



THE STATE  
of **ALASKA**  
GOVERNOR MICHAEL J. DUNLEAVY

**Department of Natural Resources**

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November 7, 2019

Matthew Reece, Minerals Program Manager  
U.S Forest Service  
Tongass National Forest  
8510 Mendenhall Loop Rd.  
Juneau, AK 99801

Re: Kensington Gold Mine Plan of Operations Amendment 1 SEIS Scoping Comments

Dear Mr. Reece,

The Office of Project Management and Permitting (OPMP) coordinated with the Alaska Departments of Natural Resources (DNR), Environmental Conservation (DEC), and Fish and Game (ADF&G) to develop the following consolidated scoping comments in response to the U.S. Forest Service's Notice of Intent (NOI) to prepare a Supplemental Environmental Impact Statement (SEIS) for Coeur Alaska's proposed Kensington Gold Mine Plan of Operations Amendment 1 (POA 1; Federal Register Vol. 84, No. 184, September 23, 2019). Please consider the following comments during preparation of the Draft SEIS.

Coeur Alaska proposes POA 1 to attain a 10-year life of mine extension from 2023 to 2033. If implemented, POA 1 would expand the currently approved disturbance area by approximately 150 acres, bringing the total disturbance area for the Kensington Gold Mine to approximately 390 acres. POA 1 includes the following main elements:

- Construction of a Stage 4 dam raise of the existing tailings treatment facility (TTF), formerly known as Lower Slate Lake, including a causeway between the TTF and Upper Slate Lake;
- Relocation of seepage collection sumps, access road, power line, pipelines, and stormwater diversion channels;
- Expansion of three existing waste rock stockpiles (WRS): Kensington, Pit #4, and Comet;
- Construction of one additional WRS (Pipeline Road);
- Relocation of ancillary facilities including the water treatment plants at the TTF;
- Increase mill production from 2,000 tons per day to 3,000 tons per day to provide operational flexibility and make up for periods of maintenance shutdowns; and

- Construction of access roads to mitigate Slate Creek resident fish spawning habitat losses by constructing deltas and rerouting Fat Rat Creek into South Creek, and culvert replacements to promote fish passage, based on recommendations from ADF&G (Albrecht 2018).

#### State Authorizations:

Please acknowledge state statutes and regulations applicable to action alternatives evaluated in detail and described in the Draft SEIS. The Kensington Gold Mine currently holds several state authorizations (POA 1, Appendix B), including a Reclamation Plan Approval, tideland lease, Temporary Water Use Authorizations, and a Certificate of Approval to Operate a Dam issued by DNR; an Integrated Waste Management Permit and Alaska Pollutant Discharge Elimination System Permit issued by DEC; and Fish Habitat Permits issued by ADF&G<sup>1</sup>. To ensure clarity and guard against conflicts with decisions reached through the National Environmental Policy Act (NEPA) process, the Draft SEIS should cite applicable state statutes, regulations, or existing permit conditions, where appropriate.

Coeur Alaska holds a private easement at Comet Beach (ADL 105543) and a tideland lease for the Slate Cove Marine Terminal (ADL 107154) issued by DNR. Although POA 1 does not appear to propose any activities affecting state tidelands, the facilities located at Comet Beach and Slate Cove are critical for Coeur Alaska's proposed reclamation and closure plan. The private easement for Comet Beach is scheduled to expire on April 14, 2025, and Coeur Alaska must apply for renewal of that authorization prior to expiration for that facility to be available for use during proposed reclamation activities under POA 1.

The proposed reroute of Fat Rat Creek to join South Creek to create a wider and deeper channel at the new stream mouth (POA 1, Section 5.6.1, page 56) is a water diversion that will require a Temporary Water Use Authorization from DNR.

#### Waste Management:

The Draft SEIS should evaluate reasonable location and design alternatives for additional waste rock storage capacity to meet the Purpose and Need. "A total of ten possible WRS areas were evaluated in 2016, out of which four WRSs were selected based on a combination of permitting, constructability, operational efficiency, and cost (NewFields, 2017)" (POA 1, Sec. 4.3, page 46). DNR recommends that the Draft SEIS consider the ten possible WRS areas evaluated by Coeur Alaska, along with others that may be identified during scoping, and evaluate those areas for potential environmental impacts, reclamation effectiveness and human health and safety considerations. For example, the Draft SEIS may consider alternative construction designs for the Pipeline WRS area due to its proximity above the mine camp. Constructing the Pipeline WRS in engineered compacted lifts at a minimum of 3:1 grade may be reasonable given additional environmental, reclamation and safety considerations (see comments on POA 1 Section 4.3.1 and 4.3.2 below).

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<sup>1</sup> Coeur Alaska's active Fish Habitat Permit for the TTF is FH05-I-0050C, which replaces FH05-I-0050B and FH05-I-0050 (POA 1, Appendix B, page 3). Coeur Alaska also holds other Fish Habitat Permits not listed.

POA 1, Section 4.2.1 notes that “Existing soils and weathered bedrock below the footprint of the proposed Stage 4 Main Dam expansion will be removed and disposed of prior to construction” (page 43). DEC suggests rewording this to read “Existing soils and weathered bedrock below the footprint of the proposed Stage 4 Main Dam expansion will be classified as per the current DEC Waste Management Permit, Section 1.4, and will be removed and disposed of prior to construction.”

POA 1, Section 4.2.1 notes that “... a temporary [graphitic phyllite (GP)] material storage area will be created...” (page 44). DEC suggests rewording this to read “a temporary GP material storage area that conforms to the current DEC Waste Management Permit Section 1.4 will be created.” Additionally, DNR recommends the Draft SEIS describe the total volume of GP that has been excavated to date, the amount disposed underground, and the amount that remains on the surface. The Draft SEIS should then consider alternatives for managing GP remaining on the surface or that may be encountered under POA 1, including permanent storage on the surface versus continued underground disposal.

POA 1, Section 4.3.1 notes that “...waste rock material will be end-dumped to form overall slopes of approximately 2H:1V at closure” (page 47). Similarly, Section 4.3.2 (page 47) describes “an overall slope of approximately 2H:1V at closure” for the Pit #4 WRS expansion area. DEC’s standard at 18 AAC 60.485(c) requires that the surface of an industrial solid waste landfill may not be sloped more steeply than a 3:1 grade.

#### Reclamation:

The Draft SEIS should evaluate information gained through the revegetation test-plot study conducted by Coeur Alaska (e.g. seed mixture, fertilizer use, and revegetation success) and consider practicable reclamation treatments to achieve required land reclamation performance standards (11 AAC 97.200) at each of the WRS areas post-closure.

Pursuant to Coeur Alaska’s TTF Environmental Monitoring Plan, Habitat biologists studied tailings geochemistry, macroinvertebrate colonization of submerged tailings, and basic water quality in Upper Slate Lake between 2013 and 2015 (Willson-Naranjo and Kanouse 2016). The studies confirm the tailings are nonacid generating, suggest aquatic macroinvertebrates will inhabit tailings, and demonstrate Upper Slate Lake water quality is similar to baseline Lower Slate Lake water quality data. These conditions will provide suitable Dolly Varden char habitat in the TTF at closure without a tailings cap. ADF&G agrees with Coeur Alaska removing the tailings cap requirement in POA 1.

Habitat biologists documented threespine stickleback in the TTF feeding on macroinvertebrate taxa, similar to pre-development Lower Slate Lake Dolly Varden char diet studies (Kline 2001), and macroinvertebrate communities in ephemeral drainages on the TTF west bank.<sup>2,3</sup> Since Habitat biologists documented macroinvertebrate and Dolly Varden char seed sources around the

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<sup>2</sup> Gordon Willson-Naranjo, Habitat Biologist, to Jackie Timothy, Southeast Regional Supervisor, ADF&G Division of Habitat. Memorandum: KGM invertebrates: west abutment TTF; dated 10/5/2015.

<sup>3</sup> Ben Brewster, Habitat Biologist, to Jackie Timothy, Southeast Regional Supervisor, ADF&G Division of Habitat. Memorandum: Tailings treatment facility threespine stickleback study; dated 10/2/2013.

TTF sufficient to meet the reclamation goal of reestablishing benthic and fish populations without intervention, ADF&G agrees with Coeur Alaska removing this requirement in POA 1.

Successful Dolly Varden char spawning around the reclaimed TTF lakeshore in created gravel patches (POA 1, Section 7.9, page 72) will depend on upwelling availability and water quality. ADF&G recommends that the Draft SEIS evaluate this reclamation method to determine feasibility and whether the action is necessary.

#### Mitigation and Monitoring:

Coeur Alaska contracts with the ADF&G Habitat Section to complete the aquatic biomonitoring required by their Alaska Pollutant Discharge Elimination System Permit (APDES) No. AK0050571 and Plan of Operations. The 2018 annual report is available in Albrecht (2019). ADF&G Habitat Section completed other studies at Kensington Gold Mine under contract with Coeur Alaska, and those reports are referenced herein.

On several occasions since 2009, Habitat biologists documented safe fish passage though the TTF diversion pipeline across several alignments.<sup>4</sup> Since safe fish passage is possible, fish relocation to East Fork Slate Creek is not warranted. ADF&G agrees with Coeur Alaska removing this requirement (POA 1, Section 5.6.1, page 56).

Pursuant to the monitoring requirements contained in 2004 SEIS and Record of Decision (ROD; Tetra Tech Inc. et al. 2004), Coeur Alaska is required to photograph habitat types and vegetation/woody debris in Sherman, Johnson, and Slate Creeks. While photo-point monitoring is a standard tool for documenting revegetation after disturbance, it is unnecessary for documenting change in Sherman, Johnson and Slate Creeks where little development occurs. Habitat biologists survey these water bodies regularly while completing aquatic resource studies (Albrecht 2019) required under Coeur Alaska's APDES Permit No. AK0050571. ADF&G agrees with Coeur Alaska removing this monitoring requirement in POA 1 (Section 5.6.2, page 56).

Pursuant to the monitoring requirements contained in 2004 SEIS and ROD (Tetra Tech Inc. et al. 2004), Aquatic Science Inc. (2011b) documented sexual maturity of Dolly Varden char in Upper Slate Lake and Upper Slate Creek late-October through early-November 2005–2010. In June 2011, U.S. Forest Service (USFS) and ADF&G staffs evaluated the data, determined the information collected was sufficient for baseline study purposes, and recommended discontinuing the studies. Studies were not completed 2011–2019, and ADF&G agrees with Coeur Alaska removing this requirement in POA 1 (Section 5.6.2, page 56).

Pursuant to the monitoring requirements contained in the 2004 SEIS and ROD (Tetra Tech Inc. et al. 2004), Aquatic Science Inc. (2006–2009b, 2011a) documented adult chum and pink salmon returning to Slate, Johnson, and Sherman Creeks between 2005 and 2010. Between 2011 and 2018, Habitat biologists documented adult chum, coho, and pink salmon returning to these creeks (Albrecht 2019). In Slate Creek, strong pink salmon returns occurred in even years 2005–2012 and in odd years 2011–2018. Johnson Creek pink salmon returns followed a similar trend

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<sup>4</sup> Bill Kane, Habitat Biologist, to Kate Kanouse, Southeast Regional Supervisor, ADF&G Division of Habitat. Memorandum: 2019 Kensington Gold Mine TTF and plunge pool trapping; dated 7/5/2019.

with strong returns in 2006 and 2008 and odd years thereafter. In Sherman Creek, strong pink salmon returns occurred only in odd years. Few chum and coho salmon spawn in these creeks. Adult salmon returns depend on marine survival and harvest, among other factors we cannot quantify, so biologists are unable to attribute changes in adult salmon abundance observed in Slate, Johnson, or Sherman Creeks to construction or operation of the Kensington Gold Mine. ADF&G recommends removing this monitoring requirement.

Pursuant to the monitoring requirements contained in the 2004 SEIS and ROD (Tetra Tech Inc. et al. 2004), Coeur Alaska (2019) documented sightings or sign of wildlife at 20 50-meter transects around the TTF between 2006 and 2018.<sup>5</sup> Observations included moose, black bear, brown bear, wolf, Sitka black-tailed deer, porcupine, red squirrel, North American river otter and other Mustelidae species, Canada goose, bald eagle, red-tailed hawk, northern pygmy-owl, sooty grouse, ducks, wading birds, and other avian species in the Slate and Spectacle Lakes area. Generally, wildlife sign and sightings each year were similar to the baseline data collected in 2004 and 2005, except during years with construction at the TTF when staff observed fewer animals and animal sign (Coeur Alaska 2019). Coeur Alaska completed the wildlife monitoring over 11 years and the data satisfy the monitoring goal of characterizing wildlife use to inform the project reclamation and closure plan; however, ADF&G Division of Wildlife Conservation biologists are interested in potential changes in wildlife use at the TTF during stage 4 construction activities and recommends continued monitoring to document changes in wildlife use associated with those activities, if authorized.

Pursuant to the monitoring requirements contained in the 2004 SEIS and ROD (Tetra Tech Inc. et al. 2004), Coeur Alaska contracted the ADF&G Division of Wildlife Conservation to complete the mountain goat population and habitat use studies during project operations. Between 2005 and 2018, Division of Wildlife Conservation annual mountain goat population estimates in the Kakuhan Range Kensington study area ranged between 25 and 118 animals (White 2019),<sup>6</sup> and the population trend over the 14-year study period was similar to trends observed in other Kakuhan Range study areas. Genetic analyses of the Kakuhan Range mountain goats indicate the geographically isolated subpopulation is genetically distinct from neighboring populations north of the Katzechin River and east of Berners Bay (White et al. 2012). If study results indicate extreme adverse reaction to mining-related activities causing abandonment of habitat, Coeur Alaska is required to minimize disturbances to mountain goats; during exploration plan reviews, ADF&G provided the USFS recommendations for minimizing disturbances to goats, such as maintaining at least 1,500 meters between helicopters and goats and avoiding helicopter use in important overwintering and potential kidding habitats during those critical life stages. The USFS continues to implement a 1,500 feet distance recommendation per the Tongass Land and Resource Management Plan (USFS 2016). We recommend the environmental review process includes an evaluation of the mountain goat data to date to determine if continued monitoring is necessary.

Thank you for the opportunity to provide scoping comments to inform the Draft SEIS for the Kensington Gold Mine POA 1 review. If you have any questions or would like to discuss any of

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<sup>5</sup> Except in 2008 and 2011.

<sup>6</sup> Excluding the greatest mountain goat population estimate of 118 animals in 2006, the population ranged between 25 and 53 animals (White 2019).

the above comments in more detail, please contact me. The State of Alaska looks forward to working with the USFS throughout the environmental review process.

Sincerely,



Kyle Moselle  
Associate Director

Cc: Chuck Pinckney, DNR  
McKenzie Johnson, DNR  
Gary Mendivil, DEC  
Kate Kanouse, ADF&G  
Sarah Yoder, HSS

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<sup>7</sup> Actually published February 2010.

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