



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
555 CORDOVA STREET
ANCHORAGE, AK 99501

WASTE MANAGEMENT PERMIT

for the

Kensington Mine

Permit No. 2022DB000X

Date: May XX, 2022

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 xxxxxx, and expires xxxxxx. 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 – 6. This permit incorporates by reference *Integrated Waste Management and Disposal Plan Kensington Gold Mine, Alaska, USA July 2021 (IWMP)* and its appendices, *Quality Assurance Project Plan Kensington Mine, Alaska, USA August 2017 (QAPP)*, and *Reclamation and Closure Plan Update for the Kensington Mine, Borough of Juneau, Alaska, USA April 2022 (RP)* and its appendices. 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. 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.

Gene McCabe
Program Manager

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1 PERMIT COVERAGE & ADOPTED REFERENCES

1.1 PERMIT COVERAGE

1.1.1 This permit is for the management of solid and liquid wastes from the Kensington Mine, which has historically averaged approximately 1,800 tons of ore and 800 tons of waste rock per day. This permit authorizes the disposal of wastewater and approximately 8.5 million tons of tailings to the Tailings Treatment Facility (TTF) and approximately 6 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 119.6 acres contained behind a 124 feet high rock fill dam.

1.1.2 This permit covers storage, containment and/or disposal of waste and monitoring at the sites listed under this subheading. However, this permit does not authorize the discharge of wastewater to surface water. The discharge of wastewater to surface water from the Kensington Mine is authorized separately under Alaska Pollutant Discharge Elimination System (APDES) permit AK0050571.

1.1.2.1 Underground Mine Workings

The disposal and containment of mill tailings, graphitic phyllite rock, and disposal of inert solid wastes into Underground Mine Workings.

1.1.2.2 Seep Water Treatment Plant (SWTP)

The disposal of effluent from the Graphitic Phyllite Treatment Plant which treats graphitic phyllite seepage water from Tailing Treatment Facilities (TTF) dam. The SWTP is located adjacent to the existing Tailing Treatment Facility Water Treatment Plant (outfall 002) and has a treatment capacity of 60 gallons per minute (gpm). When there is insufficient flow to maintain continuous operation of the SWTP, water is stored in two 4,000 gallon tanks treated in batches. Seeps from naturally occurring exposed graphitic phyllite located upgradient of the dam spillway on the west abutment are also collected and pumped to the SWTP.

1.1.2.3 Temporary Storage Containments

The storage, containment, and disposal of treatment plant sludges and hazardous chemicals in Temporary Storage Sheds.

1.1.2.4 Impacted or Potentially Impacted Surface Waters

Best Management Practices (BMP) to control and treat the impacted or potentially impacted surface waters.

1.1.2.5 Tailings Treatment Facilities (TTF)

The disposal and containment of mill tailings to the TTF. The TTF is located in the upper valley of the East Fork of the Slate Creek, and the tailings are impounded by the Main Dam at the south end. 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.

1.1.2.6 Comet Waste Rock Stockpile (WRS)

The storage of waste rock at the Comet WRS which is located south and east of the comet portal and is located in the Sherman Creek drainage area.

1.1.2.7 Kensington Waste Rock Stockpile (WRS)

The storage of waste rock and development rock at the Kensington WRS which is located east of the Kensington Portal in the Johnson Creek drainage area.

1.1.2.8 Pit # 4 Waste Rock Stockpile (WRS)

The storage of waste rock and development rock at the Pit #4 WRS which is located in the Johnson Creek drainage area and is accessed by the Jualin Road.

1.1.2.9 Pipeline Road Waste Rock Stockpile (WRS)

The storage of waste rock and development rock at the Pipeline Road WRS which is located below the Tailings Pipeline Access Road to the TTF and above the existing mine camp facilities.

1.1.2.10 Water Quality Monitoring Stations

The Quality Assurance Project and Freshwater Monitoring Plan for the Kensington Mine designates locations for monitoring water quality surrounding the mine.

1.2 ADOPTED REFERENCES

In addition to the stipulations in this permit, the permittee shall adhere to the applicable requirements of 18 AAC 15 Administrative Procedures, 18 AAC 60 Solid Waste Management Regulations, 18 AAC 70 Alaska Water Quality Standards (WQS), and 18 AAC 72 Wastewater Disposal. The permittee shall also adhere to department-approved plans authorized under the permit. When the terms of this permit differ from the terms of department-approved project documents adopted by reference in this section, the most recent term with written department approval is controlling. If there is doubt as to which conflicting term is newer, this permit shall control. Department-approved plans adopted by reference in this section must be updated within 90 days of permit issuance incorporating any changes necessary to be consistent with the terms of this permit, and these plans may be revised provided that written department approval is received. Department-approved plans adopted by reference into this permit include the following documents:

- 1.2.1 *Integrated Waste Management and Disposal Plan Kensington Mine, Alaska, USA* March 2022 (*IWM&DP*) and its appendices,
- 1.2.2 *Quality Assurance Project Plan Kensington Mine, Alaska, USA* August 2017 (*QAPP*), and
- 1.2.3 *Reclamation Plan Kensington Mine, Alaska, USA* March 2022 (*RP*).

2 SPECIFIC CONDITIONS

2.1 SITE WIDE WASTE DISPOSAL

The waste materials permitted under this section are limited to mine tailings; waste rock; mining and mineral processing wastes generated by extraction, beneficiation; and processing activities; and other wastes meeting the conditions in this permit. This permit also requires

collection of seepage and runoff below the TTF Dam, as well as disposal of sludge produced from mine water and domestic wastewater treatment.

While this permit is in effect and subject to the limitations in section 2.1.2, the permittee is authorized to dispose of solid and liquid wastes in permit-designated treatment works at the Kensington Mine. Under 18 AAC 70.010(c), water quality standards promulgated at 18 AAC 70 do not apply to a treatment works authorized by the department and applicable water quality criteria “must be met in adjacent surface water and groundwater at and beyond the boundary of the treatment works.” Treatment works are defined in AS 46.03.900(33) as “a plant, disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfills, or other works installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage, industrial waste, or other wastes.”

- 2.1.1 All Treatment Works –The underground mine workings, TTF, waste rock stockpiles, mine water seepage and collection systems are approved for containment, transference and disposal of solid or liquid wastes and approved as treatment works per 18 AAC 70.990(33) and not subject to WQS in 18 AAC 70.010(c).
- 2.1.2 Limitations
 - 2.1.2.1 The following materials shall not be disposed into the TTF or the mine unless otherwise provided or approved in writing by the Department:
 - 2.1.2.1.1 Acute hazardous wastes, as defined by 18 AAC 60.990(157), including radioactive material, explosives, strong acids and untreated pathogenic waste; however, this prohibition does not preclude disposal of natural minerals found in mine rock or residual wastes included as byproducts of the beneficiation; or
 - 2.1.2.1.2 Contaminated soils, spill booms, liners used for the containment of spilled hazardous substances, chemicals used in the cleanup of hazardous substance spills, or other hazardous substance spill cleanup wastes.
- 2.1.3 Dry methods of cleanup shall be used for initial cleanup of oil spills in the maintenance shops.
- 2.1.4 Non-hazardous incidental wastes that are approved for underground disposal include:
 - 2.1.4.1 Development rock;
 - 2.1.4.2 Settled solids from sumps, ditches, and degritting basins;
 - 2.1.4.3 Incinerator ash and residue;
 - 2.1.4.4 Ash from combustion of scrap wood material;
 - 2.1.4.5 Iron (drill steel, balls, empty cans, pipe, etc.);
 - 2.1.4.6 Broken concrete slabs, scrap lumber, pipe and similar wastes;
 - 2.1.4.7 Empty plastic and glass containers;
 - 2.1.4.8 Empty 55-gallon drums;
 - 2.1.4.9 Inert domestic waste;

- 2.1.4.10 Construction debris;
- 2.1.4.11 Tires;
- 2.1.4.12 Spill cleanup debris as specified in a plan approved by the Department;
- 2.1.4.13 Sludge and solids from the mine drainage water and TTF treatment plants; and
- 2.1.4.14 Such other material as would otherwise be disposed of in an inert solid waste landfill facility without special handling.
- 2.1.5 Tailings from the mill, graphitic phyllite rock and sludge from the graphitic phyllite treatment plant may be disposed in underground mine workings 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.
- 2.1.6 Sediments from the underground sumps may be disposed of in the Comet WRS.
- 2.1.7 Seepage and runoff collected from the TTF dam may be disposed of to the TTF.
- 2.1.8 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.

2.2 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 two sites where graphitic phyllite is being stored awaiting disposal in the mine workings. Those sites are (1) Pit # 4 where about 8,512 cubic yards (cu yd) are wrapped in 60 mil High Density Polyethylene (HDPE) liner, and (2) the north mud dump where about 8,000 cu yd are contained in a 60 mil HDPE storage cell. Material from Pit 4 is in the process of being mixed with cement and moved into the underground workings for final disposal. Shotcrete has been applied to the exposed, in-place, naturally occurring, graphitic phyllite rock to mitigate acid rock drainage.

- 2.2.1 Treated water from the GPPTP shall be pumped to a soil-filled infiltration ditch within the TTF footprint for land application.
- 2.2.2 All disturbed graphitic phyllite rock, including the two 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.
- 2.2.3 Exposed faces of graphitic phyllite rock are to have loose material removed from the face and then applied with dental concrete or shotcrete as cover.

2.3 POTENTIALLY ACID GENERATING ROCK

Potentially acid generating (PAG) rock excludes graphitic phyllite rock covered in Section 2.2 but includes all other PAG rock encountered at the project.

- 2.3.1 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.

- 2.3.2 Rock from Pit 4 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 4 for construction purposes without first being tested and approved for use by the Department. Any testing proposal shall be approved by the Department.

2.4 WASTEWATER TREATMENT PLANT SLUDGE

- 2.4.1 Sludge is generated at the mine water treatment plant (MWTP), the Tailings Treatment Facility treatment plant (TTFTP), and the SWTP.
- 2.4.2 MWTP sludge may be disposed of underground in open stopes and also within the Comet waste rock site (WRS). 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.
- 2.4.3 TTFTP sludge shall be disposed of underground as paste backfill.
- 2.4.4 SWTP sludge shall be disposed within paste backfill in the mine. However, SWTP sludge may be temporarily stored in a covered containment area before disposal.

2.5 SITE CONSTRUCTION, OPERATION, & MAINTENANCE

- 2.5.1 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.
- 2.5.2 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.
- 2.5.3 Secondary containment of all hazardous substances, as defined at AS 46.03.826(5), must be impermeable to substances stored.
- 2.5.4 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.

- 2.5.5 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.
- 2.5.6 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 SWTP. 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.
- 2.5.7 The TTF dam shall be maintained and operated as required by the most recent State of Alaska *Certificate of Approval to Operate a Dam*.
- 2.5.8 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.
- 2.5.9 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.
- 2.5.10 The permittee shall not dispose of waste materials in quantities exceeding the design capacity of the disposal facilities.
- 2.5.11 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.
- 2.5.12 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.
- 2.5.13 For any nondomestic wastewater system plan review required under 18 AAC 72.600, the permittee shall:
 - 2.5.13.1 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;
 - 2.5.13.2 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
 - 2.5.13.3 Submit to the Department within 90 days after completing construction of a significant modification to an existing process component:

- 2.5.13.3.1 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,
 - 2.5.13.3.2 A summary of the quality control activities that were carried out during construction, and
 - 2.5.13.3.3 The revised operating plans that reflect modifications made during construction.
- 2.5.14 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.
- 2.5.15 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. If hazing is included in the program, Coeur Alaska must contact ADF&G Division of Wildlife Conservation to obtain a permit to haze wildlife.

2.6 MONITORING

- 2.6.1 The Integrated Waste Management and Disposal Plan (IWMP) dated July 2021 including its appendices submitted by Coeur Alaska and approved by the department, is incorporated into this permit. Future department-approved changes to project monitoring will be included as modification to IWMP and do not require re-issuance or modification of this permit. The IWMP shall contain monitoring procedures to include the following and must be updated within 90 days of permit issuance, as needed, to confirm to the permit.
- 2.6.2 See Section 2.9 for monitoring reporting requirements.
- 2.6.3 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 submitted in Plan of Operations Amendment 1 for the Kensington Mine*, March 2022. 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.
- 2.6.3.1 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.
 - 2.6.3.2 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.

- 2.6.4 Water monitoring and corrective action shall be in accordance with Section 2.10, 18 AAC 60.810 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.
- 2.6.5 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.
- 2.6.6 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.
- 2.6.7 Signs of stress to vegetation and wildlife associated with facility activities must be monitored.
- 2.6.8 The *QAPP* shall ensure water compliance samples are analyzed by a laboratory that follows EPA-approved procedures, quality control requirements, reporting and documentation procedures.
- 2.6.9 The permittee must develop a quality *QAPP* for all sampling required by this permit. The *QAPP* must be completed within 90 days of the effective date of this permit and must be available to the department upon request.
- 2.6.10 The *QAPP* must be designed to assist in planning for the collection and analysis of water samples in support of the permit and in explaining data anomalies when they occur.
- 2.6.11 Throughout all sample collection and analysis activities, the permittee must use chain-of-custody procedures described in the *QAPP*.
- 2.6.12 The permittee must amend the *QAPP* whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the *QAPP*.
- 2.6.13 A copy or copies of the *QAPP* must be kept onsite and made available to the department upon request.

2.7 QUALITY ASSURANCE REQUIREMENTS

- 2.7.1 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.
- 2.7.2 The Quality Assurance Project Plan and Fresh Water Monitoring , dated August 2017 by Coeur Alaska, and approved by the Department includes a *QAPP*. The permittee shall update and maintain the *QAPP* as follows:

- 2.7.2.1 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.
- 2.7.2.2 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 whenever changes to methods occur.
- 2.7.2.3 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.

2.8 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.

2.9 REPORTING

- 2.9.1 If an exceedance 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 2.10.2. Reporting of sample results from the TTF is excluded from this requirement.
- 2.9.2 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.
- 2.9.3 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 2.6. 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.

- 2.9.4 Quarterly and annual reports required in Condition 2.9.3 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.
- 2.9.5 The annual report shall include:
- 2.9.5.1 an estimate of the volume remaining in the TTF for tailings under the current stage of dam construction.
 - 2.9.5.2 a summary of development rock sample analyses.
 - 2.9.5.3 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.
 - 2.9.5.4 a set of site development and use plans and any updates to the plans.
 - 2.9.5.5 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.
 - 2.9.5.6 development rock and tailings analyses, as noted in the *Integrated Waste Management and Disposal Plan*.
- 2.9.6 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 2.9.3 will be presented. The annual report shall be available to the Department at least two weeks prior to the annual meeting.
- 2.9.7 The annual report required in Condition 2.8.3 shall address the adequacy of the current version of the *Kensington Mine Reclamation and Closure Plan*.
- 2.9.8 The annual report required in Condition 2.9.3 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.
- 2.9.9 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.

- 2.9.10 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

- 2.9.11 All reports submitted under this section must be signed by the facility's responsible corporate officer certifying the accuracy of information provided therein.
- 2.9.12 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.

2.10 CORRECTIVE ACTIONS

- 2.10.1 The permittee shall comply with 18 AAC 60.800 if the visual monitoring program required under any of the items listed in Condition 2.6.3.1 discovers damage or potential damage to the waste disposal-related facility that could lead to water quality violations or harm wildlife species.
- 2.10.2 After reporting an exceedance under Condition 2.9.1, the permittee shall perform the following tasks.
- 2.10.2.1 Determine the extent of the exceedance.
- 2.10.2.2 In consultation with the Department and documented in writing, implement a plan to determine the cause and source of the exceedance.
- 2.10.2.3 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.
- 2.10.2.4 Implement the corrective action plan as approved by the Department.
- 2.10.3 The permittee shall abide by any Department-approved corrective action plan.

2.11 TEMPORARY SUSPENSION OF MINING AND MILLING

- 2.11.1 A temporary suspension of mining and milling shall be defined as a suspension of mining, milling and 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.

- 2.11.2 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:
- 2.11.2.1 The procedures, methods, and schedule to be implemented for the treatment, disposal, and storage of process waters;
 - 2.11.2.2 The control of surface drainage to and from the facility and the surrounding area;
 - 2.11.2.3 The control of erosion from the tailings area, development rock disposal areas, and any other disturbed areas within the facility boundary;
 - 2.11.2.4 The secure storage of chemicals during the period of closure;
 - 2.11.2.5 Procedures for continuing maintenance and monitoring of the dam including seepage collection and water balance; and
 - 2.11.2.6 Procedures for maintaining containment of all water at the facility and providing continuing treatment of that water in accordance with APDES Permit No. AK0050571.
- 2.11.3 The Department shall have 15 days to review and approve or require modifications to the temporary suspension plan.
- 2.11.4 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.
- 2.11.5 During temporary suspension of the site, the permittee shall:
- 2.11.5.1 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. .
 - 2.11.5.2 Continue monitoring and reporting as required for all active portions of the mine.
 - 2.11.5.3 Complete reclamation and corrective action requirements as appropriate under the *Reclamation and Closure Plan* in light of the nature of the closure.
- 2.11.6 Written Department approval is required before resuming operations after a period of temporary closure.

2.12 PERMANENT CESSATION OF MINING AND MILLING

- 2.12.1 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.

- 2.12.2 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.
- 2.12.3 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:
 - 2.12.3.1 Establish fish and wildlife habitat in the TTF per the 2022 *Reclamation and Closure Plan* update;
 - 2.12.3.2 The spillway of the tailing dam is constructed and stable;
 - 2.12.3.3 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;
 - 2.12.3.4 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, must meet applicable 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 must meet Alaska Water Quality Standards (18 AAC 70) or must not exhibit a statistically significant increase above the background concentrations using methods described in 18 AAC 60.830 for the analysis of statistical significance.
- 2.12.4 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.
- 2.12.5 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.
- 2.12.6 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 2.12.3 are met. This schedule and the parameters monitored may be modified by the department based on the monitoring results.
- 2.12.7 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.

2.13 FACILITY AUDIT

Unless waived by the department, a periodic third-party environmental audit shall be completed during the final year of the permit term or sooner if final closure starts during the permit term. However, the field inspection portion of the audit shall be conducted during the snow free season the year before permit expiration. The 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 intent of the audit is to evaluate whether both Coeur Alaska management and DEC permit administration provide reasonable assurances that the facility and environmental controls are functioning as intended. The environmental audit shall include an evaluation of the adequacy of the approved financial assurance.

2.14 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:

- (1) waste source reduction,
- (2) recycling of waste,
- (3) waste treatment, and
- (4) waste disposal

3 GENERAL PERMIT CONDITIONS

3.1 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.

3.2 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.

3.3 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.

3.4 AVAILABILITY

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

3.5 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.

3.6 CULTURAL OR PALEONTOLOGICAL 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.

3.7 APPLICATIONS FOR RENEWAL

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

3.8 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.

3.9 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.

3.10 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.

4 FINANCIAL RESPONSIBILITY

4.1 PROOF OF FINANCIAL RESPONSIBILITY

Under AS 46.03.100(f), 18 AAC 15.090, and 18 AAC 60.265, the department is required to secure proof of financial responsibility for reclamation and long term care, maintenance, including wastewater treatment, and monitoring at the facility.

4.1.1 The permittee shall provide the department with proof of financial responsibility for reclamation and closure of the facilities and post-closure monitoring. The proof of financial responsibility shall cover costs incurred for suspension of operations, reclamation and closure, near and long term wastewater treatment, and monitoring of all mine facilities.

4.1.2 The department will review and modify if necessary, the financial responsibility requirements including adjustments for concurrent reclamation, expansion, or other changes to the operation of the facility. The permittee shall address the adequacy of the financial responsibility in the annual report required in Section 2.6.3.

4.1.3 The proof of financial responsibility may be in the form of a trust fund, surety bond, letter of credit, insurance, or another department-approved mechanism.

4.1.4 Approved proof of financial responsibility must remain available through the post-closure period and may not be released in its entirety until the department certifies in writing that closure of the facility and the required post-closure monitoring have

been successfully concluded or that another entity has assumed responsibility for permit compliance, reclamation and closure activities, and post-closure monitoring.

- 4.1.5 The permittee must provide acceptable proof of financial responsibility within 60 days of the permit's effective date. The department will accept or reject the financial surety as expeditiously as possible but in no event later than 30 days after its receipt.
- 4.1.6 If the permittee is unable to provide acceptable proof of financial responsibility to the department, as approved by the department in writing, within the time period stated above, this permit will expire automatically at that time, notwithstanding any other approvals to the contrary, unless the department's failure to act is responsible for the delay in accepting or rejecting this proof.
- 4.1.7 If the permittee fails to comply with the terms and conditions of this permit and if the department concludes that such failure may prevent, inhibit or delay satisfactory reclamation and closure or post-closure monitoring of the facility, then the department may exercise its rights, under an approved mechanism, to access financial responsibility funds and use them for reclamation and closure and post-closure activities.
- 4.1.8 The permittee can apply to have the amount of the financial responsibility adjusted during the life of the permit if, for example, concurrent reclamation has been completed.

4.2 AMOUNT 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 \$42,948,858. for the Kensington Mine as approved by the U.S. Forest Service on March 8, 2022.

5 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
SWTP	Seep Water 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
WRS	Waste Rock Storage

6 FIGURES

6.1 FIGURE 1 – SLATE AND JOHNSON CREEKS



6.2 FIGURE 2 - SHERMAN CREEK

