in section 202(d) of the MMPA that NMFS provide a detailed explanation for not following any of the Commission's recommendations. This issue can be reviewed in its [28 April 2020 letter](#).

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

Sincerely,



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

References

- ABWC. 2008. Beluga whales in Kotzebue Sound. *Kotzebue Marine Mammal News* 1(2):6 pages.
- Frost, K.J., L.F. Lowry, and J.J. Burns. 1983. Distribution of marine mammals in the coastal zone of the eastern Chukchi Sea during summer and autumn. *in* Outer Continental Shelf Environmental Assessment Program, Volume 20. Minerals Management Service, Anchorage, Alaska. 88 pages.
- NAMMCO. 2018. Report of the global review of monodontids. 13–16 March 2017, Hillerød, Denmark. 359 pages.

Ms. Jolie Harrison

20 May 2020

Page 6

O'Corry-Crowe, G., A.R. Mahoney, R. Suydam, L. Quakenbush, A. Whiting, L. Lowry, and L. Harwood. 2016. Genetic profiling links changing sea-ice to shifting beluga migration patterns. *Biology Letters* 12:20160404.