



MARINE MAMMAL COMMISSION

12 January 2016

Ms. Jolie Harrison, Chief
Permits and Conservation Division
National Marine Fisheries Service
Office of Protected Resources
1315 East-West Highway, Room 13635
Silver Spring, MD 20910

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 the Municipality of Anchorage, through its Port of Anchorage (POA) department, seeking an incidental harassment authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA). POA is seeking authorization to take small numbers of marine mammals by harassment incidental to a test pile program in Anchorage, Alaska, during a one-year period¹. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 16 December 2015 notice (80 Fed. Reg. 78176) announcing receipt of the application and proposing to issue the authorization subject to certain conditions.

Background

POA is proposing to conduct a test pile program as part of the Anchorage Port Modernization Project. The purpose is to obtain representative pile installation and capacity data near the area of the future pier-head line. POA would install 10 48-in steel pipe piles using a vibratory and impact hammer. Eight of the piles would remain and be incorporated into the new port design, while two piles would be cut off at the mudline. The activities would occur for up to 31 days during daylight hours only.

NMFS preliminarily has determined that the proposed activities could modify temporarily the behavior of small numbers of up to five species² of marine mammals, but that the total taking would have a negligible impact on the affected species or stocks. NMFS does not anticipate any take of marine mammals by death or serious injury. It believes that the potential for temporary or permanent hearing impairment will be at the least practicable level because of POA's proposed mitigation measures. The mitigation, monitoring, and reporting measures include—

- (1) using and testing the efficacy of various sound attenuation devices (e.g., pile cushions, resonance-based systems, and bubble curtains);

¹ The authorization would be valid from 1 April 2016 until 31 March 2017, but all pile driving is expected to be completed by 1 July.

² The Commission understands that NMFS plans to increase the number of harbor seal takes to 62 and decrease the harbor porpoise takes to 31.

- (2) collecting in-situ sound source, sound propagation, and ambient sound measurements and adjusting the Level A and B harassment zones, as necessary;
- (3) using standard ramp-up, delay, power-down, and shut-down procedures;
- (4) prohibiting pile driving during low-light hours or poor weather if the extent of the Level A harassment zone cannot be monitored adequately;
- (5) implementing additional delay and shut-down procedures if a beluga whale calf or an aggregation of five or more beluga whales is observed approaching or within the disturbance zone;
- (6) ceasing pile driving if authorized numbers of takes for any marine mammals are met or exceeded;
- (7) using up to four (shore- and vessel-based) marine mammal observers to monitor the Level A and B harassment zones 30 minutes before, during, and 30 minutes after the pile-driving activities;
- (8) reporting injured and dead marine mammals to NMFS and the Alaska Regional Stranding Coordinators using NMFS's phased approach and suspending activities, if appropriate; and
- (9) submitting a final comprehensive report to NMFS.

Inadequate basis for issuance of beluga whale incidental take authorizations

As indicated in previous letters regarding proposed incidental harassment authorizations for other sound-producing activities in Cook Inlet³, the Commission remains concerned about the potential impacts of anthropogenic activities on the endangered Cook Inlet beluga whale population. The Commission has recommended that NMFS defer issuance of incidental take authorizations and regulations until it has better information on the cause or causes of the ongoing decline of beluga whales and has a reasonable basis for determining that authorizing additional takes by harassment would not contribute to or exacerbate that decline. Consistent with these concerns, the Commission once again recommends that NMFS defer issuance of any incidental take authorizations or regulations to POA or any other applicant proposing to conduct sound-producing activities in Cook Inlet until such time that NMFS can, with reasonable confidence, support a conclusion that those activities would affect no more than a small number of Cook Inlet beluga whales and have no more than a negligible impact on the population. That conclusion should be based on clear and consistent criteria regarding the MMPA's small numbers and negligible impact standards, which currently do not exist. Therefore, the Commission further recommends that, before issuing any further authorizations such as the one requested here, NMFS develop a policy that sets forth clear criteria and/or thresholds for determining what constitutes small numbers and negligible impact for the purpose of authorizing incidental takes of marine mammals. The Commission would welcome the opportunity to discuss that policy as it is being developed.

Programmatic environmental impact statement

The Commission is concerned that NMFS is continuing to propose and issue authorizations for the incidental taking of Cook Inlet beluga whales without adequate consideration of the combined or cumulative impacts of current and planned activities on this population. In the

³ See the Commission's 21 October 2011, 9 January 2013, 31 January 2014, 4 April 2014, 9 May 2014, 14 September 2014, 13 April 2015, 20 April 2015, and 24 July 2015 letters.

Commission's 14 July 2015 letter on NMFS's Draft Cook Inlet Beluga Whale Recovery Plan, the Commission recommended that NMFS place annual limits on the total number and types of incidental takes authorized, based on the most recent population estimate. In addition, the Commission believes that NMFS should draft and finalize its programmatic environmental impact statement (PEIS) on the issuance of incidental take authorizations in Cook Inlet (notice of intent published on 14 October 2014, 79 Fed. Reg. 61616) before issuing any additional authorizations. For these reasons, the Commission recommends that NMFS finalize its PEIS and establish annual limits on the total number and types of takes that are authorized for sound-producing activities in Cook Inlet before issuing any additional incidental take authorizations or regulations.

If NMFS decides to issue the requested authorization, notwithstanding the Commission's recommendation, the Commission has the following additional concerns regarding the proposed authorization.

Beluga whale takes

Based on the *Federal Register* notice, NMFS proposed to authorize up to 32 takes by Level B harassment for beluga whales during POA's pile-driving activities. POA estimated 20 beluga takes⁴ based on the site-specific densities and the associated ensonified areas of each test pile location and then requested authorization for an additional 12 takes⁵ to account for the possibility of a single large group occurring in the project area during the activities⁶. The Commission finds the requested level of taking to be unusually high since the proposed activities could occur on only 31 days, with approximately 27 hours of pile driving⁷. For SAExploration, Inc. (SAE), NMFS authorized up to 30 takes by Level B harassment for seismic activities that could occur 24 hours per day for up to 160 days. Although the densities for beluga whales in POA's project area are greater than SAE's, both activities would occur in Critical Habitat 1 and the ensonified area for SAE's activities⁸ is 100 times greater than POA's area⁹. The Commission wonders why in this instance NMFS is proposing to authorize a substantially greater number of beluga takes than were calculated, while it appears that NMFS is underestimating the potential number of beluga takes in other instances—NMFS has capped the beluga whale takes at 30¹⁰ for previous seismic activities. In those instances, a specific level of taking has been authorized irrespective of the potential number of takes that were estimated based on the proposed activities. Accordingly, the Commission recommends that NMFS adopt a consistent approach when determining the potential number of takes of beluga whales in Cook Inlet for future incidental take authorization applications regarding sound-producing activities.

⁴ Rounded up from 19.245 takes.

⁵ Rounded up from 11.1 takes.

⁶ The Commission understands that, due to POA including the incorrect number of days of activities (43.5 days were included rather than the proposed 31 days) and some rounding issues (summing fractions of takes across days and then rounding up) in the take calculation, NMFS likely will authorize only 24 takes of beluga whales—13 of those takes were based on the revised calculation plus an additional 11 takes based on the possibility of single large group occurring in the project area during the proposed activities.

⁷ With additional restrikes possible.

⁸ Ranging from 1,808–2,126 km².

⁹ Ranging from 15.54–22.14 km².

¹⁰ Seismic operators (i.e., SAE, Apache Alaska Corporation) base these takes on the daily ensonified area x the density in that area and then summed across all the days of the survey activities until 30 takes are reached, meaning some areas may not be surveyed if the allotted takes are met.

Mitigation and monitoring measures

NMFS proposed to require POA to implement delay and shut-down procedures if a beluga whale calf or an aggregation of five or more beluga whales is observed approaching or within the Level B harassment zone¹¹. In previous incidental harassment authorizations, NMFS has required that the action proponent implement delay and shut-down procedures if a single beluga is observed approaching or within the Level B harassment zone. Those requirements have been associated with the use of airguns and sub-bottom profilers (both chirps and boomers). In addition, NMFS has required that action proponents implement delay and shut-down procedures if five or more harbor porpoises or killer whales are observed approaching or within the Level B harassment zone. It is unclear if NMFS believes those measures are not relevant to impact and vibratory pile-driving activities or if NMFS believes those measures are now unnecessary in general. Therefore, the Commission recommends that NMFS require POA to implement delay and shut-down procedures if a single beluga or if five or more harbor porpoises or killer whales are observed approaching or within the Level B harassment zones for impact and vibratory pile driving or provide sufficient justification regarding why implementation of those procedures is not necessary for the proposed activities. In either case, those procedures should be incorporated consistently into future proposed incidental harassment authorizations.

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

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

¹¹ Based on either the 160- or 125-dB re 1 μ Pa threshold, the latter has been adjusted from 120-dB re 1 μ Pa based on ambient conditions.