DEPARTMENT OF THE ARMY PERMIT

Permittee: Alaska Gold Company

Permit No.: POA-2006-742-4, Rock Creek

Issuing Office: U.S. Army Engineer District, Alaska

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The proposed Rock Creek Mine Project is comprised of two mines, Rock Creek Mine/Mill Complex and the Big Hurrah Mine. Approximately 13, 697,436 cubic yards (cy) of fill would be placed in 414.5 acres of wetlands.

The Rock Creek Mine/Mill Complex would consist of a 50 acre open pit gold mine, two non-acid generating development rock stockpiles, a gold recovery plant and a paste tailings storage facility. The process plant site area would include a three stage crushing and screening plant, a crushed ore stockpile, a mill facility, a maintenance shop, an administration and mine dry building, warehouse, explosive storage and fuel storage.

The Big Hurrah Mine facilities would include a 22 acre main open pit mine and a 3 acre satellite pit, a non-acid generating development rock stockpile, a temporary potentially acid generating development rock stockpile that would be backfilled into the pit at closure, a run-of-mine ore stockpile, a truck maintenance shop, a small administration and mine dry building, explosive storage and diesel fuel storage.

All work will be performed in accordance with the attached plan, sheets [1-18].

Project Location: The proposed Rock Creek project site is located in the Snake River watershed within sections 14, 15 and 22-26, T. 10 S., R.34 W., Kateel River Meridian; Latitude 64.616° N., Longitude 165.455° W.; approximately 7 miles northwest of Nome, Alaska. The proposed Big Hurrah project site is located in the Solomon River watershed within sections 2, 3, 4, 5, 10 and 11, T. 10 S., R. 28 W., Kateel River Meridian; Latitude 64.646° N., Longitude 164.238° W.; approximately 50 miles northeast of Nome, Alaska.

Permit Conditions:

General Conditions:

- 1. The time limit for completing the work authorized ends on <u>August 31, 2011</u>. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will

initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

- 1. All organic materials from excavation, fill, stockpile and tailings storage areas shall be removed, segregated and stockpiled for use during mine reclamation.
- 2. Any temporary or permanent standing water that will be created by project-related activities shall be tested and monitored on an ongoing basis over at least a ten year period (and longer, if needed) to determine whether toxicity/pollution levels exist that are harmful to fish, birds or other wildlife. If so, such waters shall be (1) removed immediately (if temporary), (2) treated so that toxicity/pollution is reduced to a level that no longer poses a threat to wildlife, or (3) enclosed by deterrent devices (fencing, netting, weirs, etc.) that prevent wildlife and fish from coming into contact with toxic substances or polluted water.
- 3. Where Glacier Creek Road crosses Lindblom Creek, a culvert of sufficient size and design shall be installed to accommodate the increased flows expected in Lindblom Creek as a result of diversion of Rock Creek-drainage surface waters above the mine site. The culvert should be designed to prevent downstream bed degradation from increased flows and it should allow fish passage.
- 4. A 50 foot vegetated buffer shall be maintained, to the extent practicable, between the active or rehabilitated Big Hurrah Creek channel and the Big Hurrah access road.
- During Big Hurrah Creek tailings removal and channel/floodplain rehabilitation and re-contouring, the applicant shall minimize destruction of riverine tall willow vegetation. Where necessary to remove this habitat, the applicant shall salvage willows and replant or re-distribute them to increase bank or slope stability and to provide habitat for birds and shade, structure and cover for fish, including in and around newly created pools.
- 6. To reduce the potential for bird collisions with the proposed power line (if line burial is not feasible), bird diverter devices shall be installed and maintained within one quarter mile on either side of the new Glacier Creek Bridge. Diverters shall be spaced not more than 65 feet apart and alternate between outside wires. Power line poles and transmission lines also shall be designed to meet Avian Power Line Interaction Committee (APLIC) standards for reducing the likelihood of bird electrocution (http://www.aplic.org).
- 7. The applicant shall work with USACE, USFWS, EPA and ADNR-OHMP to identify additional mitigation opportunities in the project areas that will benefit birds or other wildlife.
- 8. All disturbed and fill areas shall be stabilized to prevent erosion. Increased water turbidity and accumulation of sediment in drainages, sloughs and other wetlands shall be evidence of insufficient stabilization.
- 9. No fill or construction materials shall be stockpiled on adjacent wetlands outside the project boundary.
- 10. Natural drainage patterns shall be maintained to the extent practicable by the installation of culverts in sufficient number and size, or the repair of existing culverts, to prevent ponding, diversion or concentrated runoff that would result in adverse impacts to adjacent wetlands and other fish and wildlife habitats.
- 11. The applicant shall work with the Alaska Department of Transportation and Public Facilities on dust minimization, especially around subsistence areas and fish racks.
- 12. A Memorandum of Agreement between USACE, SHPO and Alaska Gold Company shall be developed, prior to mining, to specify how the eligible properties shall be avoided or mitigated, should avoidance not be possible.

Special Information:

Any condition incorporated by reference into this permit by General Condition 5, remains a condition of this permit unless expressly modified or deleted, in writing, by the District Engineer or his authorized representative.

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
- a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - Damage claims associated with any future modification, suspension, or revocation of this permit.
- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a revaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

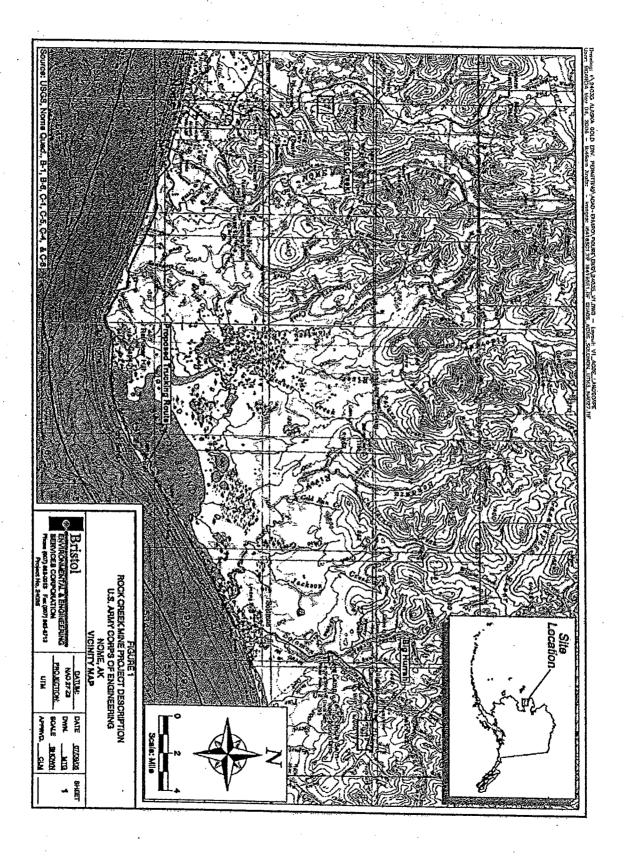
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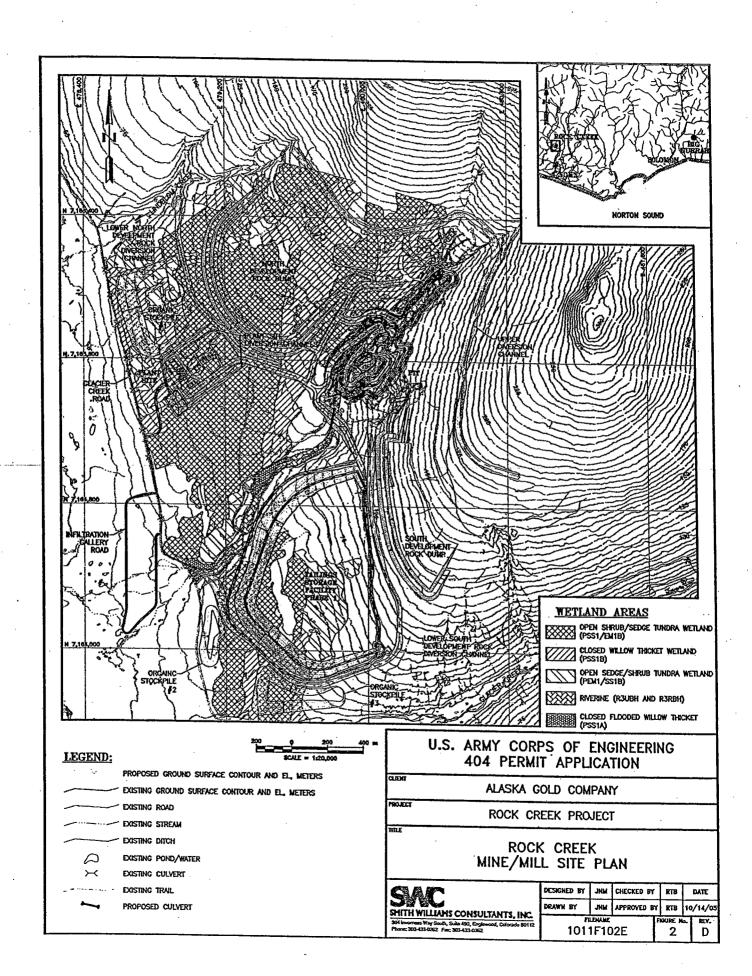
This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Stu mye	21 Aus 06
For (DISTRICT ENGINEER) LOL Kevin J. Wilson	(DATE)
Aorth Section, Regulatory Branch	` ,
North Section, Regulatory Branch	

When the structures or work authorized by this permit are still in existence at the time the property is transferred the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions have the transferee sign and date below.

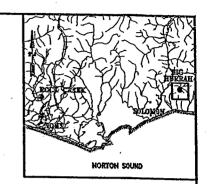
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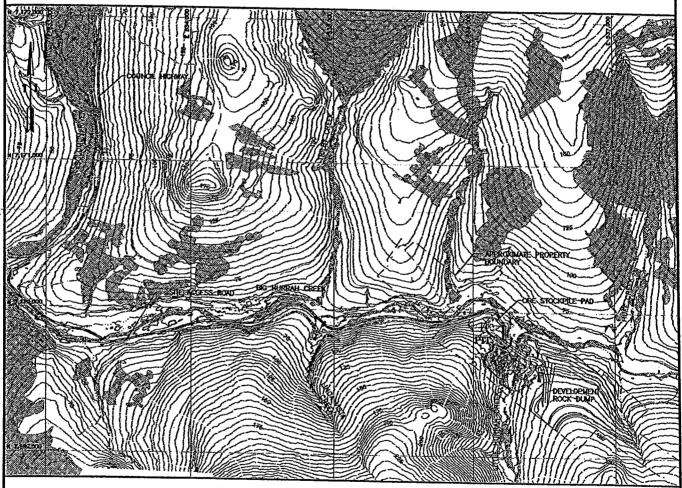




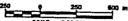
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U.S. ARMY CORPS OF ENGINEERING 404 PERMIT APPLICATION

ALASKA GOLD COMPANY

ROCK CREEK PROJECT

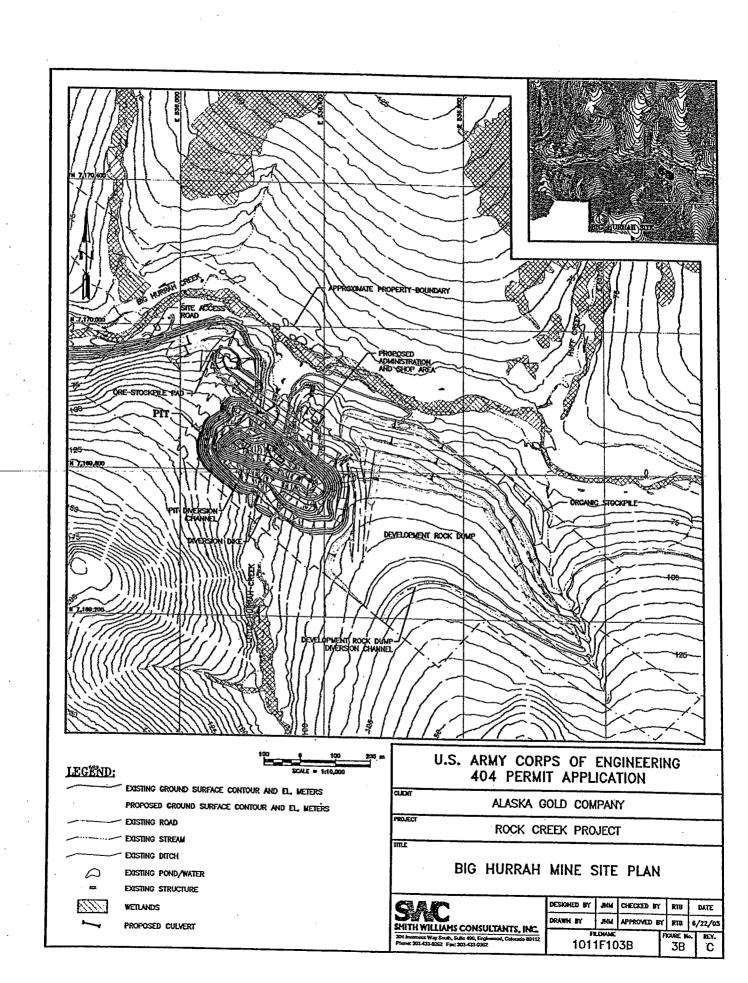
BIG HURRAH AND ACCESS ROAD OVERVIEW

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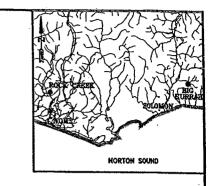
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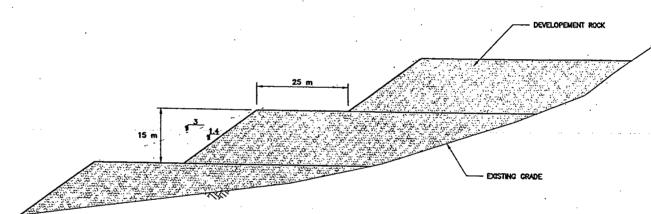
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DEVELOPMENT ROCK DUMP TYPICAL SECTION

U.S. ARMY CORPS OF ENGINEERING 404 PERMIT APPLICATION

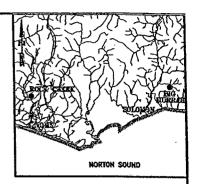
ALASKA GOLD COMPANY
PROJECT ROCK CREEK PROJECT
TITLE

CROSS SECTION OF A TYPICAL DEVELOPMENT ROCK STOCKPILE

SHITH WILLIAMS CONSULTANTS, INC.
304 Invenees Way South, Suite 460, Englewood, Colorado 80112
Phone: 304-431-2622 Fee: 304-431-0622

ESIGNED BY	MM	CHECKED BY	RTB	DATE
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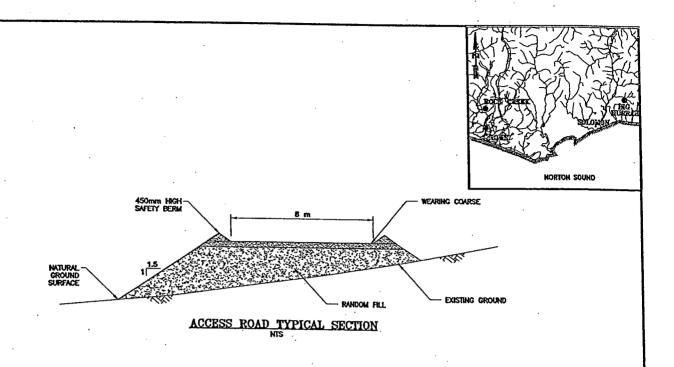
U.S. ARMY CORPS OF ENGINEERING **404 PERMIT APPLICATION**

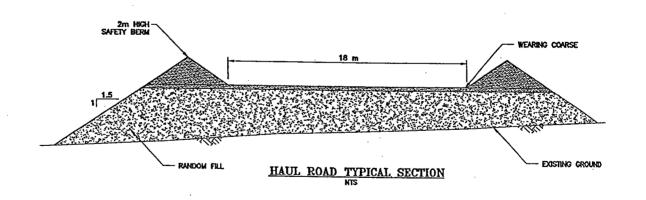
ALASKA GOLD COMPANY

ROCK CREEK PROJECT

CROSS SECTION OF A TYPICAL FOUNDATION FILL

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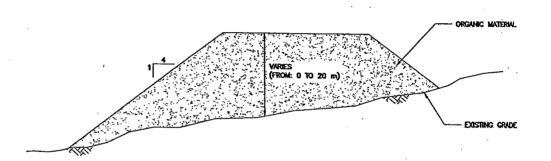
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MITH WILLIAMS CONSULTANTS, INC.	
904 Inverses Way South, Sulta 490, Explorered, Colorado 80112 Phone: 303-433-9262 Fac: 373-433-9362	

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TYPICAL ORGANIC STOCKPILE

U.S. ARMY CORPS OF ENGINEERING 404 PERMIT APPLICATION

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ALASKA GOLD COMPANY

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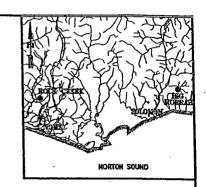
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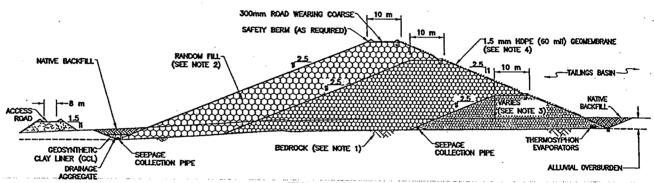
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EMBANKMENT TYPICAL SECTION

LEGEND:



PHASE 1, STAGE 1



PHASE 1, STAGE 2



PHASE 1, STAGE 3

NOTES

- FOUNDATION AREA MUST BE EXCAVATED TO NON-ICE RICH BEDROCK. FOUNDATION TO BE INSPECTED AND APPROVED BY THE ENGINEER.
- EMBANICAENT RANDOM FILL SHALL CONSIST OF DEVELOPMENT ROCK FROM THE MINE PIT DEVELOPMENT.
- 3. EMBANKMENT HEIGHTS VARY ALONG ALIGNMENT.
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 24 m FOR STAGE 3.
- A 300 mm THICK LAYER OF LINER BEDDING MATERIAL UNDERLIES THE HOPE GEOMEMBRANE.

U.S. ARMY CORPS OF ENGINEERING 404 PERMIT APPLICATION

THE THE THE

ALASKA GOLD COMPANY

PROJECT

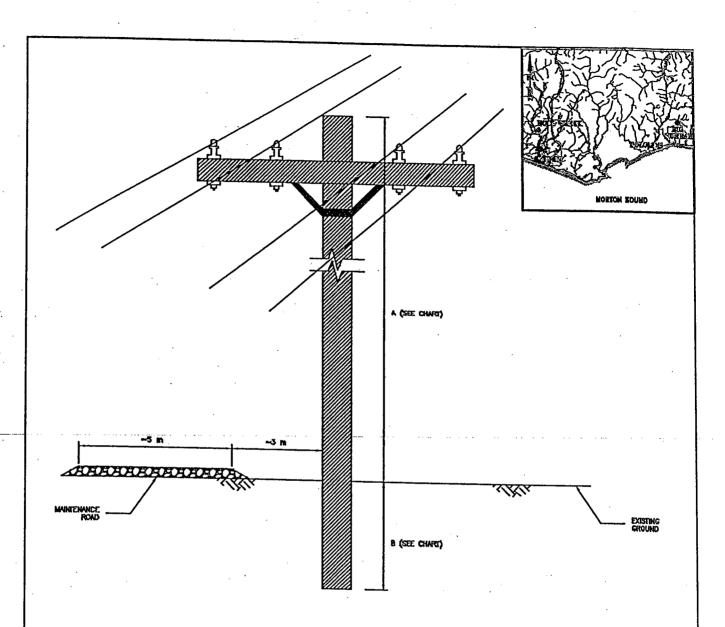
ROCK CREEK PROJECT

TLE

CROSS SECTION OF THE ROCK CREEK TAILINGS STORAGE FACILITY DAM

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HITH WILLIAMS CONSULTANTS, INC	_
H Invernees Way South, Suite 490, Englowood, Colorado 801 hone: 303-433-9262 Fee: 393-433-4362	12

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NOTES:

- MBEDDWENT DEPTH (8) IS EQUAL TO 10% OF TOTAL ABOVE GROUND HEIGHT, PLUS AN ADDITIONAL 1.2 METERS.
- 2. MAINTENANCE ROAD NOT REQUIRED AT ALL LOCATIONS.

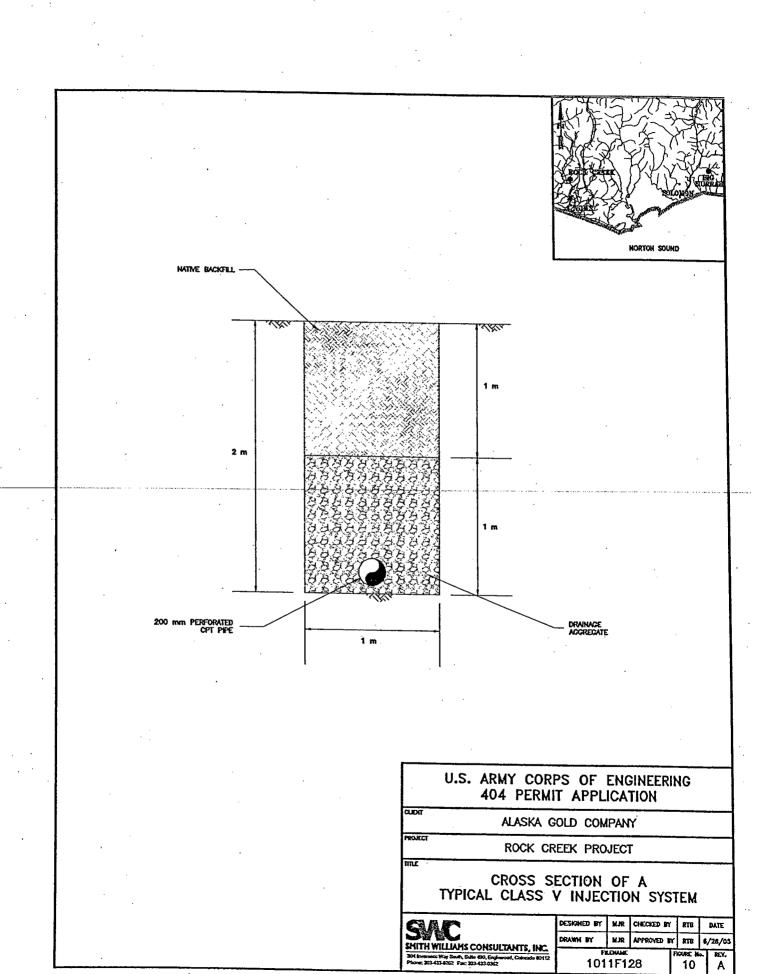
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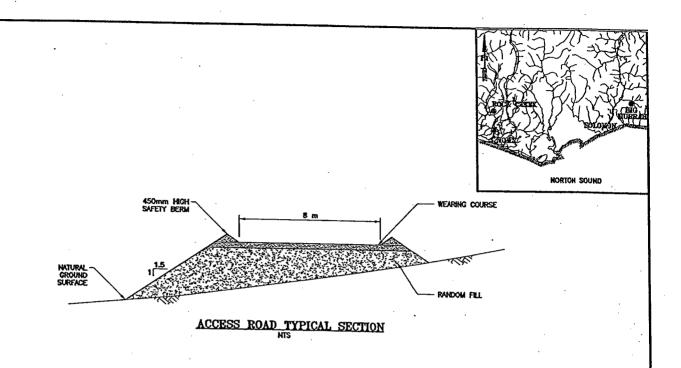
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	ALASKA GOLD COMPANY
PROVECE	ROCK CREEK PROJECT

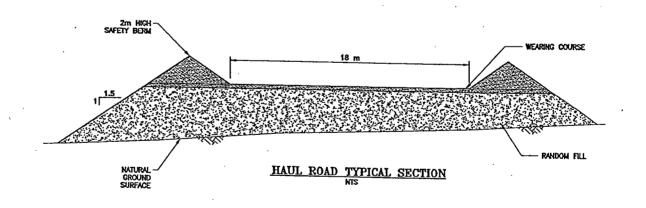
CROSS SECTION OF A TYPICAL UTILITY POLE SETTING

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	U.S. ARMY CORPS OF ENGINEERING 404 PERMIT APPLICATION		
CLIENT	ALASKA GOLD COMPANY		
PROJECT	ROCK CREEK PROJECT		
TITLE	CROSS SECTION OF A TYPICAL BIG HURRAH ROAD FILL		
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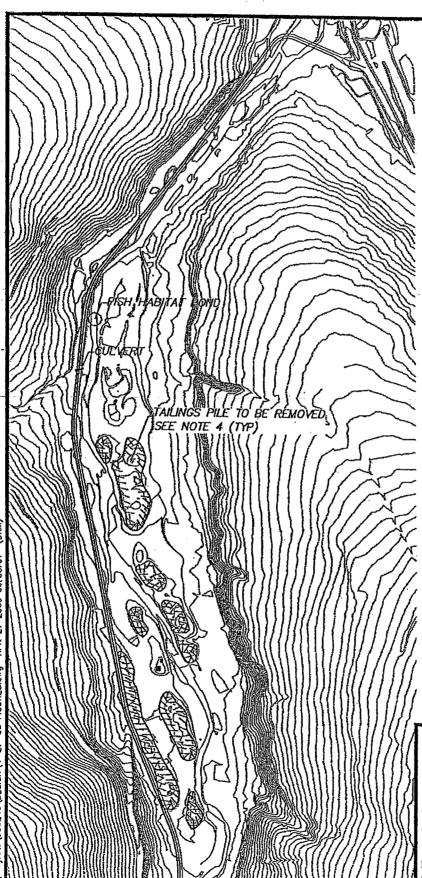
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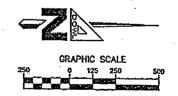
SMITH WILLIAMS CONSULTANTS, INC.
304 Invenee Way South, Suite 690, Englowood, Cohondo 80112
Phone: 303-433-0362 Fax: 303-433-0362

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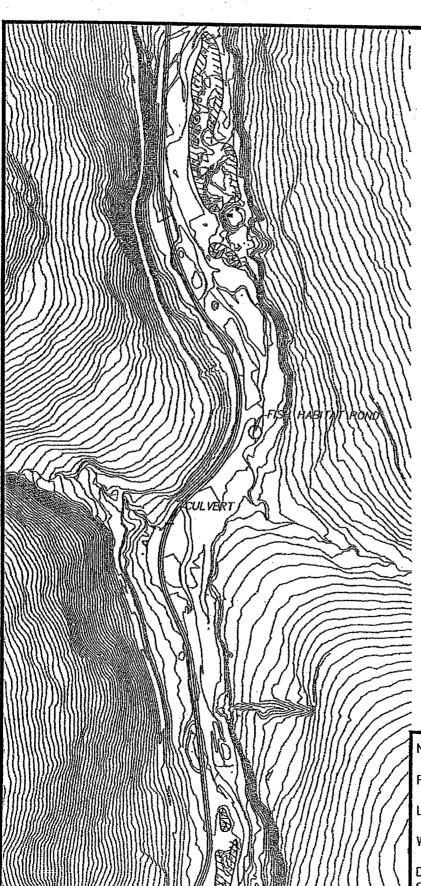


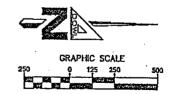
PROJECT: BIG HURRAH CREEK

LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

DATE: 04/27/06 SHEET: FIGURE 120





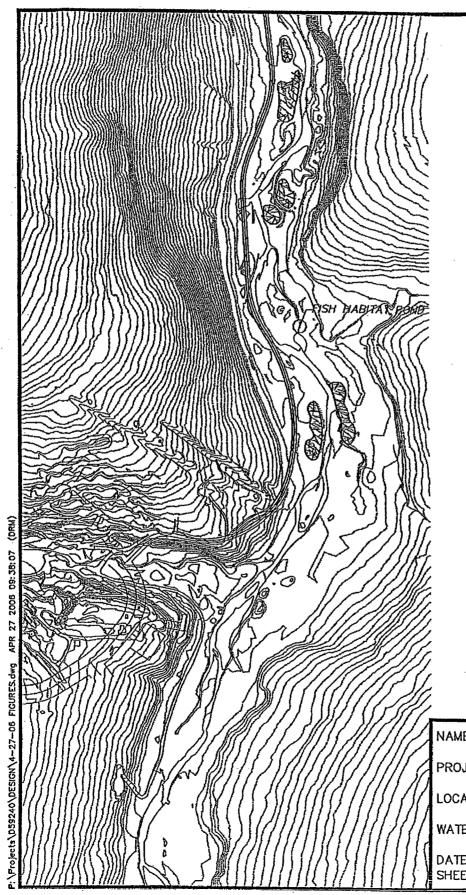


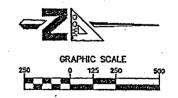
PROJECT: BIG HURRAH CREEK

LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

DATE: 04/27/06 SHEET: FIGURE 12b







PROJECT: BIG HURRAH CREEK

LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

DATE: 04/27/06 SHEET: FIGURE 12c

ASSUMES THAW STABLE GROUND DEPTH MAY INCREASE FOR THAW UNSTABLE GROUND



NAME: BIG HURRAH MINE ACCESS ROAD

PROJECT: BIG HURRAH CREEK

LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

04/27/06 FIGURE 13 DATE: SHEET:

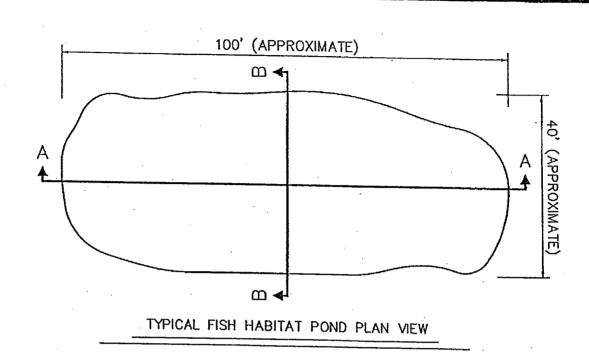


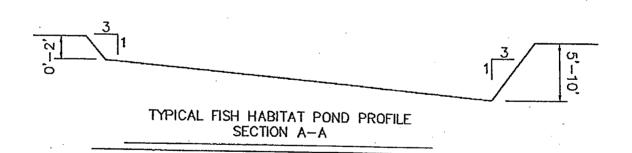
PROJECT: BIG HURRAH CREEK
CULVERT FOUNDATION DETAIL

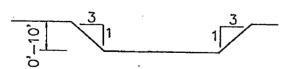
LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

DATE: 04/27/06 SHEET: FIGURE 14







TYPICAL FISH HABITAT POND CROSS SECTION SECTION B-B



NAME: BIG HURRAH MINE ACCESS ROAD

PROJECT: BIG HURRAH CREEK

FISH HABITAT POND DETAIL

LOCATION: NOME, ALASKA

WATERBODY: BIG HURRAH

DATE: 04/27/06 SHEET: FIGURE 15

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER Non-Point Source Pollution Water Control Program FRANK H. MURKOWSKI, GOVERNOR

555 Cordova Street Anchorage, AK 99501-2617 Phone: (907) 269-7564 Fax: (907) 334-2415 TTY: (907) 269-7511 http://www.state.ak.us/dec/

August 9, 2006 Certified Mail 7006-0810-0000-8656-9035

Mr. Douglas Nicholson Alaska Gold Company PO Box 640 Nome, AK 99762

Subject: Rock Cr Alaska Gold Mine

Reference No. POA-2006-742-4 State ID No. AK 0605-05AA

Dear Mr. Nicholson:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation is issuing the enclosed Certificate of Reasonable Assurance for development of a gold mine near Nome, Alaska,

Department of Environmental Conservation regulations provide that any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 - 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Director, Division of Water, 555 Cordova St., Anchorage, AK 99501, within 15 days of the permit decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

James Rypkema Program Manager

Enclosure cc: (with encl.) Jim Wolfe, Corps of Engineers, Anch Mac McLean, DNR/OHMP F&WS Charlotte MacCay, Bristol Environmental

Luke Boles, ADEC Fbks EPA, AK Operations William Ashton, ADEC Anchorage

STATE OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, in accordance with Section 401 of the Federal Clean Water Act and the Alaska Water Quality Standards, is issued to Alaska Gold Company, PO Box 640, Nome, AK 99762 to explore and mine for gold resources. The Rock Creek Mine Project is comprised of two open pit mines, the Rock Creek Mine/Mill Complex located north of Nome in the Snake River watershed and the Big Hurrah Mine located east of Nome in the Solomon River watershed.

The Rock Creek Mine/Mill Complex would consist of a 50 acre open pit gold mine, two non-acid generating development rock stockpiles, a gold recovery plant and a paste tailings storage facility. The process plant site area would include a three stage crushing and screening plant, a crushed ore stockpile, a mill facility, a maintenance shop, an administration and mine dry building, warehouse, explosive storage and fuel storage. The North Development Rock Dump area would contain approximately 4,230,000 cubic yards (cy) of fill in 119 acres of wetlands. The South Development Rock Dump would not be located in wetlands. Three Organic Overburden Stockpile Areas would contain 2,278,450 cy of fill in 57.5 acres of wetlands. The site Stormwater diversion channels would be constructed in 23 acres of wetlands with approximately 131, 449 cy of fill. The Class V Injection System-Wells would be constructed in 7.5 acres of wetlands with approximately 32,700 cy of fill. The Class V Injection System-Infiltration Gallery would be constructed in 8.5 acres of wetlands with 60,000 cy of fill. The Tailings Storage Facility would be constructed in 94 acres of wetlands and contain 6,212,765 cy of fill and be used to store mill tailings and act as a Stormwater runoff buffer. The access road and onsite haul roads would be constructed in 49.5 acres of wetlands with 510,101 cy of fill material. The Infiltration Zone Access Roads would be constructed in 6 acres of wetlands with 45,778 cy of fill material. The Plant Area would be constructed in 44.5 acres of wetlands with 117,716 cy of fill material.

The Big Hurrah Mine facilities would include a 22 acre main pit and a 3 acre satellite pit, a non-acid generating development rock stockpile, a temporary potentially acid generating development rock stockpile that would be backfilled into the pit at closure, a run-of-mine ore stockpile, a truck maintenance shop, a small administration and mine dry building, explosive storage and diesel fuel storage. The On-Site Access Road/Haul Roads would be constructed in 5 acres of wetlands with 78,477 cy of fill material.

The proposed Rock Creek project is located in Sections 14, 15, and 22-26 T. 10 S., R 34 W., Kateel River Meridian, approximately 7 miles northwest of Nome, Alaska. The proposed Big Hurrah project is located in Sections 2-5, 10 and 11, T. 10 S., R. 28 W., Kateel River Meridian, approximately 50 miles northeast of Nome, Alaska.

Public notice of the application for this certification was given as required by 18 AAC 15.180.

Water Quality Certification is required under Section 401 because the proposed activity will be authorized by a Corps of Engineers permit, reference number POA-2006-742-4, and a discharge may result from the proposed activity.

Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act and the Alaska Water Quality Standards, 18 AAC 70, provided that the following alternative measures are adhered to.

- 1. Petrochemical and other hazardous substance spill cleanup equipment shall be available on site. Cleanup materials such as sorbent pads and drip pans shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze or other pollutant spills as a result of construction activities.
- 2. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products. Fuel storage and handling activities for earth moving equipment must be sited and conducted so there is no petroleum contamination of surface runoff and water bodies.
- 3. Dredged or fill material shall be placed so that it is stable, meaning after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc. Material shall not leach harmful or toxic substances into streams or wetlands.
- 4. All surface runoff from areas disturbed during the stripping of overburden or moving of existing overburden piles shall be diverted to existing mine cuts or stabilized areas, such as settling ponds, using berms, diversion channels, or brush barriers. Surface runoff containing sediment from disturbed areas shall not be discharged without treatment into any water body. All soil disturbing construction operations that would increase turbidity of surface waters to levels that would violate Alaska Water Quality Standards shall be temporarily suspended if on-site monitoring demonstrates said violations.

- 5. During the work on the fish enhancement/material site development, construction equipment shall not be operated below the ordinary high water mark if equipment is leaking fuel, oil, hydraulic fluid, or any other hazardous material. Tracked or wheeled equipment shall not be operated in the water. Equipment shall be inspected on a daily basis for leaks. If leaks are found the equipment shall not be used and pulled from service until the leak is repaired.
- 6. For culverts which carry waters that are discharging or will discharge into fish-bearing waters, installation shall not occur within the flowing waters of the stream. Culvert installation techniques such as stream diversion, dam and pump, or stream fluming shall be incorporated into the installation activity to insure that silt laden water is not carried into sensitive fish habitat.
- 7. Any disturbance in the stream banks or streambed areas shall be stabilized to prevent erosion and resultant sedimentation of the water body during and after operations. Any disturbed areas shall be re-contoured and revegetated as soon as practicable.
- 8. Monitoring of the adequacy and effectiveness of Stormwater Management Best Management Practices (BMP) shall be conducted and reported with the weekly visual monitoring required in the Waste Management Permit 2003-DB0051, Section 1.8 (Monitoring). If a BMP is not working properly (such as there is sediment runoff) corrective measures shall be implemented as soon as practicable.
- 9. Prior to removal of new overburden and prior to placement of fill, a silt fence or similar structure shall be installed on a line parallel to and within 5 feet of the toe of slope for the overburden and spoils within all wetland areas containing standing water connected to a water body or where the toe of slope is within 25 feet of a water body. The structure shall remain in place until the fill has been fully stabilized, contained in another manner, or used for reclamation of the mine site.
- 10. Silt and sediment from the site excavation and fill materials may not enter wetlands or waters outside the necessary working area. Site preparation, excavation, fill placement, and construction activities must be conducted to prevent, minimize and contain the generation of silt and sediment that could be carried off-site by surface runoff. If silt and sediment are evident in standing or flowing water outside the excavation and fill area, Alaska Gold Company, or its contractors, shall apply appropriate control and containment measures. These measures may include fabric fences, straw bales, other effective filters, matting, settling ponds, or avoiding work during heavy precipitation.

- 11. A minimum 50 foot wide, vegetated buffer zone should be maintained between a snow storage area and any surface water bodies. This distance could be decreased if adequate stormwater/sediment catchment basins, coarse gravel berms, or sediment traps/barriers/filters are built to reduce impacts on surface water bodies from snowmelt that may potentially run off from these sites.
- 12. Accumulated trash and debris need to be removed from the snow storage area in the spring as they become visible when the snow melts. This may need to be done several times over the course of the summer as the snow pile continues to melt. Wastes and litter that become uncovered as the snow melts need to be picked up before off-site migration of the waste becomes a problem.
- 13. Natural drainage patterns must be maintained, to the extent practicable, without introducing ponding or drying. Control of drainage must be provided by appropriate ditching, culverts, and other measures. Drainage ways must be vegetated to help control the transport of fine sediments.
- 14. Organic overburden soil stockpiles shall be stabilized as soon as practicable after placement to minimize erosion, sediment runoff or dust generation.
- 15. At permanent closure of the mill process at Rock Creek the organic overburden soil stockpiles (# 1, 2, and 3) shall be revegetated after the soil is removed for the soil cover system installed on the Tailings Storage Facility and any other reclamation required for closure.
- 16. Capping of the development rock dumps with topsoil/organics and revegetation, or other state approved mitigation measures, shall be required at or after mine closure on the North or South Development Dump if the water quality criteria are not met in the surface water monitoring points LNDC or LSDC or seep monitoring points described in the Monitoring Plan submitted May 31, 2006 by Alaska Gold Company, Inc. The applicant shall address this potential requirement in the updated reclamation and monitoring plans submitted in accordance with the Waste Management Permit 2003-DB0051, Section 1.12 (Permanent Closure).

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18AAC15.100).

Date August 9, 2006

James Rypkema Program Manager

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF PROJECT MANAGEMENT AND PERMITTING ALASKA COASTAL MANAGEMENT PROGRAM

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July 31, 2006

Douglas C. Nicholson NovaGold Alaska, Inc. Alaska Gold Company P.O. Box 640 Nome, AK 99762

Charlotte MacCay
Bristol Environmental Engineering and
Services Corporation
111 W. 16th Avenue, Suite 301
Anchorage, AK 99501

Subject:

Rock Creek and Big Hurrah Creek/Alaska Gold Company/Open Pit Gold Mines

State ID NO. AK 0605-05AA Final Consistency Response

Dear Mr. Nicholson and Ms. MacCay:

The Office of Project Management & Permitting (OPMP) has completed coordinating the State's review of your proposed project for consistency with the Alaska Coastal Management Program (ACMP). OPMP has developed the attached final consistency response based on reviewers' comments.

Based on an evaluation of your project by the Alaska Departments of Fish and Game and Natural Resources and the Bering-Straits-CRSA, OPMP concurs with your certification that the project is

"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans."

consistent with the ACMP and affected coastal district's enforceable policies. This concurrence is also based on your adoption of alternative measures to achieve consistency with the ACMP enforceable policies.

This is the final consistency decision for your project.

This consistency response is only for the project as described. If you propose any changes to the approved project, including its intended use, prior to or during its siting, construction, or operation, you must contact this office immediately to determine if further review and approval of the revised project is necessary.

By copy of this letter, I am informing the U.S. Army Corps of Engineers of OPMP's final finding.

If you have any questions regarding this process, please contact me at 907-269-0029 or email jim_renkert@dnr.state.ak.us.

Sincerely,

Jim Renkert

Project Review Coordinator

Enclosures

cc: Robert McLean, DNR/OHMP, Fairbanks

William Ashton, DEC/Anchorage

Morris Nassuk, BSCRSA, Koyuk, AK

Jim Dory, City of Nome

Irene Anderson, Bering Straits Native Corporation, Nome Robert Fagerstrom, Sitnasuak Native Corporation, Nome

Roselynn Smith, DNR, Fairbanks

Ellen Simpson, ADF&G, Anchorage

Mark Fink, ADF&G, Anchorage

Patricia Jones, Fairbanks

Margie Goatley, DNR/SHPO, Anchorage

Chuck Howe, DOT/PF, Fairbanks

Jim Wolfe, COE Regulatory Branch

Don Rice, COE Regulatory Branch

Trustees for Alaska, Anchorage

Meg Schlesinger, Northern Alaska Environmental Center

Eric Uhde, Alaska Center for the Environment

Dave Chambers, Center for Science in Public Participation, Bozeman, MT

Glen Yankus, NPS, Anchorage

Loretta Bullard, Kawerak, Nome

Rose Fosdick, Kawerak Reindeer Herders Association, Nome

Nome Common Council, Nome

Nome Eskimo Community I.R.A. Council, Nome

Andrew McCarthy, National Park Service

Gina Shirey-Potts, DNR/OPMP, Juneau

Brevig Mission City Council, Brevig Mission

Brevig Mission Native Corp., Brevig Mission

Brevig Mission Traditional Corp., Brevig Mission

Solomon IRA Council, Nome

Solomon Native Corporation, Nome

Teller City Council, Teller

Teller Native Corporation, Teller

Teller Traditional Council, Teller

Council IRA Council, Nome

Council Native Corporation, Nome

Mary's Igloo Native Corporation, Teller

Mary's Igloo Traditional Council, Teller

Nome Chamber of Commerce

Victoria Erickson, ADL/Nome

Leah Senungetuk, Nome Job Center

Leo Rasmussen, USDA / Nome

Clinton White, UAF / Nome

Derrick Leedy, Nome

Austin Ahmasuk, Nome

ALASKA COASTAL MANAGEMENT PROGRAM FINAL CONSISTENCY RESPONSE CONCURRENCE

DATE ISSUED: JULY 31, 2006

PROJECT TITLE: ROCK CREEK MINE PROJECT

STATE ID. NO.: AK 0605-05AA

AFFECTED COASTAL RESOURCE DISTRICT(S): BERING STRAITS CRSA

PROJECT DESCRIPTION AND SCOPE OF THE PROJECT SUBJECT TO CONSISTENCY REVIEW: The Rock Creek Mine Project is comprised of two mine projects: 1) the Rock Creek Mine/Mill Complex located north of Nome in the Snake River watershed, and 2) the Big Hurrah Mine located east of Nome in the Solomon River watershed. A mill will be constructed at the Rock Creek site to process ore from both sites at a rate of approximately 7,000 tonnes per day. Ore from the Big Hurrah site will be trucked to the Rock Creek site for processing. The projected mine life is 4-5 years. Standard drilling and blasting techniques will be used to break the ore. The blasted ore and development rock will be hauled to the processing plant, rock dumps or stockpile area.

Alaska Gold Company (AGC) is undertaking the permitting process based on the economic resource as defined by the core drill-hole data. According to AGC "if additional resources are substantiated permits will require modifications to address an expanded pit design and longer mine life."

The Rock Creek Mine/Mill Complex will consist of an open pit gold mine, two non-acid generating development rock stockpiles, a gold recovery plant, and a paste tailings storage facility. Ore milling rates will be about 2.5 million tonnes per year (6,850 tonnes per day), while development rock stripping volumes will be in the range of 4 to 5 million tonnes per year (11,000 to 13,700 tonnes per day). The process plant site area will include: a three stage crushing and screening plant, a crushed ore stockpile, a mill facility, a maintenance shop, an administration and mine dry building, warehouse, explosive storage and fuel storage.

The Big Hurrah Mine facilities will include: an open pit gold mine, a non-acid generating development rock stockpile, a temporary potentially acid generating development rock stockpile that will be backfilled into the pit at closure, a run-of mine ore stockpile, a truck maintenance shop, a small-administration and mine dry building, explosive storage and diesel fuel storage.

The ore mining rate will be about 550,000 tonnes per year (1,500 per day) and the stripping rate will be about 1.8 million tonnes per year (5,000 tonnes per day). Ore will be stockpiled and delivered to the Rock Creek Mill at an average rate of about 365,000 tonnes per year (1000 tonnes per day). Mine operations will likely only occur 3 to 6 months per year, but could be extended to a year round basis.

Scope of Project to be Reviewed

Except for the activities subject to DEC authorizations the project subject to this consistency review is as follows:

I. Rock Creek

The project subject to this consistency review at the Rock Creek site is to discharge approximately 13,618,959 cubic yards (cy) of fill into approximately 409.5 acres of wetlands.

Proposed Facility	Wetland Fill Volume	Wetland Acreage
Rock Stockpile	4,230,000	119
Soil Stockpile	·	
1	1,602,240	41
2	15,695	1.5
3	660,515	15
Water Management Systems	·	
Stormwater Diversion Channels	131,449	23
Class V Injection System – wells	32,700	7.5
Class V Injection System - Gallery	60,000	8.5
Tailing Storage Facility (TSF) Fill Quantities		
TSF Embankment	6,212,765	94
Mine/Mill Complex Roads		
Access road and on-site haul roads	510,101	49.5
Infiltration Zone access roads	45,778	6
Plant area general fill	117,716	44.5
Total	13,618,959	409.5

Upland fill at Rock Creek will include 9,277,268 cy on 192 acres. The footprint of wetlands and uplands at Rock Creek is 601.5 acres and will contain a total of 36,790,227 cy of fill. In addition the open pit mine has a footprint of 50 acres.

II. Big Hurrah Creek

The project subject to this consistency review at the Big Hurrah site is to discharge approximately 78,477 cubic yards (cy) of fill into approximately 5 acres of wetlands. The wetland fill is for the construction of the on-site access road/haul road.

Proposed Facility	Wetland Fill Volume	Wetland Acreage
Mine Roads. On-site access	72 477	5
road and on-site haul roads	70,177	
Total	78,477	. 5

The footprint area for activities at Big Hurrah, including wetlands and upland areas, is 154.5 acres and will contain a total of 4,447,148 cy of fill. In addition the open pit mine has a footprint of 25 acres.

The applicant has agreed to incorporate the following alternative measures into the project proposal:

- 1. The State Office of History and Archaeology must receive a copy of the Big Hurrah archaeological report with findings from the U.S. Army Corps of Engineers.
- If the Rock Creek project cannot avoid NOM-129 (cabin, collapsed bunkhouse, sledge)
 the applicant must determine if the impacts will cause an adverse affect to the site. These
 findings must be received and commented on by the State Office of History and
 Archaeology.

CONSISTENCY STATEMENT: OPMP concurs with the consistency certification submitted by by Bristol Environmental and Engineering Services as the agent for Alaska Gold Company.

AUTHORIZATIONS: State agencies shall issue the following authorizations within five days after OPMP issues the final consistency determination that concurs with the applicant's consistency certification, unless the resource agency considers additional time to be necessary to fulfill its statutory or regulatory authority.

I. Rock Creek Mine/Mill Site

U.S. Army Corps of Engineers (COE)
Section 404 Permit No. POA-2006-742-4

Alaska Department of Environmental Conservation (ADEC)
401 Certificate of Reasonable Assurance

Alaska Department of Natural Resources (DNR)
Division of Mining, Land and Water (DMLW)

Reclamation Plan Approval F20069578

Temporary Water Use Permits non F2006 00, F2006 10, F2

Temporary Water Use Permits nos. F2006-09, F2006-10, F2006-11, F2006-12

II. Big Hurrah Mine

U.S. Army Corps of Engineers (COE)
Section 404 Permit No. POA-2006-742-4
Alaska Department of Environmental Conservation (ADEC)
401 Certificate of Reasonable Assurance

Alaska Department of Natural Resources (DNR)
Division of Mining, Land and Water (DMLW)
Reclamation Plan Approval F20069578
Temporary Water Use Permit nos. F2006-13, F2006-14
Office of Habitat Management & Permitting (OHMP)
Fish Habitat Permit (Big Hurrah Creek)

The Department of Environmental Conservation (DEC) will review any activities subject to DEC permits, certifications, approvals, and authorizations for consistency with 11 AAC 112.310. The issuance of the permits, certifications, approvals, and authorizations by DEC establishes consistency with 11 AAC 112.310 for those specific activities.

Please note that, in addition to their consistency review, State agencies with permitting responsibilities will evaluate this proposed project according to their specific permitting authorities. Agencies will issue permits and authorizations only if they find the proposed project complies with their statutes and regulations in addition to being consistent with the coastal program. An agency permit or authorization may be denied even though the State concurs with the ACMP. Authorities outside the ACMP may result in additional permit/lease conditions. If a requirement set out in the project description (per 11 AAC 110.260) is more or less restrictive—

than a similar requirement in a resource agency authorization, the applicant shall comply with the more restrictive requirement. Applicants may not use any State land or water without Department of Natural Resources (DNR) authorization.

PUBLIC COMMENTS: Written public comments regarding ACMP consistency were received from Nome resident Austin Ahmasuk, Kawerak Inc., and the Kawerak Reindeer Herders Association (submitted by Kawerak, Inc. on the reindeer herders' association behalf).

I. Austin Ahmasuk of Nome provided detailed personal comments regarding the proposed project activities and its consistency under the following ACMP statewide standards: 11 AAC 112.270 Subsistence; 11 AAC 112.280 Transportation Routes and Facilities; 11 AAC 112.300 Habitats; and 11 AAC 112.900 Sequencing process to avoid; minimize or mitigate.

Under 11 AAC 112.270 Subsistence, Mr. Ahmasuk raised concerns that the project would negatively impact Nome and Solomon area subsistence uses. The principle impact would be aquatic resources but there also may be impacts to terrestrial resources. Concerns regarding subsistence at Big Hurrah included: 1) the proposed fish pools provide minimal habitat improvement, 2) the potentially acid generating rock would impact aquatic resources, 3) sedimentation will reduce aquatic habitat and 4) there is no fine detail on how sediment will be controlled.

Concerns regarding Subsistence at Rock Creek included: 1) The Snake River watershed is an important subsistence resource. 2) beaver are not included as one of the wildlife resources in the Rock Creek and Snake River watersheds, 3) there is potential to expose cyanide in free and converted form, 4) paste tailing failure could impact the Snake River watershed with non-toxic ferrocyanide that decomposes to release free cyanide, 5) Weak Acid Dissociable (WAD) cyanide complexes, 6) acid generating rock piles need to have increased monitoring, 7) agency monitoring should be increased, 8) sampling results should be provided to all interested parties, 9) there is no detail on how fine sedimentation will be controlled.

Under 11 AAC 112.300 Habitats, Mr. Ahmasuk's had concerns about activities at Rock Creek and Big Hurrah. Factors that he believed affected overall consistency included: 1) sedimentation, 2) cyanide releases, 3) acidification of surface water, 4) geochemical changes to surface water, and 5) aquatic life biodiversity impacts.

At Big Hurrah he had concerns about stream crossing, removal of historic tailings, vegetative cover and monitoring. Also at Big Hurrah concerns regarding: 1) sampling schemes, 2) Humidity Cell Testing (HCT), 3) iron carbonate buffering, 4) long term testing for Neutralizing Potential and Acid Generating Potential, 5) lack of information on Potential Acid Generating and Non-Acid Generating material, 6) acid-mine-drainage and cyanide complexation impacts, 7)

oxidation of stockpiled rock.

Regarding the proposed operational and closure plan he felt that it should address the following:

1) Water quality impacts, 2) Energy Source impacts, 3) Biotic interaction impacts, 4) Flow regime impacts, 5) Habitat structure impacts.

He also had concerns at Rock Creek, the Snake River, Big Hurrah Creek, and the Solomon River regarding impacts to birds and fish.

Mr. Ahmasuk's comments and concerns regarding the consistency with the statewide standards for subsistence and habitats were reviewed by OPMP to determine if they constituted an inconsistency with the referenced ACMP standards. OPMP consulted with OHMP, the DNR Division of Mining, Land and Water, ADEC and the applicant regarding the concerns. OPMP determined that the concerns are addressed in the overall design of the project, as submitted by AGC, or through the terms and conditions that will be included in the required agency permits and authorizations.

Information regarding the overall design of the project, project plans and the required agency permits and authorizations mentioned above can be found in the following documents. The Rock Creek Plan of Operations (Volumes 1-8) submitted by AGC contains a detailed project design and plan. Pursuant to Alaska Statute Chapter 27.19 (AS 27.19), and the Alaska Administrative Code (11 AAC 97) as applicable to private land, DNR requires a mining reclamation plan. The Rock Creek Gold Mine Project Reclamation Plan can be found in Volume 4 of the Plan of Operations. Water quality is a major concern for the project. Water quality and waste rock monitoring will be done in accordance with AGC's Rock Creek Project Operational and Closure Monitoring Plan, Volume 7 of the Plan of Operations. This plan must be approved by ADEC as part of the Waste Management Permit. Other agency permits and authorizations include the DNR Temporary Water Use Permits, the OHMP Fish Habitat Permits, the ADEC Waste Management Permit (which includes the Monitoring Plan), the ADEC 401 Certificate of Reasonable Assurance and the COE Section 404 permit.

Please note that many of the concerns that were listed relate to water quality, which is regulated by ADEC. ADEC reviews any activities subject to DEC permits, certifications, approvals, and authorizations for consistency with ACMP Standard, 11 AAC 112.310, Air, Land and Water Quality. Consistency with this standard is established when DEC issues or waives the required authorization or certification.

Under 11 AAC 112.280 Transportation Routes and Facilities, Mr. Ahmasuk's states that although the proposed activity may be consistent with the ACMP he has concerns regarding: 1) safety, especially at Safety Sound (Nuuk) and, 2) dust control. He requests that a speed limit,—

mitigation of road damage, a request to see any copies of proposed mitigation and that alternatives to calcium chloride used in dust control be considered. Jurisdiction of these concerns and recommendations is under the authority of the Alaska Department of Transportation and Public Facilities (ADOT). AGC has stated that it is willing to work with ADOT on dust control and maintenance issues. According to ADOT calcium chloride is a standard dust control method used statewide.

Mr. Ahmasuk also raised concerns under 11 AAC 112.900. This regulation is a General Provision of the ACMP and refers to the ACMP process, not a specific ACMP standard. Under 11 AAC 112.900 development projects are required to avoid, minimize or mitigate impacts under a sequencing process. According to the document <u>Alaska Coastal Management Plan, As Amended, Office of Project Management and Permitting, December 16, 2004, Chapter 5, Subsection 5.2.13</u>, the ACMP cannot be viewed as a 'no net loss' program. The 1979 Final Environmental Impact Statement states that 'complete nondegradation' is an impossible standard to meet, and [] in certain instances tradeoffs between natural values and other human values will have to be made....' The complete avoidance of impacts with a mining operation is not practicable; by definition mining takes away part of the mineral resource.

Because complete avoidance is not practicable the proposed project sequences from avoidance to, 1) minimizing adverse impacts to the maximum extent practicable and 2) mitigation where appropriate and practicable. According to AGC it has incorporated minimization and mitigation throughout the development and design of the project. A discussion of how the project has minimized impacts is in the AGC Environmental Information Document (EID) Section 6.0 Alternatives Analysis. Some of the minimization and mitigation practices referenced include avoiding wetlands where feasible, especially higher value wetlands, minimizing the overall footprint of the mine and facilities at both Rock Creek and Big Hurrah, and producing paste tailing instead of conventional tailing. The project requires no new quarries or material sites as all road and foundation fill will use mine development rock or historical tailings. Organic material will be stockpiled for use in reclamation and restoration of disturbed areas. The access road at Big Hurrah is being designed to impact the minimal amount of the stream and to enhance fish habitat. The development of a pit lake at both mine sites after closure is designed to provide over-wintering habitat for fish. Additional measures include diverting surface water and groundwater around the mine and minimizing the amount of chemicals required to process the оге.

II. Comments from the Kawerak Reindeer Herders Association were submitted under ACMP statewide standard 11 AAC 112.300 Habitats. Although the Reindeer Herders Association did not find the project inconsistent with the ACMP standards or enforceable policies it did raise concerns that reindeer habitat may be impacted by the mines, specifically the potential release by the mining operations of heavy metals and fugitive dust in the transportation-

corridor. The association recommends that habitat be protected by:

- Controlling the dust caused by increased ore truck traffic
- Placing covers over the rock and ore being transported
- Continually testing to identify the presence of cadmium, heavy metals and other toxins
- Having a plan in place to stop contamination

Transportation issues regarding truck traffic are under the jurisdiction and authority of the Alaska Department of Transportation and Public Facilities. AGC has stated that it is willing to work with ADOT on dust control and maintenance issues. The ore that is being proposed for transport from The Big Hurrah ore will be drilled and blasted but not crushed or concentrated through a milling operation. According to DMLW the large particle size and the low metal concentrations of the broken ore being transported minimizes the amount and risk of dust and therefore eliminates the need for covered truck beds. The large ore size also reduces the likelihood of contaminants being dispersed during transport.

III. Comments from Kawerak, Inc. were submitted under ACMP statewide standards 11 AAC 112.270 Subsistence; 11 AAC 112.280 Transportation Routes and Facilities; 11 AAC 112.300 Habitats; and 11 AAC 112.900 Sequencing process to avoid, minimize or mitigate.

Although Kawerak, Inc. did not find the project inconsistent with the ACMP standards or enforceable policies it did have concerns and also provided recommendations.

Subsistence concerns were raised regarding the use of cyanide, the effects of acid, the release of arsenic and the sedimentation of streams and aquatic habitat. Kawerak, Inc. recommendations included monitoring the Snake River and Solomon River watersheds to detect changes in water chemistry, ph, cyanide, arsenic, and turbidity. Kawerak also recommends that the mine have steps and procedures in place to quickly mitigate any changes detected by the monitoring. They also request regular visits from permitting enforcement officers and that all monitoring data be provided to the public.

Habitat concerns were raised that the proposed activities may be inconsistent with the statewide habitat standard. Stream sedimentation is the biggest concern. An extensive monitoring program is the primary recommendation. Kawerak also recommends that a plan be developed to address the biotic and habitat integrities and how each will be monitored throughout the life of the mine.

OPMP determined that the subsistence and habitat concerns are being addressed in the overall design of the project, as submitted by AGC, or through the terms and conditions that will be included in the required agency permits and authorizations.

Transportation Routes and Facilities concerns were also raised along the section of the road that

passes through the Safety Sound (Nuuk) subsistence area. Specifically concerns were raised regarding the speed of ore trucks, safety and increased dust. Recommendations included implementing a speed limit, reconsideration of the use of calcium chloride for dust control, and covering the loads of all ore truck. Jurisdiction of these concerns and recommendations are under the authority of the Alaska Department of Transportation and Public Facilities. AGC has stated that it is willing to work with ADOT on dust control and maintenance issues.

Please see the comments in I. above regarding 11 AAC 112.900 Sequencing process to avoid, minimize or mitigate.

APPEAL: This final consistency response is a final administrative order and decision under the ACMP and for purposes of Alaska Appellate Rules 601-612. Any appeal from this decision to the superior court of Alaska must be made within thirty (30) days of the date this determination is issued.

ENFORCEMENT: Pursuant to 11 AAC 110.260(e) and 110.445(e), if after receiving this final consistency response, the applicant fails to implement an adopted alternative measure, or if the applicant undertakes a project modification not incorporated into the final determination and not reviewed under 11 AAC 110.800-11 AAC 110.820, State resource agency may take enforcement action according to the resource agency's statutory and regulatory authorities, priorities, available resources, and preferred methods.

ADVISORIES:

Please be advised that although the OPMP concurs with your certification that the project is consistent with the ACMP, you are still required to meet all applicable State and federal laws and regulations. This consistency finding may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with other applicable laws and regulations.

If the proposed activities reveal cultural or paleontological resources, please stop any work that would disturb such resources and immediately contact the State Historic Preservation Office (907-269-8720) and the U.S. Army Corps of Engineers (907-753-2712) so that consultation per section 106 of the National Historic Preservation Act may proceed.

Final Consistency Response Prepared By: Jim Renkert, Project Review Coordinator 550 W. 7th Ave., Suite 1660 Anchorage, AK 99501 (907)269-0029

Tim	Renke	A
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July 31, 2006

Date

ACMP CONSISTENCY EVALUATION

Pursuant to the following evaluation, the project as proposed is consistent with applicable ACMP statewide and affected coastal resource district enforceable policies (copies of the policies are available on the ACMP web site at http://www.alaskacoast.state.ak.us).

STATEWIDE ENFORCEABLE POLICIES

11 AAC 112.200. Coastal development

- a) In planning for and approving development in or adjacent to coastal waters, districts and state agencies shall manage coastal land and water uses in such a manner that those uses that are economically or physically dependent on a coastal location are given higher priority when compared to uses that do not economically or physically require a coastal location.
- (b) Districts and state agencies shall give, in the following order, priority to
 - (1) water-dependent uses and activities:
 - (2) water-related uses and activities; and
 - (3) uses and activities that are neither water-dependent nor water-related for which there is no practicable inland alternative to meet the public need for the use or activity

Evaluation:

- b) The proposed project involves uses and activities which are neither water-dependent nor water related for which there is no feasible and prudent inland alternative to meet the public need for use or activity.
- c) OPMP defers to the United States COE to interpret compliance with the referenced standards.

11 AAC 112.210. Natural hazard areas

Evaluation: According to the project consultant, Bristol Environmental and Engineering, the project has been sited and designed to minimize property damage and loss of life as a result of seismic or other natural hazards.

11 AAC 112.220. Coastal access

Evaluation: N/A

11 AAC 112.230. Energy facilities

Evaluation: N/A

11 AAC 112.240. Utility routes and facilities

Evaluation: N/A

11 AAC 112.250. Timber harvest and processing

Evaluation: N/A

11 AAC 112.260. Sand and gravel extraction

Evaluation: N/A

11 AAC 112.270. Subsistence

Evaluation: No comments were received from the Bering Straits CRSA or state agencies regarding subsistence. The mine sites are on private land.

11 AAC 112.280. Transportation routes and facilities

Transportation routes and facilities must avoid, minimize or mitigate

- (1) alterations in surface and ground water drainage patterns;
- (2) disruption in known or reasonably foreseeable wildlife transit; and
- (3) blockage of existing or traditional access.

Evaluation: No comments were received from the district or state agencies regarding transportation routes or facilities for the proposed project. Alterations in surface and ground water drainage patterns on the Big Hurrah road are being addressed in the OHMP Fish Habitat Permit.

11 AAC 112,300. Habitats

The Habitat Standard requires that habitats in the coastal area be managed so as to avoid, minimize, or mitigate significant adverse impacts to habitat. In addition, (3) wetlands must be managed to avoid, minimize, or mitigate significant adverse impacts to water flow and natural drainage patterns. Also, (8) rivers, streams and lakes and the active floodplains and riparian management areas of those rivers, streams, and lakes must be managed to avoid, minimize, or mitigate significant adverse impacts to:

- (A) natural water flow,
- (B) active floodplains; and
- (C) natural vegetation within riparian management areas.

Evaluation: At both sites the project has been designed to avoid most impacts to aquatic resources. Zero discharge to surface water from the tailing facility will be maintained during mine operations. Surface waters will be bypassed around the mine site. Upon closure, the applicant has proposed measures to ensure that aquatic life water quality standards will be met. The project requires a Title 41 Fish Habitat Permit from the Office of Habitat Management and Permitting (OHMP) for the portion of the project at the Big Hurrah site. OHMP will monitor fish tissue metals levels both during active mining and post-mining closure to determine whether fish are accumulating metals and whether additional treatment measures are necessary. Maintenance of stream characteristics at Big Hurrah include culvert installation, road relocation, relocating willows and alders, constructing two fish ponds, and reestablishing a single thread channel.

11 AAC 112.310. Air, land, and water quality.

Evaluation: Notwithstanding any other provision of this chapter, the statutes and regulations of the Department of Environmental Conservation with respect to the protection of air, land, and water quality identified in AS 46.40.040(b) are incorporated into the program and, as administered by that department, constitute the exclusive components of the program with respect to those purposes. (Eff. 7/1/2004, Register 170)

11 AAC 112.320. Historic, prehistoric, and archeological resources.

Evaluation: The State Office of History and Archaeology has identified the project area as important due to the high potential for cultural remains. The applicant has agreed to adopt the alternative measures that have been proposed by the State Historic Preservation Officer, Office of History and Archaeology.

The applicant has been advised to contact DNR/SHPO and the U.S. Army Corps of Engineers and the Alaska State Troopers should a site of cultural or historical significance be suspected or revealed and to stop any work that would disturb any resources.

AFFECTED COASTAL RESOURCE DISTRICT ENFORCEABLE POLICIES

Bering Straits CRSA Enforceable Policies

A. Subsistence

- A-1 Subsistence Use
- A-3 Access
- A-5 Impact Research

see evaluation for 11 AAC 112.270 and 11 AAC 112.300

B. Habitat and Biological Resource Protection

- B-1 Habitat Alteration
 - B-2 Habitat Maintenance
 - B-5 Wetlands and Tideflats
 - B-9 Rivers, Lakes, and Streams
 - B-10 Upland Habitats
 - **B-11 Instream Flow**
 - B-12 Fish Passage
 - B-13 Maintenance of Stream Characteristics
 - B-14 Use of Explosives
 - B-15 Water Intake Structures
 - B-16 In-water Facilities and Structures

see evaluation for 11 AAC 112.300 and 11 AAC 112.270

C. Air, Land and Water Quality

- C-1 State and Federal Regulations
- C-2 Water Quality Standards
- C-3 Environmental Protection Technology
- C-6 Cumulative Impacts
- C-7 Refuse Disposal
- C-9 Storage of Petroleum and Petroleum Products
- C-11 Siltation and Sedimentation
- C-12.3 Discharge of Drilling Muds, Cuttings and Production Waters see evaluation for 11 AAC 112.310

- D. Historic, Prehistoric and Archaeological Sites
 - D-2 Cultural Resource Areas
 - **D-3** Traditional Activities
 - D-5 Removal of Artifacts
 - D-6 Cultural Resource Orientation see evaluation for 11 AAC 112.320
- E. Geophysical Hazards
 - E-1 Design and Siting Criteria
 - E-5 Hazards
 - E-6 Riverine Flooding
 - E-7 Permafrost

see evaluation for 11 AAC 112.210

- F. Coastal Development
 - F-1 Water-Dependent and Water Related Activities
 - F-2 Mitigation
 - F-9 Completion of Use
 - F-11 Compatibility
 - F-12 Compliance Monitoring see evaluation for 11 AAC 112.200
- G. Mining and Mineral Processing
 - G-5 Overburden Disposal
 - G-6 Reclamation and Restoration
- I. Transportation and Utility Systems
 - I-2 Facility Design, Construction and Maintenance
 - I-3 Siting and Scheduling
 - I-6 Electric Transmission Facilities see evaluation for 11 AAC 112.240

Evaluation: The Bering Straits CRSA did not provide OPMP with ACMP consistency comments for this particular project. OPMP must assume that the District had no substantive comments on the Rock Creek Mine Project.