STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF HABITAT MANAGEMENT AND PERMITTING

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FISH HABITAT PERMIT
FH06-III-0233

ISSUED: August 9, 2006
EXPIRES: Upon Complete Removal of All Culverts

Ms. Charlotte MacCay, Agent
Alaska Gold Company
P.O. Box 640
Nome, AK 99762-0640

Dear Ms. MacCay:

RE: Big Hurrah Creek Mine Access Road and Culvert Installation;
Big Hurrah Creek, Stream No. 333-10-11700-2082; Solomon Quad;
Linda Vista Creek, Stream No. 333-10-11700-2082-3006; Solomon Quad
SID AK 0605-05AA.

Pursuant to Alaska Statute 41.14.870(b), the Alaska Department of Natural Resources, Office of Habitat Management and Permitting (OHMP) has reviewed your proposal to rehabilitate 2.5 miles of existing access road along Big Hurrah Creek and install a culverted road crossings in Big Hurrah and Linda Vista creeks. A description of the project was contained in your application dated February 21, 2006 as supplemented by modified road plan and profile and typical section sheets C2, C3, and C4 submitted by your email on August 7, 2006.

The current proposal includes reconstructing an existing access road to the historic Little Hurrah Creek hardrock mine site which is currently within a State right-of-way parallel to Big Hurrah Creek. The rehabilitated road will start at about MP 40 of the Nome-Council Highway and cross Big Hurrah Creek about 200 yards upstream of its confluence with the Solomon River. The proposed crossing location is an existing low-water ford. A primary 16’7” wide by 10’1” high by 70’ long corrugated steel pipe arch will be installed in Big Hurrah Creek and is sized to provide both fish passage and flood conveyance at the fifty-year flood event. The pipe arch will be depressed 2 feet below the streambed to ensure that there is a natural gravel streambed within the culvert after installation. The pipe arch will be set to match existing stream gradient. In addition, a four foot diameter

culvert will be installed on both sides of the pipe arch to provide additional flood relief capacity and provide a flow path if winter aufeis formation in the lower creek plugs the primary pipe arch.

Based on the current estimates of mine life, the culverted crossing is anticipated to remain in place for five years at which time it will be pulled and the low water crossing reestablished.

After crossing Big Hurrah Creek, the road will follow the left limit of the creek (south side), largely along a terrace above the active floodplain, and continue on to Little Hurrah Creek. Material for road construction will be obtained from historic placer mine tailings (83,000 cubic yards) located within the active channel and floodplain and from two material site/fish ponds (10,000 cubic yards) which are to be constructed to enhance fish rearing habitat. The ponds and outlet channels will be sloped and daylighted back to Big Hurrah Creek to prevent fish entrapment during low flows.

Owing to the presence of historic placer mine tailings within the active channel and floodplain, Big Hurrah Creek is presently braided and unstable. Following removal of the historic tailings for road construction, a stable bankfull river channel 32 feet wide at Little Hurrah Creek confluence and 37 feet wide at the road crossing will be constructed. A functional floodplain will be reestablish and measure about 70 to 80 feet wide from left limit to right limit.

A culvert design proposal for Linda Vista Creek was not included with your permit application submittal; however, your application indicates that it will be sized to accommodate fish passage.

Based on your submitted plans, the following mitigation measures will be incorporated in project design:

1. All equipment crossings of the creek will be made from bank to bank at locations with gradually sloping banks.
2. Construction will occur during periods when impacts to pink, chum, and coho salmon and Dolly Varden can be minimized.
3. Silt fences will be used to isolate as much of the road construction site from the stream as practicable.

Big Hurrah Creek has been specified as being important for the migration, spawning, or rearing of anadromous fishes in accordance with AS 41.14.879(a). Pink salmon and anadromous Dolly Varden use the stream for rearing and spawning. In addition, juvenile coho salmon were documented in Big Hurrah Creek in 2005 at the confluence of Little Hurrah Creek and Big Hurrah Creek. Your project as proposed should not have adverse effects on anadromous fish or their habitat and should not obstruct the free passage of fish.

In accordance with AS 41.14.870(d), project approval is hereby given subject to your proposed scope of work and the following stipulations:

1. Current construction plans submitted with your Fish Habitat Permit application were at the 35% submittal level. Prior to commencement of road construction activities, civil plans at the 50% or greater submittal level shall be provided to OHMP for review and approval.

2. Prior to installation of a culvert crossing at Linda Vista Creek, civil plans at the 50% or greater submittal level shall be provided to OHMP for review and approval.

3. Where practicable, existing, established clumps of vegetation growing at the base of all tailing piles to be used for road construction shall be salvaged and transplanted along the edge of the active bankfull channel between the road and the stream.

4. At all locations where diversion and reconstruction of the stream channel is necessary to accommodate the road alignment, construction sequencing for the diversion shall be established to minimize the introduction of sediment into the watershed. Excavation shall be sequenced as follows:

    a. excavate the new stream channel leaving a plug at both the upstream and downstream ends during actual construction;

    b. Upon completion of the new channel divert water into it by first removing the downstream plug from the new channel, then removing the upstream plug from the new channel, then plugging the upstream end of the original channel, and finally plugging the downstream end of the original channel

5. Upon completion of active mining and ore hauling at Little Hurrah Creek, the pipe arch and overflow culverts in Big Hurrah Creek and all associated fill material shall be removed and the area restored to approximate its pre-construction width, depth, substrate type and functional configuration. Fill material shall be removed in a manner that allows for reestablishment of the low-water ford at the traditional ford location.

The permittee is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved plan. For any activity that significantly deviates from the approved plan, the permittee shall notify OHMP and obtain written approval in the form of a permit amendment before beginning the activity. Any action taken by the permittee, or an agent of the permittee, 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 OHMP. Therefore, it is recommended that OHMP be consulted immediately when a deviation from the approved plan is being considered.

This letter constitutes a permit issued under the authority of AS 41.14.870 and 11 AAC 110, and must be retained on site during the permitted activity. Please be advised that this determination applies only to activities regulated by OHMP; other divisions with ADNR also may have jurisdiction under their respective authorities. This determination does not relieve you of the responsibility for securing other permits, state, federal, or local. You are still required to comply with all other applicable laws.

Pursuant to 11 AAC 112.010, the conditions of this permit are consistent with the Standards of the Alaska Coastal Management Program and the Bering Straits CRSA Coastal District Program.

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 were a direct result of the failure to comply with this permit or any applicable law.

The recipient of this permit (the permittee) 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 the permittee's 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--44.62.630.

Sincerely,

Edmund J. Fogels, Acting Deputy Commissioner

BY: Robert F. “Mac” McLean, Area Manager
Office of Habitat Management and Permitting

ecc: Luke Boles, ADEC, Fairbanks
William Ashton, ADEC, Anchorage
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Bill Meyers, ACOE, Anchorage
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RFM/mac