



**DeLong Mountain Transportation
System Port - Dredging and
Material Disposal**

Section 10 of the Rivers and Harbors
Act and Section 404 Clean Water Act
Permit Application

Supplemental Information
May 5, 2021

Prepared for:

Alaska Industrial Development and
Export Authority
813 W Northern Lights Blvd.
Anchorage, Alaska 99503

Prepared by:

Stantec Consulting Services
725 East Fireweed Lane Suite 200
Anchorage, AK 99503-2245

INTRODUCTION

This document supplements the information in the attached Engineering Form 4345, a permit application by the Alaska Industrial Development and Export Authority (AIDEA). The proposed Project is to complete annual maintenance dredging at the DeLong Mountain Transportation System Port to support use of already permitted and constructed facilities. The excavated material will come from the port basin and from the beach on the north side of the port above high tide line. The excavated and dredged material will be discharged in the shallow discharge area on the south side of the port. The material will supply beach nourishment and shoreline protection in the disposal area.

APPLICATION BLOCK 23: DESCRIPTION OF AVOIDANCE, MINIMIZATION, AND COMPENSATION ACTIVITIES BOTH UNDERTAKEN AND PROPOSED

The dredged material will be removed from an existing basin. This is an operational permitted port. The material being dredged is natural beach sand and will be moved in the same direction as long shore (littoral) drift. Teck annually completes maintenance dredging at the DeLong Mountain Transportation System Port. Teck is the operator and AIDEA owns the facility. No new structures will be built or added to the marine footprint. The excavated and discharged material will provide shoreline protection in the shallow water disposal area. An intact shoreline protects inland resources (including ponds, wetlands, and historic resources) by maintaining a natural beach complex on the south side of the port. The beach is a natural barrier resisting storms and tidal surges. There has been a historic regulatory requirement to transfer beach sand from the north side to the south side of the dock. Historic dredging requirements have varied from 30,000 cubic yards to 50,000 cubic yards of material yearly. In 2012 USACE specified a yearly discharge volume of 15,000 cubic yards for the south side of the dock. This application proposes to maintain historic dredge and discharge volumes. No wetlands will be filled or impacted by the action.

The work area shown in Figure 1 reflects maintenance dredging that has been ongoing since the project opened in 1989. The dredging and discharge areas shown in the figure have been refined using current imagery and National Oceanic and Atmospheric Administration (NOAA) data. The local NOAA tidal data was used to calculate the Mean High Water (MHW) and the High Tide Line for the DeLong Mountain Transportation System Port. The current tidal elevations are shown in Figure 1.

Avoidance

Dredging cannot be avoided. The shallow water dock receives vessel traffic carrying supplies, fuel, and equipment during the summer. The operation of the DeLong Mountain Transportation System Port requires maintenance dredging to sustain a consistent navigational depth. The port basin naturally fills with sand over time and excess material must be removed. There have been regulatory requirements in USACE permits to move material yearly to support the beach on the south. This application does not change historic dredged or discharge volumes. Only the amount of material necessary for navigation will be dredged in the port basin. Additional sand from the North beach will be excavated and moved to the south to be discharged into the shallow water discharge area yearly. There are no wetlands filled by this action.



Minimization

The area to be dredged has been limited to the port basin and the smallest practicable beach footprint. The shallow water discharge area is designed to supply protection for the existing beach structure.

As part of minimizing impacts in the area consideration has been given to local species.

The marine and nearshore environment of the Delong Mountain Transportation System Port is habitat mapped by the National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS) as potentially including species listed under the Endangered Species Act. These species include:

- NMFS
 - Bowhead whale (Endangered)
 - Fin whale (Endangered)
 - Humpback whale (Endangered)
 - Bearded Seal (Threatened)
 - Ringed Seal (Threatened)
- USFWS
 - Polar Bear (Threatened)
 - Spectacled Eider (Threatened)
 - Steller's Eider (Threatened)

The Project has proposed these minimization and avoidance measures:

- All dredging will take place during ice-free (i.e., summer) conditions.
- All dredging will take place in basin water depth less than 6.7 meters (-22 feet, Mean Lower Low Water [MLLW]=0.0 feet).
- All dredging will halt if a protected species approaches to within 50 m (164 ft) of the activity. Activity will stop until the animal is farther than 50 m (164 ft) from the activity or is not seen for 15 minutes.

Potential Impacts to Species

Bowhead Whale, Fin Whale, Humpback Whale

With the proposed avoidance measures, impacts are not likely to adversely affect bowhead whale, fin whale, or humpback whale. The avoidance of dredging areas deeper than 6.7 m (-22 ft, MLLW=0.0) is anticipated to eliminate activity in water deep enough for these species to occupy.

Bearded Seal and Ringed Seal

Bearded seal and ringed seal are present in the Chukchi Sea and Bering Sea year-round. They have a wide range throughout the Arctic and may be present in the area at any time of year. By proposing to halt dredging if a protected species (including bearded seal and ringed seal) is within 50 m (164 ft) of the activity, impacts are not likely to adversely affect these species.

Polar Bear

The Chukchi Sea population of polar bear may use the pack ice in the area in the fall and winter to hunt or den. Individuals typically move out of the area and into the northern Chukchi Sea with the retreat of the pack ice in spring, summer, and fall. By proposing to work only in ice-free conditions, impacts to polar bear will be avoided, since individuals should not be in the area. If an individual is present, activity will halt if they are within 50 m (164 ft) of the activity.



Spectacled Eider and Steller's Eider

Spectacled Eider utilize nearshore marine environments in the area. Steller's Eider breed primarily along the Arctic Coastal Plain and winter in southwest Alaska. Both species are most likely to occur in the project area during spring migration to, and fall migration from, breeding habitats further north in the Arctic. By proposing to halt dredging if a protected species is in a 50 m (164 ft) buffer zone, impacts are anticipated to be avoided.

Construction Impacts for species

Construction activity would result in minor alteration of shoreline habitat. None of this habitat is potentially suitable for staging, foraging, migration, or breeding activities, as it has been dredged since 1989. Similar terrestrial and aquatic habitat are ubiquitous around the project area, and suitable substitute habitat is expected to be available. No construction impacts are anticipated for the listed species.

Construction activity would result in noise from dredging and operation of heavy equipment. No pile driving is proposed, and the 50 m (164 ft) buffer zone is anticipated to be protective of impacts to potential species. In-water noise will only be in the summer season and not be continuous. Dredging will not be continuous, with work alternating between in-water dredging and sand movement above MHW. As a result, noise impacts are anticipated to be localized, temporary, and not likely to adversely affect species.

No wetlands will be impacted by this Project. The Project purpose is to provide for navigation and protect the existing beach system. There will be no loss of Section 10 waters. Therefore, no compensatory mitigation is proposed for this action.

