



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Fish and Game

DIVISION OF HABITAT
Fairbanks Region Office

1300 College Road
Fairbanks, AK 99701-1551
Main: 907.459.7289
Fax: 907.459.7303

FISH HABITAT PERMIT

FH19-III-0142

ISSUED: June 27, 2019
EXPIRES: December 31, 2024

Daniel Graham
Donlin Gold
4720 Business Park Blvd.
Suite G-25
Anchorage, AK 99503

RE: APMA A192749
Geotechnical Drilling/Stream Crossings/Water Withdrawal
Multiple Residential Steam Crossings and Water Withdrawals
Sections 30, T23N, R48W; Sections 25-27, and 34-36, T23N, R49W; Sections 7, 8, 17,
and 18, T22N, R48W; and Sections 12-15, T22N, R49W, Seward Meridian,
Sleetmute D-6 Quad
Location Coordinates (NAD 83) 61.9980 N, 158.2140 W

Dear Mr. Graham:

Pursuant to AS 16.05.841 (Fishway Act), the Alaska Department of Fish and Game (ADF&G) Division of Habitat has reviewed your proposal to conduct geotechnical investigations and resource drilling at the Donlin Gold project site. Your application was received by email on June 4, 2019.

Project Description

Donlin Gold is proposing geotechnical investigations and resource drilling beginning during the summer of 2019 and continuing over the next several years, in support of the development of an open pit, hardrock gold mine (Donlin Gold project) located in the Yukon Kuskokwim region, approximately 10 miles north of the village of Crooked Creek (located on the Kuskokwim River). Work will take place during summer and winter seasons. Equipment to be used for

overland travel includes, but is not limited to, two Core Drilling Rigs, one RC Drilling Rig, two Geoprobe 6712 DT, one Cat 318CL Excavator, and two Cat D5N LGP Dozers. The following stream crossings will be utilized, primarily in the winter, and may include the building of ice bridges:

Waterbody Crossing	Latitude	Longitude
Anaconda Creek 1	61.998 N	158.214 W
Anaconda Creek 2	62.000 N	158.245 W
American Creek	62.026 N	158.204 W
Queen Gulch	62.059 N	158.225 W
Snow Gulch	62.060 N	158.181 W

Water will be utilized from American Creek, Anaconda Creek, Snow Gulch, Queen Gulch along with Lewis Gulch and tributaries. It is estimated that up to three, two-inch pumps will be utilized for providing water to the drills with the capacity to pump 20 gpm each. The pumps will be located near the planned drill sites and utilize existing access to the extent possible.

In addition, seismic surveys are planned with approximately 15 miles of seismic lines. Details on the separation distance between fish bearing streams and holes used for explosive charges along with the size of the planned explosive charges, their depth and spacing will be provided to ADF&G as these details are developed and prior to transporting the explosives to site. A complete description of your project was contained in your APMA application dated April 22, 2019.

Fishway Act

Anaconda and American creeks, and their tributaries support resident fish species including Dolly Varden, slimy sculpin, burbot, and Arctic grayling. Additionally, Anaconda and American creeks downstream of your activities provide rearing habitat for juvenile coho salmon. Queen, Snow, and Lewis gulches and their tributaries likely support resident fish species such as ninespine stickleback. Your proposed project should not obstruct the efficient passage and movement of fish.

In accordance with AS 16.05.841, your project is approved subject to the project description above and your submitted scope of work, with the following stipulations:

- 1) Crossings shall be made from bank to bank in a direction substantially perpendicular to the direction of stream flow, and only at locations with gradually sloping banks. There shall be no crossings at locations with sheer or cut banks. Equipment crossings shall be

made in a manner that precludes creation of barriers to efficient fish passage (ridging and/or rutting of streambed, etc.).

- 2) Any ice/snow bridges and approach ramps constructed at stream crossings must be substantially free of extraneous material (i.e., soil, rock, wood, or vegetation). Any ice/snow bridge shall be breached or weakened, and fill used for ramps shall be removed upon completion of use to facilitate breakup such that fish passage is maintained.
- 3) Each water intake structure shall be designed to prevent the entrainment, impingement and/or entrapment of fish and shall be installed and maintained at each intake location. The effective screen openings may not exceed 0.25 inches (1/4 inch), and water velocity at the screen/water interface may not exceed 0.5 feet per second when the pump is operating.

Note: For detailed information regarding screened intake device design please consult our webpage <http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.withdrawal> and Technical Report No. 97-8 (http://www.adfg.alaska.gov/static/license/uselicense/pdfs/97_08.pdf). Feel free to contact our office for additional assistance.

Permit Terms

This letter constitutes a permit issued under the authority of AS 16.05.841 and must be retained on site during project activities. Please be advised that this determination applies only to Division of Habitat regulated activities; 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.

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 provision 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 a Division of Habitat responsibility. Therefore, we recommend you consult the Division of Habitat before considering any deviation from the approved plan.

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

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. You shall mitigate any adverse effect upon fish or wildlife, their habitats, or any restriction or interference with public use that the commissioner determines was a direct result of your 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.

Please direct questions about this permit to Habitat Biologist Maria Wessel at (907) 459-7281 or maria.wessel@alaska.gov.

Sincerely,
Doug Vincent-Lang
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
Aaron Tiernan, ADF&G CF, Anchorage
Josh Peirce, ADF&G WC, McGrath

Al Ott, ADF&G HAB, Fairbanks
Faith Martineau, ADNR, Fairbanks
Permit Coordinator, ADF&G SF, Anchorage
NOAA Fisheries, Anchorage
Michael Walton, ADNR, Fairbanks
Charlie Cobb, ADNR, Anchorage
Jenny March, ADNR, Fairbanks

AB/mlw