STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
WASTEWATER DISCHARGE PROGRAM

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MONTH XX, 2013

File #1533.62.001

DRAFT

Certified Mail # _____

Wayne Zigarlick, General Manager
Coeur Alaska, Inc.
3031 Clinton Dr., Suite 202
Juneau, Alaska 99801

Subject: Draft Waste Management Permit No. 2013DB0002, Kensington Mine

Dear Mr. Zigarlick:

Alaska Department of Environmental Conservation has completed its evaluation of your Waste Management Permit application dated April 2010 for the disposal of wastes from the Kensington Gold Mine, as detailed in your Integrated Waste and Hazardous Materials Management Plan application materials and in the attached permit. The attached permit covers disposal of waste to the tailings treatment facility (TTF), development rock disposal facilities, and underground in the mine. It also covers wastewater collection, treatment, containment, and monitoring systems at the Kensington Mine. In addition to the disposal of wastes listed above, this permit covers hazardous chemical storage and containment, reclamation and closure activities related to all the facilities, and financial assurance.

The attached permit is issued under the provisions of Alaska Statute 46.03.100, and the Alaska Administrative Code (AAC), 18 AAC 15, 18 AAC 60, 18 AAC 70, and 18 AAC 72 and other applicable state laws and regulations. The attached permit incorporates Coeur's April 2010 Waste Management Permit Application titled "Integrated Waste management and Disposal Plan Kensington Gold Mine", "2013 Reclamation and Closure Plan Update for the Kensington Gold Project, Borough of Juneau, Alaska", dated April 2013, and project documents listed in appendix A. Please review the conditions and stipulations in this permit and ensure that they are all understood. This permit is effective _____, 2013, and expires after _____, 2018.

This permit rescinds the waste management and disposal authorization portion of the May 6, 2005 State Certification of the Corps of Engineer's permit # POA-1990-592-M, Lynn Canal, 31 M. It also rescinds and replaces Solid Waste Permit No. SWZA015-18 dated June 17, 2013.

Any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 - 18 AAC 15.340. An informal review request must be delivered to the Director of the Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 15 days of receipt of the permit decision. An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 555 Cordova Street, Anchorage, Alaska 99501, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

Sincerely,

DRAFT
Wade Strickland
Program Manager

Enclosure: Waste Management Permit No. 2013DB0002, Kensington Mine

cc: Allan Nakanishi, DEC, Anchorage
Kenwyn George, DEC, Juneau
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STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
555 CORDOVA STREET
ANCHORAGE, AK 99501

WASTE MANAGEMENT PERMIT

for the

Kensington Mine

Permit No. 2013DB0002 **Date: _____, 2013**

This Waste Management Permit is issued to Coeur Alaska, Inc, 3031 Clinton Dr., Suite 202, Juneau, Alaska 99801 for the disposal of wastes from the Kensington Mine as defined in permit Section 1.1. The Kensington Mine facilities are located 45 miles north of Juneau with access from Slate Creek Cove in Berner's Bay, off Lynn Canal. This permit is issued under the provisions of Alaska Statutes (AS) 46.03.100, and the Alaska Administrative Code (AAC), 18 AAC 15, 18 AAC 60, 18 AAC 70, and 18 AAC 72, as amended or revised, and other applicable state laws and regulations. This permit is effective _____, 2013, and expires after _____, 2018. This permit may be terminated or modified in accordance with AS 46.03.120.

This permit is subject to the conditions and stipulations contained in Sections 1 - 5. This permit incorporates by reference Coeur's April 2010 Waste Management Permit Application titled "Integrated Waste management and Disposal Plan Kensington Gold Mine", "2013 Reclamation and Closure Plan Update for the Kensington Gold Project, Borough of Juneau, Alaska", dated April 2013, and project documents listed in appendix A. Changes to the documents incorporated herein must be approved by the Department of Environmental Conservation (DEC or Department) if they affect this permit. If the Department approves the changes, they become part of this permit.

After completing reclamation activities and terminating active wastewater treatment, the Department requires the permittee to conduct post-closure maintenance and monitoring for a minimum of 30 years after closure. The permittee shall assess the conditions at the facility and respond accordingly throughout the post-closure care period. At the end of the post-closure period, the Department will determine whether post-closure care and monitoring should be extended, based upon the information collected by that time.

DRAFT

Wade Strickland
Program Manager

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1 SPECIFIC PERMIT CONDITIONS

1.1 PERMIT COVERAGE

1.1.1 Summary information This permit is for the management of solid and liquid wastes from the Kensington Mine, which produces approximately 1,450 tons of ore and 500 tons of development rock per day. This permit authorizes the disposal of wastewater and approximately 4.5 million tons of tailings to the Tailings Treatment Facility (TTF) and 3 million tons of tailings underground. The TTF was, formerly Lower Slate Lake covering 20 acres. At mine closure, the TTF is proposed to be approximately 61.8 acres contained behind a 90 feet high rock fill dam.

1.1.2 This permit covers:

1.1.2.1 The disposal and containment of mill tailings to the TTF;

1.1.2.2 The disposal and containment of mill tailings to the underground mine workings;

1.1.2.3 The disposal and containment of graphitic phyllite rock to the underground mine workings;

1.1.2.4 The collection and treatment of graphitic phyllite seepage waters;

1.1.2.5 The disposal of effluent from the graphitic phyllite treatment plant;

1.1.2.6 The temporary storage and disposal of treatment plant sludges;

1.1.2.7 The storage and disposal of development rock;

1.1.2.8 The storage and containment of hazardous chemicals;

1.1.2.9 The disposal of inert solid wastes;

1.1.2.10 Impacted or potentially impacted surface waters;

1.1.2.11 Monitoring requirements related to the TTF and mine operations except for discharges to waters of the United States, which are covered under Alaska Pollutant Discharge Elimination System (APDES) Permit No. AK0050571.

1.1.2.12 Reclamation and closure activities related to all the facilities; and

1.1.2.13 Proof of financial responsibility.

1.1.3 In addition to the stipulations in this permit, the permittee shall adhere to the requirements of 18 AAC 60 Solid Waste Management Regulations, 18 AAC 70 Alaska Water Quality Standards, and 18 AAC 72.500 – 72.600 Non-Domestic Wastewater Disposal. The permittee shall also adhere to the requirements of Kensington Project's Plan of Operations Monitoring Plan, Reclamation and Closure Plan, and supporting documents (see Appendix A - Project Documents) approved by the Department. When the terms of this permit differ from the terms of the project documents, the terms of the permit are controlling unless there are more recent department-approved project document terms. If there is doubt as to which of the conflicting terms is newer, this permit shall control. The project documents must also be updated within 90 days from the date of issuance of this permit incorporating any changes necessary to be consistent with the terms of this permit.

1.1.4 During the period beginning on the effective date of this permit and lasting through the permit's expiration date, the permittee is authorized to dispose of wastes as specified in this permit to the TTF, underground in the mine, and to the development rock piles at the Kensington Mine.

1.2 LIMITATIONS

1.2.1 The waste materials permitted under this section are limited to wastewater, mine tailings, development rock, wastewater treatment plant sediments and sludge, underground drainage sump sediments, and other wastes meeting the conditions in this permit.

1.2.2 The following materials shall not be disposed into the TTF or the mine unless otherwise provided or approved in writing by the Department:

1.2.2.1 Hazardous wastes, as defined by 40 C.F.R. Part 261, and radioactive material, explosives, strong acids, untreated pathogenic waste, glycol, solvents, oily wastes, waste oil, greases, paints, chemical wastes, transformers, and packing material or associated equipment, laboratory wastes and unused chemicals, uncombusted household waste, untreated sewage solids, and asbestos waste; however, this prohibition does not preclude disposal of Bevill excluded waste, natural minerals found in mine rock or residual wastes included as byproducts of the beneficiation process which may be disposed into the tailing area or mine, as long as they are in quantities that would not cause significant impact on mine closure, reclamation, or water quality; or

1.2.2.2 Contaminated soils, spill boom, liners used for the containment of spilled materials, chemicals used in the cleanup of spills or other chemicals used in the beneficiation process unless approved under Condition 1.2.5.

1.2.3 Dry methods of cleanup shall be used for initial cleanup of oil spills in the maintenance shops.

1.2.4 Activities at the site which will cause a greater amount of waste material to be treated and disposed beyond that described in Condition 1.1.1 of the permit are prohibited without prior approval by the Department.

1.2.5 Non-hazardous incidental wastes that are approved for underground disposal include:

1.2.5.1 Development rock;

1.2.5.2 Settled solids from sumps, ditches, and degritting basins;

1.2.5.3 Incinerator ash and residue;

1.2.5.4 Ash from combustion of scrap wood material;

1.2.5.5 Iron (drill steel, balls, empty cans, pipe, etc.);

1.2.5.6 Broken concrete slabs, scrap lumber, pipe and similar wastes;

1.2.5.7 Empty plastic and glass containers;

1.2.5.8 Empty 55-gallon drums

1.2.5.9 Inert domestic waste;

1.2.5.10 Construction debris;

1.2.5.11 Tires;

1.2.5.12 Spill cleanup debris in a plan approved by the Department

1.2.5.13 Sludge and solids from the mine drainage water and TTF treatment plants, and

1.2.5.14 Such other material as would otherwise be disposed of in an inert solid waste landfill facility without special handling.

1.2.6 Tailings from the mill, graphitic phyllite rock and sludge from the graphitic phyllite treatment plant may be disposed of underground provided these materials are encased in paste to prevent leaching or movement of material post-placement in the underground stopes. Graphitic phyllite rock must be encased in cement paste and placed in a stope that is below the lowest predicted static water level at that location.

1.2.7 Sediments from the underground sumps may be disposed of in the Comet development rock pile.

1.2.8 The Department may set or modify permit conditions based on monitoring results or changes in facility processes in accordance with permit amendment or modification procedures.

1.2.9 Seepage and runoff collected from the TTF dam may be disposed of to the TTF.

1.3 GRAPHITIC PHYLLITE

Graphitic phyllite rock, which produces acid rock drainage, is naturally occurring in the area of the TTF dam. Construction activities are associated with the dam and excavated graphitic phyllite. Currently, there are five sites where graphic phyllite is being stored awaiting disposal in the mine workings. Those sites are 1) the downstream side of the dam's east abutment, where about 3,800 cubic yards (cu yd) of graphic phyllite (are overlain with diorite, 2) Pit 3 where approximately 12,360 cu yd are wrapped and sealed in 60 mil HDPE liner, 3) the north mud dump where around 8,000 cu yd are contained in a 60 mil HDPE storage cell, 4) the north end of the TTF where initially 260 cu yd was stored with a polyethylene liner and cover, and 5) Pit 7 which serves as a lined staging area for graphitic phyllite that was previously stored at the north end of the TTF, excavated from there, moved to Pit 7, and awaits underground disposal. Drainage water from the diorite overlain graphitic phyllite at the east abutment on the downstream side of the dam is captured and treated by the graphitic phyllite package treatment plant (GPPTP). The GPPTP is located adjacent to the graphitic phyllite rock below the dam's east abutment and has a treatment capacity of 60 gallons per minute (gpm). When there is insufficient flow to maintain continuous operation of the GPPTP, water is stored in a 20,000 gallon tank and treated in batches. Seeps from naturally occurring exposed graphitic phyllite are also collected and pumped to the GPPTP. Shotcrete has been applied to the exposed, in-place, naturally occurring, graphitic phyllite rock to prevent acid rock drainage.

1.3.1 Treated water from the GPPTP shall be pumped to a soil-filled infiltration ditch within the TTF footprint for land application.

1.3.2 Residual seepage water from the graphitic phyllite disposal area at the north end of the TTF may be disposed through land application in a diorite-filled trench according to the "Tailings Treatment Facility – ARD Remediation Plan, Revision 1," dated June 10, 2013.

1.3.3 Seepage and runoff from the graphitic phyllite rock shall be managed to prevent it from escaping containment.

1.3.4 The approximately 3,800 cu yd of graphitic phyllite rock that is encased in diorite below the east abutment to the dam may remain in place until an underground stope is available to contain this material, scheduled for 2014. After the removal of temporarily stored graphitic phyllite rock, diorite rock shall be placed on the exposed in situ graphitic phyllite rock down gradient of the dam. A minimum of two feet of soil cover must be placed over the diorite rock, and the final grade of the reclaimed area shall be 3:1 or otherwise approved by the Department.

1.3.5 All disturbed graphitic phyllite rock, including the five storage sites, shall be moved to one or more suitable underground stopes when available and isolated from air and water within paste backfill. The stope(s) shall be below the water table at closure.

1.3.6 Exposed faces of graphitic phyllite rock are to have loose material removed from the face. Dental concrete, or shotcrete may be applied to surfaces not permanently exposed at closure, or those that form a permanent part of the dam and spillway structure.

1.4 POTENTIALLY ACID GENERATING ROCK

Potentially acid generating (PAG) rock excludes graphitic phyllite rock covered in Section 1.3 but includes all other PAG rock encountered at the project.

1.4.1 DEC shall be informed within 10 working days whenever PAG rock is encountered at any above-ground workings, and a plan shall be submitted for approval detailing how that material will be managed.

1.4.2 Rock from Pit 3 possesses varying levels of acid generation potential. The rock was used in the construction of the roads and storm water appurtenances. No additional rock shall be used from Pit 3 for construction purposes without first being tested and approved for use by the Department. Any testing proposal shall be approved by the Department.

1.5 WASTEWATER TREATMENT PLANT SLUDGE

1.5.1 Sludge is generated at the mine water treatment plant (MWTP), the Tailings Treatment Facility treatment plant (TTFTP), and the GPPTP. The MWTP sludge has been analyzed and shown to be acceptable for disposal to the Comet development rock pile (see Golder Associates Technical memo 073-93714.000 in Appendix A). DEC also approved the disposal of MWTP pond sediments and sludge, and underground sump sediments to the Comet development rock pile in a letter dated May 19, 2009, and exempted Solid Waste regulation requirements in a

letter to Coeur dated June 3, 2009.

1.5.2 MWTP sludge may be disposed of within the Comet development rock site. This sludge shall be dewatered and placed far enough back from the face of the rock pile to ensure the solids are not carried by infiltrating water to the face of the pile. A berm shall be installed along the outside perimeter of the stockpile to ensure that solids are not transported off-site by surface water.

1.5.3 TTFTP sludge shall be disposed in the TTF or underground within paste backfill.

1.5.4 GPPTP sludge shall be disposed within paste backfill to the mine. However, GPPTP may be temporarily stored in a covered containment area before disposal.

1.6 SITE CONSTRUCTION, OPERATION, & MAINTENANCE

1.6.1 Changes to the mill, waste treatment processes, solid waste disposal facilities, seepage collection systems, and the addition of new waste streams that discharge into the TTF that may have a significant impact on mine closure, reclamation, or water quality, must be submitted to the Department and approval must be obtained prior to any such change or discharge.

1.6.2 The permittee shall provide and maintain secondary containment for all mill reagent and water treatment chemical piping and chemical mix tanks containing hazardous or toxic materials. Secondary containment is considered to be 110% of the largest tank within a containment area or the total volume of manifolded tanks. The permittee must design and install secondary containment structures in a manner that ensures spills will not escape from the structures. Secondary containment structures must be covered, or best management practices must be incorporated into the management of the structures to remove precipitation water, such that 110% of the capacity of the largest tank or container is always present. To prevent the discharge or loss of contained material facilities shall be maintained in good working condition at all times by the permittee. Any variation from this condition must be approved by the Department.

1.6.3 Secondary containment of all hazardous substances, as defined atAS 46.03.826(5), must be impermeable to substances stored.

1.6.4 The permittee shall design all mill reagent and water treatment chemical piping and chemical mix tanks to allow for routine inspections for leaks. Mill reagent piping outside of the mill building must not be buried unless secondary containment is used that provides the ability to inspect for leaks.

1.6.5 The permittee shall develop the site in accordance with the plans submitted by the applicant and approved by the Department, and approved amendments to those plans.

1.6.6 The permittee shall maintain the seepage collection system below the TTF dam in according to plans approved by DEC. The seepage collection system shall be constructed and maintained such that all seepage and runoff water from the dam and area adjacent to the seepage sump is captured and pumped back to the TTF. Seepage and runoff collection systems shall be operated to ensure that the Kensington Mine operates as a zero discharge facility except for the discharges

permitted under APDES Permit No. AK0050571.

1.6.7 The TTF dam shall be maintained and operated as required by the most recent State of Alaska *Certificate of Approval to Operate a Dam*.

1.6.8 The permittee shall ensure that tails are deposited into the TTF, and development rock to disposal areas in a manner that will not damage or otherwise jeopardize the integrity of the containment in those areas.

1.6.9 The permittee shall take reasonable measures to control dust and particulates that may occur from the TTF, development rock disposal areas, crushers, loading facilities, roads, or other mine components, by wetting or other effective measures.

1.6.10 The permittee shall not dispose of waste materials in quantities exceeding the design capacity of the disposal facilities.

1.6.11 The permittee shall control and treat surface water and seepage water as necessary to prevent off-site water quality exceedances in waters of the State.

1.6.12 The permittee shall notify the Department in writing at least 15 days before the introduction of a new chemical into the process or waste treatment streams that may have a significant impact on mine closure, reclamation, or water quality. Material Safety Data Sheets on new chemicals must be forwarded to the Department at time of notification and maintained on-site. Introduction of these new chemicals into the process requires written Department approval.

1.6.13 For any nondomestic wastewater system plan review required under 18 AAC 72.600, the permittee shall:

1.6.13.1 Submit plans to the Department at least 60 days before construction of any modification or new installation, and receive Department approval of any changes that will significantly modify the quality or quantity of a discharge, the operation of a waste treatment component, or the disposal facilities;

1.6.13.2 Notify the Department in writing at least 15 days before the introduction of new process solutions into an existing process or waste treatment component that has been significantly modified; and

1.6.13.3 Submit to the Department within 90 days after completing construction of a significant modification to an existing process component:

1.6.13.3.1 As-built drawings of the process component(s) which show any changes of those aspects that would affect performance of that process component as required in 18 AAC 72.600,

1.6.13.3.2 A summary of the quality control activities that were carried out during construction, and

1.6.13.3.3 The revised operating plans that reflect modifications made during construction.

1.6.14 The permittee shall notify the Department of an unpermitted discharge of any hazardous substance at the facility in conformance with 18 AAC 75 Article 3.

Reportable spills include unplanned discharges of process chemicals which would violate limitations in this permit.

1.6.15 Implement a program to minimize the likelihood that any area containing contaminated water within the facility boundary becomes attractive to waterfowl, shorebirds, or other wildlife. Any wildlife casualties shall be reported to the Department and to the appropriate State and federal agencies.

1.7 MONITORING

1.7.1 See Section 1.10 for monitoring reporting requirements.

1.7.2 Monitoring of surface water shall be in accordance with the Fresh Water Monitoring Plan, Appendix 4b of the Plan of Operations, dated May 2005 and the Fresh Water Monitoring Plan Addendum submitted as Appendix B of the Integrated Waste Management and Disposal Plan, dated April 2010.

1.7.3 Monitoring sites and parameters to be monitored:

Table 1-1 Monitoring sites, parameters, and frequencies

Monitoring site	**Analysis suite**	**Flow/quantity**	**Frequency**
Dam seepage sump	Suite A[1]	Mean flow	Monthly[2]
TTF pond	Suite A[1]	N/A	Quarterly
Upper Slate Lake (USL)/TTF bypass pipe	Not required	Max/min gpm	Weekly
USL to TTF	N/A	Report event and impact to the TTF	N/A
Rainfall	N/A	Inches	Monthly
Snow	N/A	Inches	Cumulative monthly
Graphitic phyllite seeps on the East and West embankments below the dam	Suite A[1]	N/A	When observed[3]
Graphitic phyllite seeps sump at the Northwest end of the TTF	Suite A[1]	N/A	Quarterly when accessible until deemed non-acid generating.
GPPTP effluent	Suite A[1]		Monthly
GPPTP effluent		Monthly mean gpm	
Mine drainage to WTP	Suite A[1]	Mean gpm	Monthly

Monitoring site	Analysis suite	Flow/quantity	Frequency
Mine sump sediments	SPLP	N/A	Quarterly[4]
Pit 3 standing seep water	Suite A[1]	N/A	Quarterly
Tailings – POO Appendix 4a Pg 6			Quarterly
Development rock - section 4.2 of POO			Quarterly

Note 1. See Table 1-2 for parameters monitored.

Note 2. The Department may change the frequency from monthly to quarterly for the analysis of water quality depending on results or trends of the monthly monitoring.

Note 3. For each seep with an adequate flow to provide a sample for analysis, monitoring shall be no more frequently than annually, preferably during the same season in order to track any trends in pollutant concentrations.

Note 4. Monitoring can be reduced to annually after 8 quarterly samples show no significant increase in constituents and must revert to quarterly should annual results show significant increases.

Table 1-2 Suite A monitoring parameters

Aluminum, Total	Copper	Selenium	Turbidity
Ammonia as N	Iron, Total	Silver	Dissolved Oxygen
Arsenic	Lead	Zinc	Temperature
Cadmium	Manganese	Nitrate + Nitrite as N	Conductivity
Chloride	Mercury, Total	Sulfate	Hardness
Chromium, Total	Nickel	TDS	pH
Note: Monitoring shall be for dissolved metals unless otherwise specified.			

1.7.4 Monitoring plans must be updated within 90 days of permit issuance incorporating any changes necessary to be consistent with the terms of this permit. Otherwise, Department –approved changes to project monitoring that do not result in increased environmental impacts will be included as amendments to the Monitoring Plan and do not require public notice.

1.7.4.1 Conduct weekly visual monitoring of the TTF dam, the tailings pipeline and other facilities for signs of damage or potential damage from settlement, ponding, leakage, frost action, erosion, or operations. Visual monitoring shall be documented.

1.7.4.2 Mine tailings shall be tested on a quarterly basis to ensure there are no significant deviations from the original tailings analysis which may

affect monitoring, closure requirements, water quality, or any other permit condition. Constituent levels measured include aluminum, ammonia, arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel, nitrate, pH, selenium, silver, sulfate, total dissolved solids (TDS), zinc, meteoric water mobility procedure, and acid base accounting. These analyses shall be included in the annual report.

1.7.4.3 A mine tailings habitability study shall be conducted during the term of this permit with results of the study presented before the summer of 2017.

1.7.5 Water monitoring and corrective action shall be in accordance with Section 1.11, 18 AAC 60.815 Solid Waste Management Regulations, and the most recent Monitoring Plan and Quality Assurance Project Plan (QAPP) submitted by Coeur Alaska, as approved by the Department or modified by amendment to this permit.

1.7.6 The Department may modify monitoring requirements, including the establishment of additional compliance points in response to trends showing changes in the concentration or load of parameters being monitored.

1.7.7 If the permittee monitors any influent, effluent, receiving water, or solid waste characteristic identified in the Monitoring Plan more frequently than required, the permittee shall notify the Department that the additional monitoring has occurred in the next quarterly report after the monitoring has occurred. The results of such monitoring shall be available for inspection by the Commissioner or his/her representative at the project site, or other location proposed by the permittee and agreed upon by the Department. The permittee shall provide copies of the results to the Department upon request.

1.8 QUALITY ASSURANCE REQUIREMENTS

1.8.1 Maintenance of inspection and sampling logs and procedures for processing, consolidating, and reporting inspection and sampling data shall be in conformance with the most recent QAPP submitted by Coeur Alaska, as approved by the Department.

1.8.2 The Fresh Water Monitoring Plan submitted as Appendix 4b of the Plan of Operations, dated May 2005 by Coeur Alaska, and approved by the Department includes a QAPP. The permittee shall update and maintain the QAPP as follows:

1.8.2.1 Adhere to conditions in the Department-approved Kensington Mine Project QAPP Quality Control and Quality Assurance Objectives sections. The QAPP reflects the current sampling program for the mine facilities. Any significant changes in the QAPP procedures shall be submitted to the Department for approval.

1.8.2.2 Ensure water compliance samples are analyzed by a laboratory that follows EPA-approved procedures, quality control requirements, reporting and documentation procedures. The QAPP, containing quality control procedures and criteria, analytical methods, detection limits and reporting requirements pertinent to the permittee’s samples

shall be submitted to the Department for approval and must be updated annually and whenever changes to methods occur.

1.8.2.3 Analyze collected samples using methods set out in EPA-600/4-79-020 Methods for Chemical Analysis of Water and Wastes; EPA-600/4-82-057 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater; Standard Methods for the Examination of Water and Wastewater (edition in effect at the time of sampling); or other methods approved by the Department. Each result must be accompanied by a reference, such as the method number, to the method that was used to perform the analysis.

1.9 MODIFIED LIMITS

If during the life of this permit a new or revised water quality regulation is established or standard adopted in accordance with 18 AAC 70 for a pollutant present in this discharge, then upon the effective date of the new rule, this permit is considered to be automatically modified in accordance with the new regulation or toxic pollutant concentration standard.

1.10 REPORTING

1.10.1 If a violation of Alaska Water Quality Standards is detected at a surface water monitoring location, the permittee shall verbally notify the Department within 24 hours after receipt of monitoring results, and shall conduct corrective actions according to Condition 1.11.21.11.2.

1.10.2 Quarterly and annual reports are to be submitted to the Department with copies to the U.S. Forest Service and DNR, and shall present a summary of all monitoring required under this permit.

1.10.3 For each year of sample collection and analysis, the permittee shall submit to the Department quarterly monitoring reports, for a total of three quarterly reports each year and one annual monitoring report, which includes the fourth quarter monitoring data, summarizing the inspection and monitoring results set out in Section 1.7. All quarterly reports shall be submitted to the Department no later than 60 days after the last day of the quarter. The annual report will be due by March 1st, summarize activities and data from the preceding calendar year, and discuss relevant plans for the upcoming year. Upon request, copies of the laboratory reports should be submitted to the Department. Electronic copies of reports shall be submitted to the Department using commercially available software or according to electronic reporting requirements established by the Department.

1.10.4 Quarterly and annual reports required in Condition 1.10.3 shall include information necessary to determine data validity, data variations, and trends. All records and information which validate the QAPP and that result from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation, shall be retained in Alaska for observation by the Department for three years. Upon request from the Department, the

permittee shall submit certified copies of such records. The Department may at its discretion perform field and laboratory audits of monitoring activities.

1.10.5 The annual report shall include:

1.10.5.1 an estimate of the volume remaining in the TTF for tailings under the current stage of dam construction.

1.10.5.2 a summary of development rock sample analyses being conducted under the Plan of Operation section 4.2, Geology.

1.10.5.3 the water balance for the TTF or any updates to it, including inflow in the form of process water in tails, precipitation and run-on, seepage return water, the TTFTP effluent, and any other water directed to the facility, and outflows including the TTFTP effluent and water returned to the mill.

1.10.5.4 a set of site development and use plans and any updates to the plans.

1.10.5.5 a log of all wastes, including tailings disposed to the TTF and development rock volumes at the disposal sites. The log shall include the dates of disposal, estimated quantities disposed, a description of the waste, and any required sampling or analysis performed on the waste. If development rock is removed from the piles for construction purposes the change in volumes are to be noted.

1.10.5.6 development rock and tailings analyses, as proposed in item 2.4 of the Integrated Waste Management and Disposal Plan.

1.10.6 An annual meeting with the Department will be held in conjunction with other state and federal agencies and open to the public in which the annual report required in Condition 1.10.3 will be presented. The annual report shall be available to the Department at least two weeks prior to the annual meeting.

1.10.7 The annual report required in Condition 1.10.3 shall address the adequacy of the current version of the Kensington Mine Reclamation and Closure Plan.

1.10.8 The annual report required in Condition 1.10.3 shall also address the adequacy of the financial responsibility, including, but not limited to, inflation, significant changes in reclamation activity costs, and concurrent reclamation, expansion or other changes to the operation of the facility.

1.10.9 The permittee shall maintain an updated Reclamation and Closure Plan, showing site use and development plans, and shall provide the Department with copies of any amendments to that Plan affecting the waste disposal operations authorized by the permit.

1.10.10 Notifications and reporting as required under this permit shall be submitted to the Department at the following address:

Department of Environmental Conservation
Division of Water
410 Willoughby Ave., Ste 303
P.O. Box 111800
Juneau, Alaska 99811-1800
Phone: (907) 465-5313

1.10.11 All reports submitted under this section must be signed by the facility's responsible corporate officer certifying the accuracy of information provided therein.

1.10.12 Knowingly making a false statement, by the permittee, the operator or other employees, including contractors, on any such report may result in the imposition of criminal penalties as provided for under AS 46.03.790.

1.11 CORRECTIVE ACTIONS

1.11.1 The permittee shall comply with 18 AAC 60.815 if the visual monitoring program required under any of the items listed in Condition 1.7.4.1 discovers damage or potential damage to the waste disposal-related facility that could lead to water quality violations or harm wildlife species.

1.11.2 After reporting a violation under Condition 1.10.1, the permittee shall perform the following tasks.

1.11.2.1 Determine the extent of the exceedance.

1.11.2.2 In consultation with the Department and documented in writing, implement a plan to determine the cause and source of the exceedance.

1.11.2.3 Submit to the Department, within seven working days after an exceedance is verified by the permittee, a plan for corrective actions to prevent adverse environmental impacts and further exceedances of applicable Alaska Water Quality Standards or permit limits.

1.11.2.4 Implement the corrective action plan as approved by the Department.

1.11.3 Capping of the tailings, addition of organics, or other state approved mitigation measures will be required at or after mine closure if water quality criteria are not met in the impoundment, or if the tailings do not successfully recolonize as determined by the Alaska Department of Fish and Game (ADF&G).

1.11.4 The permittee shall abide by any Department-approved corrective action plan.

1.12 TEMPORARY SUSPENSION OF MINING AND MILLING

1.12.1 A temporary suspension of mining and milling shall be defined as a suspension of mining, milling or processing activities for more than 90 days but less than three years. The length of time for a temporary suspension may be extended beyond three years by written authorization from the Department. If not already submitted, the permittee shall submit a conceptual temporary suspension plan to the

Department within 90 days of issuance of this permit.

1.12.2 The permittee shall submit to the Department an update to the conceptual suspension plan reflecting current conditions no later than ten days after a temporary suspension has been initiated. The permittee is encouraged to submit the revised temporary suspension plan immediately upon availability and, if possible, prior to commencement of the temporary suspension. The updated temporary suspension plan shall include the following:

1.12.2.1 The procedures, methods, and schedule to be implemented for the treatment, disposal, and storage of process waters;

1.12.2.2 The control of surface drainage to and from the facility and the surrounding area;

1.12.2.3 The control of erosion from the tailings area, development rock disposal areas, and any other disturbed areas within the facility boundary;

1.12.2.4 The secure storage of chemicals during the period of closure;

1.12.2.5 Procedures for continuing maintenance and monitoring of the dam including seepage collection and water balance; and

1.12.2.6 Procedures for maintaining containment of all water at the facility and providing continuing treatment of that water in accordance with APDES Permit No. AK0050571.

1.12.3 The Department shall have 15 days to review and approve or require modifications to the temporary suspension plan.

1.12.4 Once a temporary suspension plan has been approved, it becomes enforceable under the conditions of this permit and full implementation of the approved specific plan is required. The plan can be amended by submitting a revised plan to the Department for approval.

1.12.5 During temporary suspension of the site, the permittee shall:

1.12.5.1 Continue pollution control activities associated with the TTF and the development rock disposal sites including, but not limited to, dust control, maintenance of the drainage diversion structures, maintenance of all seepage control structures and processes, and maintenance of the dam including appropriate freeboard. .

1.12.5.2 Continue monitoring and reporting as required for all active portions of the mine.

1.12.5.3 Complete reclamation and corrective action requirements as appropriate under the Reclamation and Closure Plan in light of the nature of the closure.

1.12.6 Written Department approval is required before resuming operations after a period of temporary closure.

1.13 PERMANENT CESSATION OF MINING AND MILLING

1.13.1 Within 90 days of the decision that permanent cessation of mining, milling, or processing will occur, updated reclamation and monitoring plans must be submitted to the Department for approval. The updated plans must address current conditions at the facility. The Closure and Reclamation Plan submitted as part of the application for this permit is approved. Future updates and changes to that plan must be approved in writing by this Department.

1.13.2 Permanent cessation of mining and milling at the site must be implemented and completed in accordance with the conditions of this permit and with the Plan of Operations and Reclamation and Closure Plan approved by the Department and DNR.

1.13.3 In addition to other requirements of the Reclamation and Closure plan, permanent closure of the waste disposal facilities will be complete when the following criteria are met:

1.13.3.1 Aquatic life has been established in the TTF to the satisfaction of the DF&G; capping of the tailings, addition of organics, or other state approved mitigation measures shall be required if necessary to meet water quality or the requirements of DF&G;

1.13.3.2 The spillway of the tailing dam is constructed and stable;

1.13.3.3 A stable vegetative cover is established on the development rock, backfilled areas, and other infrastructure or other facilities as prescribed in the most recent Reclamation and Closure Plan approved by the department and DNR;

1.13.3.4 Active water treatment is not required for any water discharged from the facilities. Any surface water discharge from the mine site or facilities must be in accordance with the facility's current APDES permit, meet water quality criteria contained in the Alaska Water Quality Standards (18 AAC 70), and all discharge from any of the seepage collection and treatment systems meet Alaska Water Quality Standards (18 AAC 70) or does not exhibit a statistically significant increase above the background concentrations using methods described in 18 AAC 60.830 for the analysis of statistical significance.

1.13.4 Permanent closure must be achieved prior to the cessation of any care and maintenance activities required under the approved temporary suspension plan if a period of temporary suspension immediately preceded commencement of permanent closure.

1.13.5 The permittee shall maintain the facility correcting any erosion or settlement of the dam, tailings area or development rock disposal sites that may impair water quality or otherwise threaten the environment, up until the time that this permit, or any successor permit, is transferred to another entity or terminated by the department.

1.13.6 Post-closure monitoring and corrective action of surface water, and visual monitoring for settlement and erosion is required in years 1, 2, 5, 10, 15, 20 and 30 after the criteria in Condition 1.13.3 are met. This schedule and the parameters

monitored may be modified by the department based on the monitoring results.

1.13.7 Demolition debris disposal may be approved at the time of permanent cessation of mining and milling in accordance with a plan approved by the department at the time.

1.14 PROOF OF FINANCIAL RESPONSIBILITY

The Department accepts, as adequate financial assurance, equivalent surety for reclamation that is provided through a government agency. A Reclamation Plan and total financial assurance amount of $28,727,011 for the Kensington Mine was approved by the U.S. Forest Service on May 3, 2013 (File code: 2840). On June 28, 2013 Coeur submitted to the U.S. Forest Service a bond rider and two new bonds as financial guarantees for the total amount as follows:

1) Bond Rider increasing original bond number ESD7318759 from $7,354,015 to $10,337,561. Issuing carrier is National Union Fire Insurance Company of Pittsburg, PA.
2) New Bond 39S204970 issued by Liberty Mutual Insurance Company in the amount of $9,194,725.
3) New Bond SU27806 issued by Aspen American Insurance Company in the amount of $9,194,725.

Consistent with a Memorandum of Understanding (12-MU-11100500-043) between the Department, DNR, and the U. S. Forest Service, this approved amount satisfies the financial responsibility requirements under AS 46.03.100 (f), 18 AAC 60.265, and 18 AAC 15.090.

1.15 FACILITY AUDIT

A periodic third-party environmental audit shall be conducted with the first audit to be completed in 2017, or sooner if final closure occurs prior to 2017. This audit will include all aspects of this Waste Management Permit. The environmental audit is required to verify Coeur Alaska's compliance with applicable environmental laws associated with this permit. The third party contractor should be mutually agreed on by the state and Coeur Alaska, but in the event that agreement cannot be reached, the state retains the final contractor selection decision. Costs for the third-party contractor shall be borne by Coeur Alaska. The environmental audit shall include an evaluation of the adequacy of the approved financial assurance.

1.16 POLLUTION PREVENTION STRATEGY

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options as outlined in AS 46.06.021:

1st waste source reduction,
2nd recycling of waste,
3rd waste treatment, and
4th waste disposal

2 GENERAL PERMIT CONDITIONS

2.1 ACCESS AND INSPECTION

The permittee shall allow the Commissioner or his/her representative access to the permitted facility at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, state laws, and regulations.

2.2 INFORMATION ACCESS

Except where protected from disclosure by applicable State or Federal law, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska Department of Environmental Conservation, Juneau, Alaska.

2.3 CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from any potential civil or criminal liability for noncompliance with the permit or with applicable laws.

2.4 AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the facility.

2.5 ADVERSE IMPACT

The permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncompliant activity. The permittee shall cleanup and restore all areas adversely impacted by the noncompliance.

2.6 CULTURAL OR PALENTOLOGCAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work, which would disturb such resources, shall be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources (907-465-4563), shall be notified promptly.

2.7 APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), an application for renewal or amendment of this permit <u>must</u> be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

2.8 OTHER LEGAL OBLIGATIONS

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the department or from other local, state, or federal agencies, and to comply with the requirements contained in any such permits. All activities conducted and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.9 TRANSFER OF OWNERSHIP

In the event of any change in control or ownership of the permitted facility, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director of the Division of Water. The original permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the department approves assignment of the permit. The department will not unreasonably withhold such approval.

As between the State and the permittee, no transfer of this permit shall relieve the permittee of any liability arising out of operations conducted prior to such transfer, regardless of whether such liability accrues before or after such transfer.

2.10 TOXIC POLLUTANTS

If during the life of this permit a new or revised toxic pollutant (including oil, grease, or solvents) concentration standard is established in accordance with 18 AAC 70 for a pollutant present in this discharge and that standard is more stringent than the limitation in this permit, then upon the effective date of the new rule, this permit is considered to be automatically modified in accordance with the new toxic pollutant concentration standard.

3 GLOSSARY OF TERMS

AAC	Alaska Administrative Code
COE	US Army Corps of Engineers
DEC	Alaska Department of Environmental Conservation
DNR	Alaska Department of Natural Resources
DOL	Alaska Department of Law
DF&G	Alaska Department of Fish & Game
gpm	Gallons per minute
GPPTP	Graphitic Phyllite Package Treatment Plant
HDPE	High Density Polyethylene
MWTP	Mine Water Treatment Plant
Permittee	Coeur Alaska, Inc.
QAPP	Quality Assurance Project Plan
TTF	Tailings Treatment Facility
TTFTP	Tailings Treatment Facility Treatment Plant
USL	Upper Slate Lake

4 MAPS

Figure 1 – Slate and Johnson Creeks

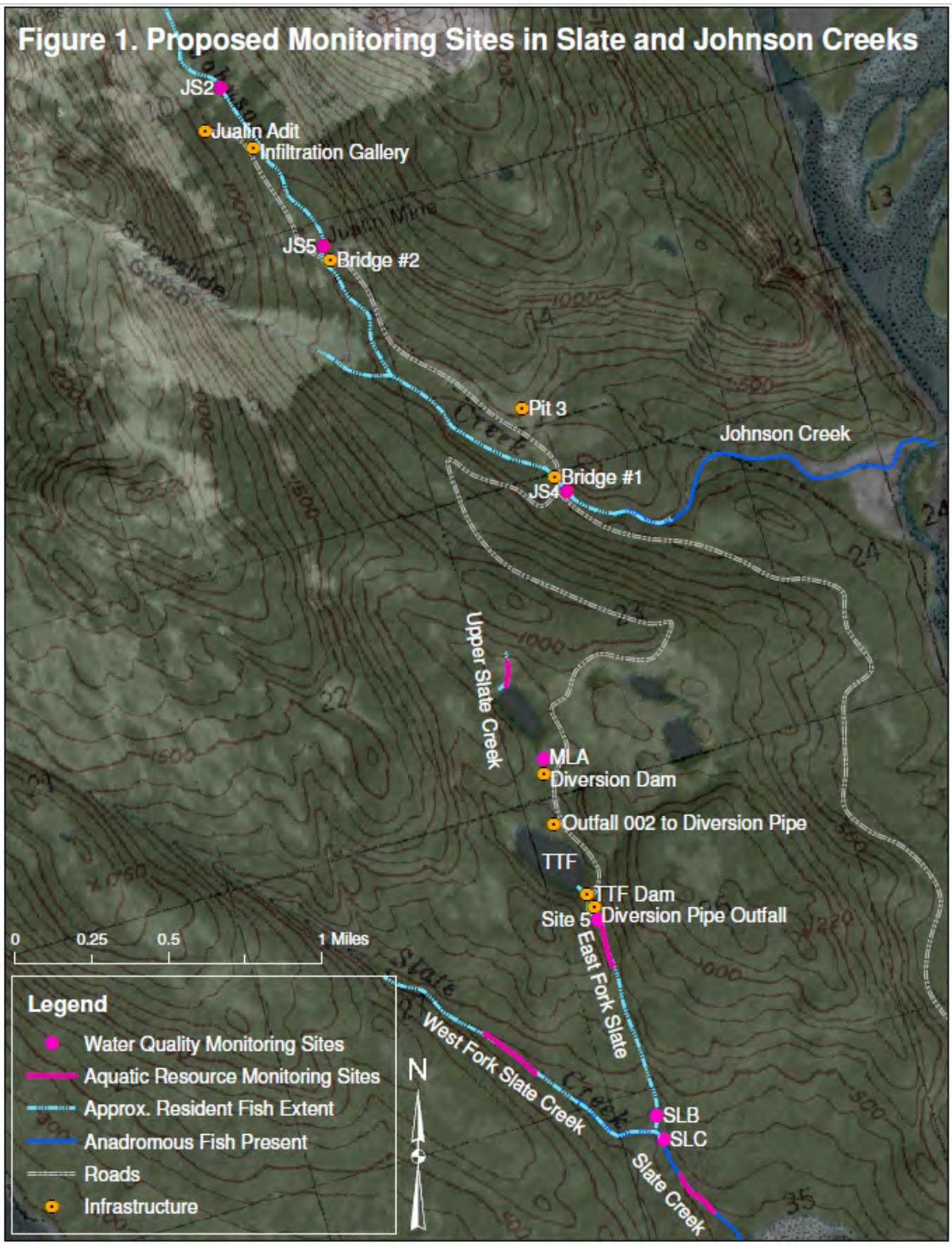
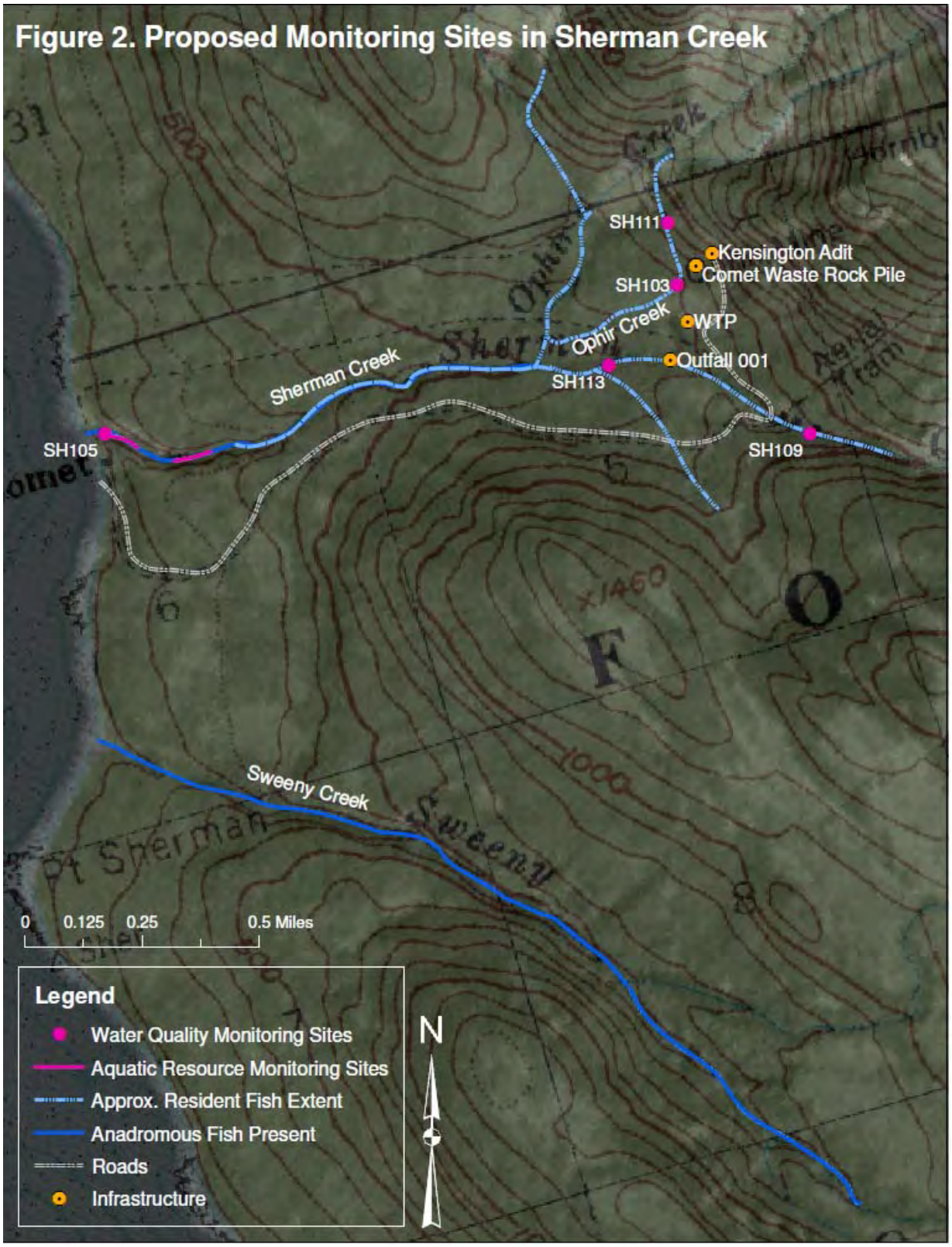


Figure 2 - Sherman Creek



Appendix A - Project Documents

1. Documents open to public comment

The following documents are available for review at the Department of Natural Resources website at: http://dnr.alaska.gov/mlw/mining/largemine/kensington

- Final Plan of Operations for the Kensington Gold Project, May 2005 (Coeur Alaska Inc.)

  Appendix 4a – TTF Monitoring Plan

  Appendix 4b – Fresh Water Monitoring Plan

  Appendix 4e – Quality Assurance Plan

- Integrated Waste Management and Disposal Plan Kensington Gold Mine, Appendix B - Fresh Water Monitoring Plan, Addendum, April 2010. (SRK Consulting (USA), Inc.)
- Kensington Gold Mine Storm Water Land Infiltration System Daily Operations Manual of Best Management Practices, November 2009. (Coeur Alaska Inc.)
- Reclamation and closure plan update for the Kensington Gold Project, Borough of Juneau, Alaska, April 2013. (KC Harvey, Environmental, LLC.)
- Tailings Treatment Facility – ARD Remediation Plan, Revision 1, June 10, 2013.

2. Supporting documents not open to public comment

- Operation and Maintenance Manual Lower Slate Lake Tailings Dam, August 13, 2010 (Knight Piesold)
- Letter to USDA Forest Service: "Kensington Borrow Material ARD Assessment", August 9, 2007. (Coeur Alaska Inc.)
- Letter to the USDA COE "Kensington Gold Project, Information for Administrative Amendment POA-1990-592-M dated January 30, 2009. (Coeur Alaska Inc.)
- Technical memorandum "Acid Rock Drainage Assessment for Borrow Material", May 15, 2008. (Golder Associates.)
- Technical memo 073-93714.000 dated February 20, 2009. (Golder Associates.)
- Permit modification POA-1990-592-M6, Lynn Canal, dated August 14, 2009. (USDA COE)
- Permit # POA-1990-592-M (Lynn Canal 31) dated June 17, 2005. (USDA COE)
- Kensington Gold Project Final Supplemental Environmental Impact Statement, December, 2004. (USDA Forest Service.)
- Reclamation Plan Approval J20133158 May 3, 2013. (DNR)