

# STATE OF ALASKA

**FRANK H. MURKOWSKI, GOVERNOR**

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**DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF WATER  
WASTEWATER DISCHARGE PROGRAM**

June 17, 2005

File # 1533.62.001

Robert Richins  
Project Director  
Coeur Alaska, Inc.  
3031 Clinton Rd., Suite 202  
Juneau, AK 99801

Certified Mail#:7004 1160 2848 6328

Return Receipt Requested

RE: ADEC 401 Certification of NPDES Permit No. AK-005057-1

Dear Mr. Richins:

In accordance with Section 401 of the Clean Water Act and provisions of the Alaska Water Quality Standards (18 AAC 70), the Department of Environmental Conservation issues the enclosed Certificate of Reasonable Assurance for the NPDES permit for discharges of wastewater from the Kensington Gold Project located in the Tongass National Forest 45 miles north of Juneau, Alaska.

This certification replaces that dated January 27, 1998 for the same permit number and expires on June 16, 2010.

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, 410 Willoughby Ave., Juneau, Alaska 99801, within 15 days after receiving this certification. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days after the date of this certification. If a hearing is not requested within 30 days, the right to appeal is waived.

Please be advised that, pursuant to 18 AAC 15.120(c), the certification of this NPDES permit constitutes the permit required under AS 46.03.100. 18 AAC 15.120(c) also states, "Any rights or privileges inuring to the benefit of EPA in the NPDES permit, including any right to enter, inspect, sample, and have access to records, also inure to the benefit of the department. Any reports or other information filed with EPA in accordance with the NPDES permit must be filed with the department at the same time."

By copy of this letter we advise the EPA and the state Office of Project Management and Permitting of our actions and enclose a copy of the certification for their use.

Sincerely,

**SIGNATURE ON FILE**

Gretchen Keiser  
Program Manager  
Wastewater Discharge Program

Enclosures: Certificate of Reasonable Assurance  
ADEC Response to Comments on the Draft 401 Certification of NPDES AK-005057-1

cc:

Luke Boles, ADEC/Fairbanks  
Cindi Godsey, EPA Reg. X/Anchorage  
Hahn Shaw, EPA Reg. X/Seattle  
Jim Vohden, ADNR/Fairbanks  
Ed Fogels, ADNR/Anchorage

Stan Foo, ADNR/Anchorage  
Kenwyn George, ADEC/Juneau  
Mac McLean, ADNR, OHMP/Fairbanks  
USDA Forest Service  
People who commented on the draft 404 certification

STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CERTIFICATE OF REASONABLE ASSURANCE

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A Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act, was requested by Coeur Alaska, Inc. for the discharge of treated domestic wastewater and treated non-domestic wastewater from the Kensington Mine.

The facility is located in the Tongass National Forest 45 miles northwest of Juneau, Alaska, and proposed to discharge pollutants to Sherman Creek, East Fork Slate Creek, and Lynn Canal.

Public notice of the application for this certification was made in accordance with 18 AAC 15.140.

A State Certificate of Reasonable Assurance is required for the proposed activity because the activity will be authorized by an Environmental Protection Agency permit identified as NPDES Permit No. AK-005057-1 and discharges will result from the activity.

This NPDES permit certification covers wastewater disposal from the following discharges:

1. Outfall 001 – Discharge of mine water to Sherman Creek and is located at Latitude 58° 52' 04" N, Longitude 135° 06' 55" W.
2. Outfall 002 – Discharge of tailings effluent water from the Tailings Storage Facility (TSF) to East Fork Slate Creek and is located at Latitude 58° 49' 58" N, Longitude 134° 57' 58" W. [Note: this is a change to the previous location of Outfall 002 to Camp Creek in the existing permit.]
3. Outfall 003 – Discharge of treated domestic wastewater to Lynn Canal and is located at Latitude 58° 51' 58" N, Longitude 135° 08' 28" W.

The Department reviewed the three discharges described above with respect to the antidegradation policy of the Alaska Water Quality Standards and finds the reduction in water quality to be in accordance with the requirements of 18 AAC 70.015, provided that the terms and conditions of this certification are made part of the final NPDES Permit.

The Department reviewed the applicant's proposal to collect data and request a future modification to permit limits for discharges of tailings effluent water from Outfall 002 based upon site specific criteria established under 18 AAC 70.235 of the State's Water Quality regulations. This certification ensures protection of water quality based upon limits derived from existing Water Quality Standards. Any future modification to the permit will only occur after the necessary data collection and review, public notice, and any necessary regulation changes.

After review of the public comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the activities and the resulting discharges are in compliance with the requirements of Section 401 of the Clean Water Act, which includes the Alaska Water Quality Standards, 18 AAC 70, provided that the terms and conditions of this certification are made part of the final NPDES permit.

Through this certification, in accordance with 18 AAC 15.120 ADOPTION OF NPDES PERMITS, the final NPDES permit will constitute the permit required under AS 46.03.100 Waste management and disposal authorization, provided that the terms and conditions of the final certification are made part of the final NPDES Permit. The department specifies the following permit terms and conditions under authority of AS 46.03.110(d) and 33 U.S.C. § 1341:

### **Outfall 001 – Discharge of mine water to Sherman Creek**

The Department authorizes the Outfall 001 effluent limitations and monitoring frequency for the parameters contained in Table 1 of the Preliminary Final Permit. No mixing zone is authorized.

Dissolved oxygen in the effluent and in Sherman Creek upstream and 500 feet downstream of the discharge shall be recorded weekly during low stream flow periods.

*Rationale: Dissolved oxygen is important for the health of aquatic life. Effluent and ambient monitoring for dissolved oxygen will show whether mine water is low in DO and whether there is any depression of oxygen in Sherman Creek caused by the discharge.*

Turbidity measurement in Sherman Creek is required in Table 1. This measurement is to be made upstream of the discharge.

*Rationale: 18 AAC 70.020(b)(12) bases the allowable turbidity in the effluent on the background turbidity value.*

The Total Dissolved Solids (TDS) monthly average and daily maximum effluent limits for the discharge into Sherman Creek are 1000 mg/l. These limits are based on site specific criteria established under 18 AAC 70.236(b)(3). These criteria replace those for aquatic life, aquaculture, and drinking water supply uses in 18 AAC 70.235 and listed in 18 AAC 70.020.

*Rationale: The Site Specific Criteria (SSC) for Sherman Creek were public noticed, reviewed in depth by the department, and justified in a decision document that was submitted through the Alaska Administrative Procedure Act to the Department of Law, and then filed by the Office of the Lieutenant Governor as a regulation change. EPA separately reviewed the SSC to determine that the water of Sherman Creek is fully protected for the designated uses at 1000 mg/l of TDS.*

### **Outfall 002 – Discharge of tailings effluent water from the Tailings Storage Facility (TSF) to East Fork Slate Creek**

The Department authorizes the Outfall 002 effluent limitations and monitoring frequency for the parameters contained in Table 3 of the Preliminary Final Permit. No mixing zone is authorized. Information on constituents and pollutants in the tailings water was derived from tests on ore samples. The results of the tests and analyses related to the Tailings Storage Facility are in the December 2004, USDA Forest Service Final Supplemental Environmental Impact Statement for the Kensington Gold Project.

*Rationale: In this case, the Outfall 002 effluent limitations are set to meet the water quality standards at end of pipe so no mixing zone is needed.*

### **Outfall 003 – Discharge of treated domestic wastewater to Lynn Canal**

- 1) The Department authorizes a Mixing Zone (MZ) for Outfall 003 to Lynn Canal for Fecal Coliform Bacteria. The size of the mixing zone is 200 meters (m) wide x 1200 m long (600 m on each side of the outfall pipe). Permit effluent limits that meet water quality standards at the boundary of this mixing zone are 150,000 FC/100 ml daily maximum and 100,000 FC/100 ml monthly average.

*Rationale: In accordance with State regulations 18 AAC 70.240, the Department has authority to designate mixing zones in certifications. This mixing zone will ensure that the most stringent water quality standard for fecal coliform bacteria (14 FC/100 ml, 30 day average, and not more than 10% of the samples may exceed 43 FC/100 ml), is met at all points outside of the mixing zone.*

*The Department considered all aspects required in 18 AAC 70.015 (Antidegradation) and 18 AAC 70.240-270 (Mixing Zones) including, but not limited to, the potential risk to human health and ecological resources based on existing monitoring data of Lynn Canal water quality and mixing zone modeling of the predicted effluent quality from the discharge.*

*The Department finds that the size of the mixing zone authorized for discharge in this certification is appropriate and provides reasonable assurance that existing uses of the Lynn Canal outside of the mixing zone are maintained and fully protected.*

During any commercial fishing opening Coeur Alaska Inc. shall inform ADEC and local fishing organizations of any upset in the treatment system likely to result in an exceedance of permit limits.

*Rationale: Sea water used in roe processing that contains fecal coliform bacteria could cause discoloration of the roe, which could affect marketability. There is no health hazard associated with this discoloration.*

- 2) The Department requires that if chlorine is used for disinfection, the daily maximum effluent limit for chlorine (Cl) shall be 0.02 mg/L at all times from Outfall 003. Since the current MDL for Cl is 0.1 mg/L, the compliance level for Cl is 0.1 mg/L. If used for disinfection, Cl shall be sampled on a weekly basis from the Outfall 003 discharge. The sampling reduction in footnote 2 of Table 3 in the Preliminary Final Permit applies for Cl if chlorine is used.

*Rationale: In accordance with State regulations 18 AAC 15.090, the Department may attach terms and conditions to a permit, variance, or approval, including operating, monitoring, inspection, sampling, access to records and reporting requirements, and the posting of a performance bond or other surety, that it considers necessary to ensure that all applicable criteria will be met.*

- 3) The Department requires that signs be placed along the beach near the mixing zone and outfall line for Outfall 003. The signs must provide the identity and telephone numbers of the discharger, and must inform the public that a mixing zone exists, treated wastewater is being discharged, and users of the area should exercise caution.

*Rationale: In accordance with AS 46.03.110 (d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The notification requirement is intended to inform the public of the presence of elevated pollutant levels within the mixing zone.*

**Receiving water monitoring**

The Department requires the receiving water monitoring contained in section 1.E. of the Preliminary Final Permit including the water column monitoring, sediment monitoring, aquatic resource monitoring, and the annual water quality monitoring summary. Sampling, testing and reporting shall be for dissolved metals where required by the state water quality standards.

*Rationale: In accordance with State regulations 18 AAC 70.010 the water quality criteria and limits must be met in adjacent surface water and groundwater at and beyond the boundary of the treatment works and, in accordance with 18 AAC 15.090, the Department may attach terms and conditions to a permit or approval, including operating, monitoring, inspection, sampling, access to records and reporting requirements, and the posting of a performance bond or other surety, that it considers necessary to ensure that all applicable criteria will be met. The receiving water monitoring required will verify whether the criteria are met.*

June 17, 2005

SIGNATURE ON FILE

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Date

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Gretchen Keiser  
Program Manager  
Wastewater Discharge Program