

**STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND & WATER  
Water Resources Section  
Southeast Regional Office**

**Finding and Determination  
pursuant to the Alaska Water Use Act  
AS 46.15.080**

**LAS 24432  
Coeur Alaska, Kensington Mine, Johnson Creek Water Right Application**

**Pending Action:**

ADNR/Water Resources has received an application for a water right from  
Coeur Alaska, Inc.  
3031 Clinton Drive  
Juneau, AK 99801

to appropriate water from an infiltration gallery on Johnson Creek within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 15, Township 35 South, Range 62 East, Copper River Meridian, a total of up to 0.35 cubic feet per second (CFS) or 226,211 gallons per day (gpd), including 218,711 gpd for mining & milling and up to 7,500 gpd for domestic use, on patented claims within Sections 10 and 15, and including up to 180 gallons per minute (gpm) for tailings slurry transport to Lower Slate Lake within Sections 26 and 27, Township 35 South, Range 62 East, and up to 180 gpm for tailings slurry transport to mine stopes for tailings backfill in various locations of the underground workings, from each of which up to 160 gpm is to be recycled back to the mill.

In order for a Permit to Appropriate Water to be issued, ADNR/Water Resources must make a written finding pursuant to AS 46.15.080, as follows:

**AS 46.15.080. Criteria for issuance of permit.**

[The text of the statute is in bold font; discussion is in regular font.]

**(a) The Commissioner shall issue a permit if the commissioner finds that**

**(1) rights of a prior appropriator will not be unduly affected;**

There is one prior appropriator of record for water from the Johnson Creek source: ADL 101821, Hyak Mining Company: up to 7,000 gallons per day for mining camp uses, year-round, taken from within USMS 266 in the NE¼ NE¼ Section 15, Township 35 South, Range 62 East, Copper River Meridian, for use within Hyak No. 2 mining claim within the above-described parcel.

Pursuant to AS 46.15.133 and 11 AAC 93. 080, notice of Coeur Alaska's water right application was sent by certified mail to prior appropriator Hyak Mining Company on 24 June 2004. The notice was received, but no comments were submitted in response. It must therefore be assumed that Hyak does not object to any undue effect on its prior right that the proposed appropriation might have. No undue effect is expected, however, since this prior right is for a small amount, equivalent to 0.01 cubic feet per second, and is not subject to an instream flow requirement. I therefore find that the rights of the only prior appropriator of record will not be unduly affected.

**(2) the proposed means of diversion or construction are adequate;**

Water is proposed to be withdrawn from Johnson Creek by means of an "infiltration gallery", a perforated pipe dug into the stream bank, from which water is to be pumped into a 216,000 gallon water storage tank. This is a common water withdrawal arrangement that appears to be suitable for the application proposed. I therefore find that the proposed means of diversion and construction are adequate.

**(3) the proposed use of water is beneficial;**

Johnson Creek water is proposed to be used for mining camp domestic purposes, mill processes, and tailings slurry transport from the mill to the TSF and to mined stopes to be backfilled. "Beneficial use" is defined in the Alaska Water Use Act as "a use of water for the benefit of the appropriator, other persons or the public, that is reasonable and consistent with the public interest, including, but not limited to, domestic, ... mining, ..." (etc.). I therefore find that the proposed uses are beneficial.

**(4) the proposed appropriation is in the public interest.**

Having made the considerations required by subsection (b) below, I find that the proposed appropriation is in the public interest.

**(b) In determining the public interest, the commissioner shall consider**

**(1) the benefit to the applicant resulting from the proposed appropriation;**

The proposed appropriation is necessary to allow the diversion and use of water for mining camp domestic purposes, mill processes, and tailings transport, without which Coeur could not develop and operate the Kensington Mine project in its currently proposed configuration. The appropriation is therefore assumed to be necessary for any economic benefit from the Kensington Mine project that might accrue to the applicant. There is no evidence in the record to indicate that the applicant is proceeding counter to the applicant's economic interests.

**(2) the effect of the economic activity resulting from the proposed appropriation;**

As an authorization without which the Kensington Mine could probably not be developed in its currently proposed configuration, the proposed appropriation, like any other required authorization, can be considered as a necessary element of any resulting economic effect. However, ADNR/Water Resources does not have the staff capability to independently analyze the effect of the economic activity resulting from the proposed appropriation. We must therefore rely on other evidence in the record. The USFS Final Supplemental Environmental Impact Statement, December 2004, Socioeconomics Section, is assumed to be the most comprehensive current statement of likely economic effects of the mine project on the region of interest. This analysis appears to conclude that the economic impacts of the Kensington Mine's construction and operation would have a net positive effect on the region of influence (the CBJ) and on the state as a whole [4.15.4 Summary, p. 4-118]. There is no evidence in the record indicating a likelihood of a net negative economic effect to the region of influence or to the state. Therefore, it is reasonable to conclude that the effect of the economic activity resulting from the proposed appropriation can be expected to be positive.

**(3) the effect on fish and game resources and on public recreational opportunities;**

Johnson Creek is cataloged in ADF&G's Anadromous Waters Catalog (#115-20-10070) for pink, chum and coho salmon; in addition, cutthroat trout and Dolly Varden trout exist in the Johnson Creek anadromous reach, and Dolly Varden trout inhabit the resident reach. ADNR/OHMP has indicated its intention to issue Title 41 permits for the necessary construction of the infiltration gallery in the bank of Johnson Creek. ADNR/Water Resources defers to OHMP in its estimation that project effects on fish and wildlife habitat are acceptable, if permits are suitably conditioned and the conditions are met. ADF&G, through ADNR/OHMP, has recommended that the following instream flow schedule for Johnson Creek, from below the infiltration gallery to the mouth, be made a condition of this water right, to protect the spawning and rearing of pink, chum, and coho salmon, Dolly Varden and cutthroat trout in the anadromous reach and Dolly Varden in the resident reach:

January - April	2.5 cfs
May - October	no restriction
November - December	2.5 cfs

Water would not be allowed to be withdrawn from Johnson Creek when the natural stream flow, as measured downstream from the infiltration gallery, is less than the flow amounts in the schedule.

There is no known current significant recreational use of Johnson Creek. If Lower Slate Lake reclamation goals are met, access to the stream for recreational fishing could be increased somewhat via the road from Slate Creek Cove.

Therefore, it is reasonable to conclude that the effects of the proposed appropriation on fish and game resources and on public recreational opportunities will not be significant.

**(4) the effect on public health;**

The proposed appropriation includes the use of Johnson Creek water for domestic purposes in the Jualin mining camp, a use that is essential for the health of mine workers.

In the broader sense of effect on the environment upon which public health depends, the proposed appropriation involves discharges that require EPA NPDES permits and ADEC Certificates of Reasonable Assurance for the NPDES permits. To the extent that Johnson Creek water becomes comingled with Slate Creek water within the TSF, the discharge (Outfall 002) is from the TSF to East Fork Slate Creek. To the extent that any tailings slurry water drains from backfilled stopes, the discharge is mine drainage that exits the mine via the 850 level adit through the 800' portal, and is then treated and released from the Sherman Creek treatment facility (Outfall 001) to South Fork Ophir Creek, a tributary of Sherman Creek.

ADNR/Water Resources defers to ADEC regarding the compliance of the project with relevant Alaska Water Quality Standards and assumes that the proposed appropriation of water will have no adverse effect on public health.

**(5) the effect of loss of alternate uses of water that might be made within a reasonable time if not precluded or hindered by the proposed appropriation;**

The record contains no evidence of alternate uses of the water proposed to be appropriated, with the exception of the following:

- The gradient of the Johnson Creek drainage and the historic use of the stream for hydropower indicate a possible potential for hydroelectric development. However, it





**State of Alaska  
Department of Natural Resources**

**PERMIT TO APPROPRIATE WATER  
LAS 24432**

The State of Alaska, acting by and through the Department of Natural Resources, Division of Mining, Land and Water, 550 West 7<sup>th</sup> Avenue, Suite 900A, Anchorage, AK 99501-3577, hereinafter referred to as the grantor, under AS 46.15, the Alaska Water Use Act, and the regulations adopted under it, grants to:

Coeur Alaska, Inc.  
3031 Clinton Drive  
Juneau, AK 99801

The right to the following use of water:

SOURCE:	Johnson Creek
USE A:	Domestic
QUANTITY A:	7,500 gallons per day
USE B:	Mining & milling, tailings slurry transport
QUANTITY B:	218,700 gallons per day
MAXIMUM WITHDRAWAL RATE:	0.35 Cubic Feet per Second
PERIOD:	I January through 31 December

With a PRIORITY DATE of 23 June 2003.

The LOCATION of this water source:

An infiltration gallery on Johnson Creek within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 15, Township 35 South, Range 62 East, Copper River Meridian.

The LOCATION to which this appropriation is appurtenant:

Patented claims within Sections 10 and 15 (domestic, mining & milling uses), in Lower Slate Lake (tailings slurry transport use) within Sections 26 and 27, Township 35 South, Range 62 East, Copper River Meridian, and in backfilled mine stopes in various locations within the Kensington Mine Project (tailings slurry transport use).

**PERMIT TO APPROPRIATE WATER  
LAS 24432**

Changes in the natural state of water are to be made in the manner and only for the purposes stated in this permit. This permit is subject to the pertinent statutory provisions in AS 46.15, Administrative Regulations in 11 AAC 93, and the following conditions:

The holder of this permit shall:

1. Follow acceptable engineering standards in exercising the privilege granted by this permit.
2. Except for claims or losses arising from negligence of the State, defend and indemnify the State against and hold it harmless from any and all claims, demands, legal actions, loss, liability and expense for injury to or death of persons and damages to or loss of property arising out of or connected with the exercise of the privilege granted by this permit.
3. Comply with all applicable laws, regulations and conditions.
4. Notify the grantor of any change of address, transfer of any real property identified in this permit, or any proposed change in the water appropriation.
5. Respond to any request for additional information during the duration of this permit per AS 46.15.100 and AS 46.15.175. Failure to respond may result in the termination of this permit.
6. Obtain and maintain permanent right of access to the property where water is to be withdrawn, impounded, or diverted, and over which water is to be transported both to the point of use and to the point of discharge, per 11 AAC 93.040 (c) (4).
7. Pay an annual Administrative Service Fee that shall be assessed upon this appropriation of water, per 11 AAC 05.010 (a) (8) (m).
8. If the grantor determines that this appropriation unduly affects a prior appropriator's ability to obtain water in accordance with his or her permit or certificate, this appropriation may be amended or water use may be curtailed until the prior appropriator can again obtain water under his or her prior right. Those individuals within the same area that do not have water rights may also be required to curtail taking water.
9. Withdraw no water from Johnson Creek when the natural stream flow, as measured at a point downstream from the infiltration gallery as approved in the stream gaging plan (See Condition 10.), is less than the flow amounts in the following schedule:

January - April	2.5 cfs
May - October	no restriction
November - December	2.5 cfs

PERMIT TO APPROPRIATE WATER  
LAS 24432

This instream flow requirement is established to protect the spawning and rearing of pink, chum, and coho salmon, Dolly Varden and cutthroat trout in the anadromous reach and Dolly Varden in the resident reach:

10. Continuously measure stream flow in Johnson Creek downstream from the infiltration gallery in accordance with a stream gaging plan approved by the Department. The plan is to be submitted to the Department within 60 days after issuance of this Permit. The Department's approval may include a requirement to commence stream gaging by a date certain or within a certain amount of time.
11. Measure and report to the Department monthly the daily amounts of water diverted from Johnson Creek, according to a water use measurement plan to be submitted to the Department not later than 60 days prior to the commencement of water diversion, for approval by the Department. The plan shall include provisions for the metering of all water withdrawals or diversions (except for the water component of tailings slurry transports, which shall be estimated and reported) of 30,000 gallons per day or more.
12. Avoid, minimize, and mitigate for any interception of surface water or groundwater in hydrologic continuity with surface water in the Johnson Creek drainage, from effects of underground workings, stoping, etc. on secondary permeability, vertical hydraulic conductivity, fracturing, or subsidence, such that the water is diverted to another drainage.

The permittee must follow all applicable statutes, regulations, and plan requirements of the Alaska Coastal Management Program (ACMP). This authorization is subject to ACMP Consistency Finding AK0406-13J issued 25 April 2005, and to its relevant alternative measures.

This permit shall EXPIRE on 4 May 2015.

This Permit to Appropriate Water is issued by the authority of AS 46.15.080 and 11 AAC 93.120 on 5 May 2005.

APPROVED:   
Signature

John Dunker  
Name

Water Resource Manager  
Title