Dear Mr. Graham:

RE: Port Construction/Sheet Pile Wharf
Kuskokwim River (Stream No. 335-20-16600)
Section 29, T20N, R49W, Seward Meridian, Sleetmute D-6
Location coordinates (WGS84): 61.7945 N 158.2147 W

Pursuant to AS 16.05.871(b), the Alaska Department of Fish and Game (ADF&G), Division of Habitat, has reviewed your proposal to construct a 952 foot wharf on the Kuskokwim River at Jungjuk Creek. We received an initial copy of your application on October 8, 2015, and received additional application information on December 29, 2017.

Project Description
Donlin Gold is proposing to construct a port referred to as the Jungjuk (Angyaruaq) Port at a location on the north bank of the Kuskokwim River, immediately upstream of the mouth of Jungjuk Creek and approximately 8 miles (13 km) downstream of the nearest village, Crooked Creek. The Jungjuk Port facility is required to complete the transition of supplies and consumables from water to land transport and vice-versa throughout the life of the Donlin Gold mine project. The portion of the Jungjuk Port that directly impacts the Kuskokwim River is the wharf structure and part of the yard area. The wharf would be approximately 952 ft. (290 m) long, sufficient for two barge tows to be at the berth at the same time, along with a ramp to allow roll-on/roll-off cargo handling. The wharf would be constructed using an open cell sheet pile™ bulkhead earth-retaining system. Rip-rap armor rock would be placed at both the upstream and downstream ends of the structure to protect it from erosion. Course rock fill would be
placed behind the sheet pile wall to bring the operational surface of the port site yard in the wharf area to the appropriate elevation. Vibratory and impact pile drivers will likely be used to install sheet piles. Water pumping may be used to control water impacting construction if determined necessary. Preliminary plans and specifications for the Jungjuk Port were included in the December 29, 2017 application packet.

**Anadromous Fish Act**

The Kuskokwim River has been specified as being important for the spawning, rearing, or migration of anadromous fishes pursuant to AS 16.05.871(a). The river in the area of your activity provides migration habitat for Chinook, sockeye, chum, pink, coho salmon, least cisco, sheefish, and humpback whitefish, and spawning habitat for whitefish. Resident fish species captured in the vicinity of your project include longnose sucker, Arctic grayling, Dolly Varden, Alaskan brook lamprey, burbot, slimy sculpin, and northern pike. Your project as proposed may have adverse effects on anadromous fish or their habitat and should not obstruct the free passage of fish.

In accordance with AS 16.05.871(d), project approval is hereby given subject to the project description above with the following stipulations:

1) Sound monitoring shall be established to reduce the potential for lethal effects to fish. A hydroacoustic monitoring program shall be employed during pile driving to assure that peak sound pressure levels within fish-bearing waters does not exceed 206 dB at any time. In-water noise levels of 180 dB or higher shall be immediately reported to this office by email or telephone. Site specific mitigation measures may be required to prevent fish movement delay or redirection.

2) If the instantaneous peak sound pressure level (peak SPL) exceeds 206 dB measured in the water at a distance of 10 m from the source, sound pressure mitigation/attenuation measures shall be implemented.

3) If the cumulative sound exposure level (cumulative SEL) exceeds 183 dB, a no-work/quiet period may be required.

4) Donlin Gold shall submit final plans and specifications to the Division of Habitat for review and approval, noting any deviations from the preliminary plan set submitted for this permit, prior to construction.
You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved plan, you shall notify the Division of Habitat and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the Division of Habitat. Therefore, it is recommended you consult the Division of Habitat immediately when a deviation from the approved plan is being considered.

For the purpose of inspecting or monitoring compliance with any condition of this permit, you shall give an authorized representative of the state free and unobstructed access, at safe and reasonable times, to the permit site. You shall furnish whatever assistance and information as the authorized representative reasonably requires for monitoring and inspection purposes.

This letter constitutes a permit issued under the authority of AS 16.05.871 and must be retained on site during project activities. Please be advised that this determination applies only to activities regulated by the Division of Habitat; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The department reserves the right to require mitigation measures to correct disruption to fish and game created by the project and which was a direct result of the failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

This permit decision may be appealed in accordance with the provisions of AS 44.62.330-630.

Any questions or concerns about this permit may be directed to Habitat Biologist Maria Wessel at (907) 459-7281 or emailed to maria.wessel@alaska.gov.

Sincerely,
Sam Cotten, Commissioner

BY: Audra L. J. Brase, Regional Supervisor
Division of Habitat
Alaska Department of Fish and Game

ecc: John Chythlook, ADF&G SF, Fairbanks
Douglass Cooper, USFWS, Fairbanks
Ben Soiseth, USACE, Fairbanks
AWT Northern Detachment, Fairbanks
Lee McKinley, ADF&G-JPO, Anchorage
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Josh Peirce, ADF&G WC, McGrath

AB/mlw