Program Management Office • 1980 Anchorage Port Road • Anchorage, Alaska 99501

November 20, 2024

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

Subject: Development of Regulations for Requested Incidental Take of Marine Mammals by the Don Young Port of Alaska Modernization Program Phase 2B: Cargo Terminals Replacement Project in Anchorage, Alaska

Dear Ms. Harrison and others,

On behalf of the Don Young Port of Alaska Modernization Program, we provide the following comments on the proposed rule (89 *Federal Register* 85686) for promulgation of regulations for take of marine mammals incidental to construction of the Cargo Terminals Replacement (CTR) Project.

For the CTR Project, NMFS is proposing to require the Port of Alaska to shut down at the Level B zone for Cook Inlet beluga whales during vibratory installation and removal of temporary piles, while also requiring use of a bubble curtain on the same piles in the months of high beluga whale abundance, August through October.

The Port of Alaska respects and is aligned with NMFS's commitment to protecting Cook Inlet beluga whales; however, the proposed mitigation measures will create undue hardship to a critical infrastructure project with no proven added conservation benefit to beluga whales.

The Port of Alaska disagrees with the proposed requirement to use a bubble curtain during vibratory piling of temporary piles because it would provide no additional protection to beluga whales from vibratory piling sound. For the CTR Project, NMFS is proposing to require the Port of Alaska to shut down at the Level B zone for Cook Inlet beluga whales during vibratory installation and removal of temporary piles, while also requiring use of a bubble curtain on the same piles in the months of high beluga whale abundance, August through October. In the proposed rule, NMFS cites data from Illingworth & Rodkin (2021), a sound source verification study of pile driving at the Port of Alaska. The study showed that use of a bubble curtain during vibratory piling reduced the sound energy levels at frequencies above 100 Hz, which are the frequencies that beluga whales are the most sensitive to. However, it is important to note that the Port of Alaska's Level B zones, the distances at which NMFS would require the Project to shut down if beluga whales approached, are calculated without the benefit of frequency-weighting for the different functional hearing groups and without consideration of whether those frequencies are audible to beluga whales. Lower-frequency sound energy inaudible to beluga whales is largely defining the extent of Level B zones (Illingworth & Rodkin 2021).

Beluga whales would never receive the benefit that the bubble curtain could provide from vibratory driving because the project would shut down before they were close enough to experience the benefit. The Port of Alaska has many years of demonstrated success in shutting down pile driving to avoid impacts on beluga whales and other marine mammal species, and the likelihood of a beluga whale being exposed to elevated sound levels within the Level B zone for more than a few minutes is discountable.

Use of a bubble curtain is time-consuming, and the inefficiencies and delays associated with use of a bubble curtain during vibratory piling of temporary piles could lead to additional days or years of construction that generate underwater sound and other construction-related disturbances. For example, extensive shutdowns at the Level B zone for beluga whales during the Port of Alaska's NES1 Project in 2024 further pushed sheet pile removal into the later part of the 2024 construction season when beluga whales were more abundant. The continued extensive shutdowns pushed construction and completion of the NES1 Project into 2025.

The Port of Alaska is concerned that the proposed requirement to shut down at the Level B zone for beluga whales during vibratory installation and removal of temporary piles while also requiring use of a bubble curtain on the same piles will not benefit belugas and will prevent completion of the CTR Project on time. This delay would further increase the risk of a critical failure due to the deteriorating condition of the facility.

Furthermore, the sizes of the Level B zones were calculated based on use of an unweighted sound metric that does not reflect beluga hearing sensitivity (or lack of sensitivity to very low-frequency sounds). NMFS currently does not apply adjustments or weighting to sound levels that apply to behavioral harassment (Level B), although the advantages of such a methodology have been discussed in the marine mammal community for many years. However, hearing sensitivity is incorporated by NMFS into the thresholds for Level A harassment (NMFS 2024). When adjusting overall sound levels for frequency weighting (NMFS 2020, 2024), the Port's calculations for vibratory sounds indicate that the weighted sound levels are 12 to 25 dB lower than unweighted sound levels and roughly 15 dB lower than those used for low-frequency cetaceans. This is based on examining the full 1/3 octave band spectrum for vibratory sounds. However, NMFS's threshold for Level B harassment is applied to all marine mammals, regardless of their hearing sensitivity.

The Port of Alaska requests that NMFS consider two options for the final rule for the CTR Project:

- Remove the requirement for use of a bubble curtain during installation and removal of temporary piles, and the Project will shut down at the Level B zones as calculated in the Port's application.
- Alternatively, if a bubble curtain is required during installation and removal of temporary piles with a vibratory hammer, the Level B shutdown zones for beluga whales should be reduced in size to reflect the reduction in sound energy from a bubble curtain at the frequencies that beluga whales are most sensitive to. The Port of Alaska proposes to work with NMFS and use representative acoustic data, including site-specific data collected during construction of the Petroleum and Cement Terminal in 2020–2021, to compute weighted sound level adjustments for the CTR Level B zones.

Thank you for considering the Port's concerns.

Sincerely,

Signed by:
Stephen Ribuffo
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Stephen Ribuffo
Director
Don Young Port of Alaska

Literature Cited

Illingworth & Rodkin, LLC. 2021. *Port of Alaska Modernization Program, Petroleum and Cement Terminal Hydroacoustic Monitoring Report*. Prepared for the Port of Alaska, Anchorage, AK, by Illingworth & Rodkin, Cotati, CA. January 2021.

NMFS (National Marine Fisheries Services). 2020. Manual for Optional USER SPREADSHEET Tool (Version 2.2, December) for: 2018 Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0). December.

NMFS. 2024. 2024 Update to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 3.0) - Underwater and In-Air Criteria for Onset of Auditory Injury and Temporary Threshold Shifts. October.