Response to Comments

on

Department of Environmental Conservation
Draft Waste Management Permit No. 2022DB0001

&

Department of Natural Resources
Draft Reclamation Plan Approval No. J20223158RPA

Coeur Alaska Inc.
Kensington Gold Mine

Public Noticed April 29, 2022 – May 31, 2022

FINAL

July 14, 2022

Introduction

Public notice start: April 29, 2022

Public notice end: May 31, 2022

The Kensington Mine is an underground gold mine situated at the southern end of the Kakuhan Range of the coastal mountains in the Tongass National Forest on the small peninsula formed between Lynn Canal and Berners Bay. The mine is located on private land controlled by Coeur Alaska and regulated by the Alaska Department of Natural Resources (DNR) as well as public land regulated by the State of Alaska or the U.S. Forest Service (USFS) Tongass National Forest-Juneau Ranger District. The mine is within the administrative boundary of the City and Borough of Juneau. The site is currently accessible by floatplane, helicopter, or boat. The mill site and mine portal area lie near the old Indiana site access from the Jualin Mine site road. The current Comet Portal (850 feet elevation) access to the mine is located between Ophir and Sherman Creeks at the western base of Lions Head Mountain. Coeur proposes a life-of-mine extension to continue uninterrupted mining past the year 2023. The mine produces approximately 2,000 tons per day of ore. The mill and mine operate 24 hours per day, seven days a week. A gold concentrate is produced at the mill, packed in containers, and transported for off-site processing. Tailings from the mill are either sent to the Paste Backfill Plant, to be processed and placed in the underground mine, or placed at the Tailings Treatment Facility (TTF).

This document summarizes and addresses comments received on Alaska Department of Environmental Conservation (DEC), draft Waste Management Permit (WMP) No. 2022DB0001 and Alaska Department of Natural Resources draft Reclamation Plan Approval (RPA) No. J20223158RPA. The WMP regulates the containment and disposal of mine tailings, waste rock, wastewater, and other mine-related wastes at the Kensington Mine. The RPA regulates activities and costs associated with the reclamation and closure of the mine.

Substantive comments concerning requirements of the draft DEC WMP permit and the draft DNR RPA and the State's responses are contained in the following pages. The State did not respond to comments outside the scope or beyond regulatory authority of these permits. Changes made to the draft WMP resulting from a comment received during the public notice period are reflected in the final WMP. There were also some minor changes made to the draft permits after public notice correcting typographical and grammatical errors, formatting, and to clarify information. Those minor changes to the permits are not detailed in this document.

Opportunities for Public Participation:

To ensure public and agency opportunities for participation, the DEC and DNR:

- Published a public notice in the Juneau Empire newspaper on April 29, 2022. Written comments were solicited from April 29, 2022 through May 31, 2022.
- Online public notice published on DEC and DNR websites from April 29, 2022 through May 29, 2022.
- Copies of 2022 draft WMP and draft RPA were emailed to DNR, Alaska Department of Fish & Game (ADF&G), and USFS on April 29, 2022.
- Copies of 2022 draft WMP and draft RPA with supporting documents were posted on DEC and DNR websites on April 29, 2022 through May 31, 2022

Comment Overview

The State received comments from the Southeast Alaska Conservation Council (SEACC), Center for Science in Public Participation (CSP2), ADF&G, and the USFS. Permit-specific comments on the draft DEC permit and draft DNR approval and the State's responses to those comments are contained in the following table.

Comment No.	Comment Summary	Agency Response
1	SEACC requests that DEC delay the renewal of the Waste Management Permit and extend the public comment period until at least 30 days after the annual meeting, on June 23, 2022 SEACC contends that DEC delayed the issuance of new WMP, which was scheduled to be renewed in 2018, to allow Kensington to focus solely on crafting the Environmental Impact Statement (EIS) for its Tailing Treatment Facility (TTF) expansion rather than implementing numerous recommendations noted in the 2017 Kensington Mine Environmental Audit report for cleaning up and improving its operations associated with its WMP.	The notice period for public comment, from April 29 through May 31, 2022, provided 33 days for document review and receipt of comments. The purpose of the annual meeting is primarily for communication between the regulating agencies and the permittee, and it is independent of the permit reissuance process. The Final Supplemental Environmental Impact Statement Plan of Operations Amendment 1 for the Kensington Mine R10-MB-500d (SEIS), July 2021 and the SEIS Final Record of Decision (ROD), February 2022, were issued by USFS well before the draft WMP 2022DB0001 and draft RPA J20223158RPA were noticed. Both permits incorporated pertinent decisions from the ROD. Therefore, the request for extending or delaying the comment period is denied.
2	SEACC comments that DEC should include a description of its plan to alter the WMP during the permit term to incorporate any needed changes after the release of USFS mandated two-year Ecological Risk Assessment (ERA) report including any subsequent changes to Fresh Water Monitoring Plan (FWMP) requirements.	If the USFS ERA report requires a revision to the FWMP, the permittee will be required to update the FWMP. Additionally, the FWMP can be updated with new information or requirements at any time and submitted to DEC for review. Upon written DEC approval, the updated FWMP will be adopted by reference to the effective WMP. No change to the permit was made because of this comment.

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3	SEACC contends that 2017 audit report recommended reporting the total volume disposed of underground (p. 11-12). SEACC adds that while the 2022 draft WMP (Section 2.9.5) appears to include reporting requirements for above-ground waste disposal sites; however, no such underground reporting requirement is made. SEACC further adds that no underground disposal figures are available in Kensington's 2021 Annual Report.	Under WMP, inert materials are allowed to be disposed underground in mine stopes. Although the 2017 audit report may have made the recommendation for monitoring and reporting underground disposal volumes, the agencies did not have a regulatory basis of concern to require it in the permit. It should be noted that the recommendations provided in the audit report serve as suggestions to assist agency decisions. However, the agency is not required to adhere to them, particularly when there is no regulatory basis to do so. No changes to the permit were made based on this comment
4	SEACC asserts that Kensington should follow the 2017 audit report recommending that Kensington begins to report the development rock disposal amounts for each specific disposal facility. According to SEACC, the 2021 Annual Report does not report development rock disposal by individual site or facility. It only reports the overall development rock disposed in the surface stockpiles (tons/month) in Table 11, and tailings disposed of in the TTF (Table -10). SEACC continues to say that 2022 draft WMP (Section 2.9.5) includes no such change based on audit report recommendation.	Under 18 AAC 60.005(c)(8), development rock is exempt from regulation because it is chemically inert and monitoring and reporting the disposal amount does not serve regulatory concerns. Recommendations provided in the audit report serve as suggestions to assist agency decisions. However, the agency is not required to adhere to them, particularly when there is no regulatory basis to do so. No changes to the WMP permit are made based on this comment.
5	SEACC contends that during the 2017 Audit Report, three sites containing graphitic phyllite (GP) waste were in use; Pit 4, Pit 7, and the Mud Dump. However, only two sites, Pit 4 and the Mud Dump, are mentioned in the 2022 draft WMP. SEACC asks why Pit 7 isn't mentioned in the 2022 draft WMP.	The GP formerly contained in Pit 7 has been mixed with cement and disposed underground in mine stopes. Now Pit 7 contains only inert waste rock coming from underground mine operations. Therefore, Pit 7 was removed from the permit as a site containing GP. No changes to the WMP permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
6	SEACC is concerned regarding the application of shotcrete to exposed rock to mitigate acid drainage. SEACC contends that shotcrete may not be enough to contain seepage and recommends using crushed diorite cover instead as noted in the 2017 Audit Report recommendation to control GP seepage along the downstream side of the TTF's dam's east abutment.	Shotcrete involves spraying previously prepared ready-mixed concrete which is pneumatically projected at high velocity onto exposed rock surfaces. The cement in the shotcrete is specially formulated to adhere to and stabilize and curb seepage by filling in cracks in the rock face. Additionally, the carbonate matrix in the cement neutralizes the acidic nature of any GP drainage. The use of shotcrete is an appropriate method of mitigating seepage from exposed acid rock drainage (ARD) material. The seepage along the downstream side of the TTF dam's east abutment is collected by a trench system and is piped to a treatment plant prior to disposal. DEC finds that the way shotcrete and seepage containment are employed to be reasonable and effective. The Waste Management Permit regulates to achieve containment of ARD. The permittee has demonstrated a proven and effective manner of containing ARD. No changes to the WMP permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
7	SEACC points out that 2017 Audit Report found that GP exposed at the north end of the TTF is in contact with TTF surface water, and DEC issued a Notice of Violation for the failure to comply with the APDES permit; discharge of acidic metal ridden seepage water from waste rock directly into the TTF, an unlined facility which may allow groundwater infiltration. The original 2013 WMP requires that all seepage and runoff from GP rock shall be managed to prevent it from escaping containment (Section 1.3.3). However, in the 2022 draft WMP, this language and three entire sections regarding treatment and management of GP seepage and runoff have been removed. SEACC contends that DEC appears to be backsliding on the original permit terms by removing language requiring acid rock drainage management.	The GP exposure at the northern end of the TTF is now submerged beneath the waters contained in the TTF. Submersion within water or subaqueous storage prevents the oxidation of the GP which in turns mitigates the generation of ARD. Subaqueous storage of ARD-generating material is a recommended method of long-term storage of ARD under Global Acid Rock Drainage Guide (GARD Guide) sponsored by the International Network for Acid Prevention (INAP). Since the GP at the northern end of the TTF stored in an environmentally protective manner, references to the GP were removed from the WMP. The comment on "backsliding" refers to Alaska Pollutant Discharge Elimination System (APDES) regulation 18 AAC 83.480(a) when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit. Since this WMP is not issued under APDES regulation, it is not subject to the requirement therein. No changes to the WMP permit are made based on this comment.
8	SEACC wants to know if Pit 4 has adequate covering and why was this not discussed in the 2022 draft WMP.	The GP pile at the Pit 4 is wrapped in high density polyethylene (HDPE) sheeting as indicated in condition 2.2 of the Waste Management Permit. The HDPE wrap serves as a Best Management Practice limiting exposure of ARD-generating material to water during interim storage. No changes to the permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
9	SEACC says that the 2017 Audit Report pointed out that the 2013 WMP (Section 1.7.4.2) states that tailings shall be tested quarterly to ensure that there are not significant changes from baseline conditions, which could affect monitoring, closure requirements, water quality, and other permit conditions. SEACC asserts that not only does the permit mandate that the testing will occur, but it also states that reports shall include information necessary to determine data validity, variations, and trends. However according to the Audit Report, Kensington's quarterly reports do not include baseline data, graphs, data validation, or quality control information. This makes it difficult to identify trends and changes from baseline analysis, and data graph to evaluate trends (pp. 23-24). This would allow the agency to better review compliance. A similar recommendation about reporting methods was made relevant to mine sump sediments; baseline chemistry that determines if the sediments can be disposed on the waste rock pile is not provided. According to SEACC, none of the Audit Report recommendations regarding the inclusion of baseline data, data tables, and graphs to evaluate trends have been incorporated into either 2022 draft WMP language or Kensington's 2021 WMP Annual Report. Moreover, SEACC asserts that DEC/DNR appears to have ignored the 2017 Audit Report recommendation pertaining to geochemistry reporting methodology, which would have resulted in easier compliance review.	Data of concern were examined in the SEIS found at https://www.fs.usda.gov/project/?project=55533. Considering the recent findings of the SEIS, the 2017 Audit Report's recommendation is irrelevant as the currently submitted data and graphs are enough to evaluate trends. No changes to the permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
10	According to SEACC, the 2017 Audit Report reviewed the Integrated Waste Management and Disposal Plan (IWMDP) and noted that eco-friendly solvents (e.g., Orange Sol or Simple Green (p. 29)) were not used for machine parts washing. Instead, toxic solvents were being used on the premise when the eco-friendly solvents didn't work. Therefore, SEACC requests that the DEC works with Kensington to identify eco-friendly solvents.	The comment is beyond the scope of Waste Management Permit. However, sentiments expressed by the commenter are required in permit condition 2.14, which prescribes a hierarchy for implementing a pollution prevention strategy. No changes to the permit are made based on this comment.
11	SEACC notes that Kensington disposed of dewatered sludge cakes from wastewater treatment processes in the Comet Waste Rock Site (WRS). SEACC further says that the 2017 Audit Report revealed that the sludge cakes were not being placed correctly to avoid infiltration and drainage issues. SEACC further adds that in the 2022 ROD, the USFS required Kensington, as part of mitigation for water quality concerns pursuant to the existing and expanding Comet WRS, to dispose of wastewater sludge cakes underground. However, the 2022 draft WMP appears to allow Kensington to continue disposing of sludge cakes above-ground in the Comet Waste Rock Site (WRS). SEACC requests that the 2022 draft WMP be changed to reflect the US Forest Service ROD (POA 1) requirement for underground disposal of water treatment sludge cakes.	The WMP Part 2.4.2 was revised requiring that mine water treatment plant sludge be disposed of underground as paste backfill.

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12	SEACC requests that DEC disclose any and all spills which have occurred at Kensington. DEC regulates the mitigation and reporting of spills of chemicals through the Waste Management Permit. However, DEC has not disclosed most of the substances that have been spilled in the 2022 draft WMP. Additionally, numerous Clean Water Act violations have occurred during the past three years; five Notice of Violation for Clean Water Act issued between October 2019 and April 2021 have been occurred. EPA has issued citations and fined the mine; however, no DEC enforcement action has followed. SEACC requests that DEC follows the terms in its relevant permits and required needed compliance regarding Kensington.	DEC, Division of Spill Prevention And Response (SPAR) is responsible for the management of spills of oil and hazardous substances, and maintains a database of spill incidents at https://dec.alaska.gov/applications/spar/publicmvc/perp/spillsearch. The Spill Search database contains spill name, date, location, facility address, facility type, primary responsible party, media impacted, substance released, amount released, and disposal method. Ongoing CWA violations at the facility are under the authorities of the DEC APDES Compliance & Enforcement Program and beyond the scope of this permit action. No changes to the permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
13	SEACC cites following from 2017 Audit Report: *"… Kensington's 2013 indirect costs estimates and assumptions are consistent with ADNR/ADEC draft guidelines and industry standards. However, given the remoteness of the mine site and limited seasonable timeframe for closure and reclamation activities, contingency estimates should be on the high end of the ADNR/ADEC range presented in Table 11. Kensington assumes a 12 percent contingency for scope, which is higher than the ADNR/ADEC range of 6 to 11; the Audit Team recommends Kensington utilize 11 percent for the 2018 update. The Audit Team recommends that the bid contingency be moved to 8 or 9 percent (the upper end of ADNR/ADEC range) given site location and seasonal limitations (p. 49)."* According to SEACC, in the 2022 draft WMP, a scope contingency figure of 8% (Appendix A, p. 10) is used. It is unclear how a lower figure than recommended by both the audit and the USDA would satisfy the financial requirements and guarantees associated with reclamation costs. So, the SEACC requests that the DEC explains this difference in its current permit.	Recommendations provided in the audit report serve as suggestions to assist agency decisions. However, the agency is not required to adhere to them. Kensington's contingency percentage is 8% and is within the recommended range of scope contingency of 6% - 11% from the July 2017 Mine Reclamation and Closure Cost Estimation Guidelines (2017 Guidelines). In general terms, there is acceptance of the concept that scope contingency may be reduced over the life of mine under the assumption that the reclamation and closure plan cost estimate is supported by more and more detailed site and process information as the mine matures. Further, DNR, DEC, and USFS participated in the financial responsibility review as a part of the SEIS and concurred with financial assurance calculation of the selected alternative identified in the ROD.

Comment No.	Comment Summary	Agency Response
14	SEACC submits that factors associated with climate change have not been considered or addressed in the Reclamation Plan. There are multiple examples to date in the history of Kensington that clearly show that climate change has already caused unexpected issues. In Kensington's 2021 Annual Report, it is stated that the National Weather Service reported that the Juneau area experienced annual precipitation about 14% above normal and snowfall about 56% above normal. An evaluation of the effects of changing temperatures, increasing snow loads and precipitation on the TTF facility, development of rock disposal areas, water treatment and capacity, and other mine workings is essential. The Forest Service has required Kensington to evaluate and incorporate climate change factors based on numerous studies that predict warmer and wetter conditions for Alaska, with increasing rainfall and decreasing snowfall over the next 50 to 100 years, along with an increased probability of extreme precipitation events. These types of changes will undoubtedly affect WMP factors: storage containment, and disposal of waste and associated monitoring.17 Development rock storage, in particular, will be impacted. Yet no discussion of these factors or how the mine may adapt its controls to mitigate for them exist in the DWMP or Reclamation Plan. SEACC requests that the 2022 draft WMP and Reclamation Plan incorporate a discussion of climate change factors and mitigations relevant to reclamation, similar to the Final Supplemental Environmental Impact Statement and POA1 ROD.	The State's reclamation standards under 11 AAC 97 provide for a qualitative approach to reclamation that allows for adaption based on changing conditions on site. Kensington's WMP and RPA are reissued on a five-year cycle and can be updated anytime the agencies deem necessary. The frequency of review allows for revisions to the mine plan of operations and permits when factors due to climate change affect operating and permit requirements. The natural conditions of a site are always a factor and are monitored and reported. If climate change causes an issue in an area regulated by the permits, that specific problem will be addressed as needed on a case-by-case basis. No changes to the permit are made based on this comment.

Comment No.	Comment Summary	Agency Response
15	CSP2 commented that an inflation rate that reflects the present high rate of inflation, and the uncertainty in future rates, should be adopted for the reclamation cost calculations. The rate used to adjust the reclamation costs inflation are understated. While the rate was determined using an average of the last five years of inflation in Anchorage, using a five-year average under existing inflation conditions is not appropriate.	The rate of inflation calculated for Kensington's financial assurance estimate is a part of the WMP and RPA which are reissued on a five-year cycle. Financial assurance estimates can be updated anytime the agencies deem necessary. The frequency of review allows for revisions to the financial assurance estimate to address and capture inflation rate fluctuations over time. The five year average of the Anchorage Consumer Price Index is used to calculate an inflation rate for every mine under a WMP or RPA. The financial assurance amount includes five years of inflation compounded on current estimates. Since the final amount has been padded with five years of inflation that has yet to occur, the agencies have an adequate, if not abundant, cushion to make future adjustments as needed. No changes were made to the permit based on this comment.
16	CSP2 Commented that the indirect costs should be applied uniformly across all Long-Term Care and Maintenance activities. The departure from standard procedures in determining mobilization/demobilization costs in the 2022 Reclamation Plan should either be applied to all of the direct costs, or the costs should be moved into the direct cost calculation. Applying indirect costs to only some of the direct costs violates the assumptions under which the indirect cost recommendations were made.	For indirect cost calculations, the 2017 Guidelines were used. Kensington's indirect cost was 46.5%, and is consistent with the indirect range of 31.5% - 58.5% from the 2017 guideline recommendation. This way of applying mob/demob costs is more accurate than applying a percentage. Long-term Care and Maintenance is after reclamation and closure and therefore calculated differently. Post-closure monitoring is evaluated on a case-by-case basis. DNR and DEC participated in the financial responsibility review as a part of the SEIS and concurred with financial assurance calculation of the selected alternative identified in the ROD.

Comment No.	Comment Summary	Agency Response
17	ADF&G. referenced condition 1.1.2.2 of the 2022 draft WMP. Within this condition and elsewhere in the draft permit, the "Graphitic Phyllite Package Treatment Plant (GPPTP)" is referenced; this temporary water treatment plant was replaced by the Seep Water Treatment Plant in an earlier project expansion. Therefore, throughout the permit, this term should be replaced accordingly with "Seep Water Treatment Plant."	All permit references to, "Graphitic Phyllite Package Treatment Plant (GPPTP)" were changed to "Seep Water Treatment Plant."
18	ADF&G submitted comments with the following recommendations for revision to the Environmental Monitoring Plan (EMP) and Reclamation Closure Plan (RCP): *The updated TTF EMP inappropriately includes Section 2.4 pertaining to required aquatic resources monitoring in the TTF during reclamation.* *Remove the dissolved oxygen and additional aquatic resources monitoring identified in Sections 2.3 and 2.4, and Table 6.* *Distinguish the timeframe and required monitoring associated with discrete fish habitat mitigation areas identified in Section 4.0 and Table 6.* *Revise qualifications of water quality monitoring activities identified in Section 2.1 and Table 6; this additional monitoring should instead commence immediately upon cessation of mining operations.* *Within Section 2.3 (9), correct "Dolly Varden trout" to "Dolly Varden char."'*	The permittee will be required to update the TTF EMP and the RCP documents in accordance with agency requirements. Upon USFS and state-agency approval, the updated documents will be accepted by the agencies as modifications to the mine plan of operations. References in the RPA and WMP will be updated to reflect recently approved documents. No change was made to the permit resulting from this comment.

Comment No.	Comment Summary	Agency Response
19	The USFS referred to condition 1.5.2 of the 2022 draft WMP which says, “MWTP sludge may be disposed in underground 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. But as a condition in the POA1 SEIS ROD, the filter press sludge must be disposed of underground, not within the WRS. It would probably be best for the WMP to not be in conflict with the ROD.	The WMP has been changed requiring that wastewater filter press sludge must be disposed underground.