**DEPARTMENT OF THE ARMY**
**ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS**
**REGULATORY DIVISION**
**P.O. BOX 22270**
**JUNEAU, AK 99802-2270**

December 1, 2020

Regulatory Division
POA-1988-00269

Mr. Matthew A. Reece
U.S. Forest Service
8510 Mendenhall Loop Road
Juneau, Alaska 99801

Dear Mr. Reece:

This letter provides the U.S. Army Corps of Engineers (Corps) comments in response to the Greens Creek Mine Supplemental Environmental Impact Statement (SEIS) agency scoping meeting for the mine's proposed Amendment to the General Plan of Operations North Extension Project Tailings Disposal Facility held in Juneau, Alaska on November 4, 2020. These comments are preliminary to the issuance of a Draft SEIS at which time the Corps will comment further on the proposal. The Corps' participation as a cooperating agency in preparation of the SEIS is predicated on the expectation that it will be able to rely on the document to make the necessary analyzes and decisions during the anticipated Department of the Army (DA) permit application evaluation for the proposal.

**Limits of Corps Jurisdiction:** The Department of the Army (DA) exerts regulatory jurisdiction over waters of the United States (WOTUS), including wetlands, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) and Section 404 of the Clean Water Act (Section 404).

Section 10 requires that a DA permit be obtained for certain structures or work in or affecting navigable WOTUS, prior to conducting the work (33 U.S.C. 403). Navigable WOUS are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Section 10 regulatory jurisdiction in coastal areas extends to the line on the shore reached by the plane of the mean high water mark.

Section 404 requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into WOTUS, including wetlands, prior to conducting the work (33 U.S.C. 1344). WOTUS include all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats,

wetlands, sloughs, wet meadows, or natural ponds, the use degradation or destruction of which could affect interstate or foreign commerce.

The landward limits of jurisdiction in tidal waters extends to the high tide line, which means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The limit of jurisdiction in non-tidal WOTUS in the absence of adjacent wetlands extends to the ordinary high water mark. When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands. When the WOTUS consists of wetlands the jurisdiction extends to the limit of the wetland (33 CFR Part 328).

The SEIS should include a delineation showing the proposal relative to pertinent jurisdictional boundaries (high tide line, mean high water, ordinary high water, or wetland boundaries).

**Project Purpose:** The definition of overall project purpose is used in the determination of practicable alternatives since the Environmental Protection Agency's 404(b)(1) Guidelines (Guidelines) define practicable to mean: "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes."[1] While the definition of overall project purpose is solely the Corps' responsibility, it must take into consideration the applicant's stated purpose for the project.[2] The overall project purpose should be specific enough to define the applicant's needs, but not so restrictive as to preclude all discussion of alternatives. The applicant's needs must be considered in the context of the desired geographic area of the development and the type of project being proposed; however, the Corps makes the final determination on the definition of overall project purpose, even if it differs from what the applicant submitted.

If a permit applicant has limited their purpose in such a way that the alternatives analysis would be constrained, then the Corps will re-define the overall project purpose in order to allow for consideration of an appropriate range of alternatives. The EIS purpose statement should allow for the generation of a range of alternatives for a meaningful analysis under the Guidelines.

**Alternative Analysis:** Clean Water Act (CWA), Section 404 permits are only issued for projects that clearly demonstrate compliance with the Guidelines. The Guidelines state that no discharge of dredged or fill material can be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, as long as the alternative does not have other significant adverse environmental consequences. In those cases where non-water dependent work is proposed in a "special aquatic site" (such as wetlands, eelgrass beds, or mudflats), practicable alternative are presumed to exist unless clearly demonstrated otherwise by the applicant. Also, where a discharge is proposed for a special aquatic site, all practicable

[1] 40 CFR 230.10(a)(2)
[2] July 2009, Army Corps of Engineers Standard Operating Procedures for the Regulatory Program.

alternatives to the proposed discharge which do not involve a discharge into to a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

An alternative is considered practicable if it is available and capable of being accomplished after taking into consideration costs, existing technology, and logistics in light of the overall project purpose. The least environmentally damaging practicable alternative may include construction in upland, reducing the size of the proposal to the minimum discharge necessary for the project, or the inclusion of logistic and operational controls.

The SEIS should clearly outline the site selection/screening criteria for the practicability for the alternatives considered. Additionally, the criteria identified should be those final criteria developed with input by the Corps. Examples may include: criteria related to availability (i.e. available for acquisition, zoned appropriately or potential for re-zoning); cost (i.e. reasonable acquisition or development costs); technology (i.e. whether existing technology is available to address any site constraints like steep topography); and logistics (i.e. location of parcel within certain distance of particular facilities/city boundaries/highway and/or utility infrastructure; adequacy of parcel size; availability of utilities; availability for access, etc.). Consider establishing criteria that are minimum/maximum or pass/fail (e.g., at least 15 acre size (minimum size); ability to connect to utilities (sewer, electricity) (pass/fail).

**Evaluation for compliance with the Section 404(b)(1) Guidelines:** Under the 404(b)(1) Guidelines, no discharge can be permitted if there is a practicable alternative with less adverse impact on the aquatic environment, unless the alternative has other significant adverse effects on the natural environment (40 CFR § 230.1 0(a)).

In addition, no discharge can be permitted under the Guidelines if it would, individually or cumulatively, cause or contribute to significant degradation of waters of the United States (U.S.), or violate other applicable laws, such as State water quality standards, toxic effluent standards, or the Endangered Species Act. The Guidelines also state that no discharge in wetlands shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

In determining whether the proposal complies with Guidelines, the Corps must assess potential impacts on the aquatic ecosystem, including substrate, suspended particulates/turbidity, water, current patterns and water circulation, and normal water fluctuations. Information regarding these factors should be included to evaluate these impacts.

Potential impacts to wetlands should be included in the analysis. In order to assess impacts to wetlands, a range of design alternatives for the Tailings Disposal Facility expansion, Roads, Water Management, Peat and Overburden Storage Area, Electric Powerhouse and Sub-station, and Water Collection System should be analyzed, as the

proposal could have direct and indirect impacts to physical and chemical and biological conditions of the aquatic ecosystems.

Potential impacts on the human use characteristics (subpart F 40 CFR 230.50) should be addressed including recreational and commercial fisheries, water-related recreation, aesthetics, national public lands, and wilderness areas.

In order to evaluate possible contaminates in dredge and fill materials, a pre-testing evaluation should be conducted to determine if there are sources of contamination and harmful quantities to the aquatic environment by man-induced discharge activities (subpart G, 40 CFR 230.60). An example specific to this project are naturally occurring deposits of acid generating rock and arsenic within the proposed project area, however the other potential sources of contaminates should be examined as well.

The SEIS should include analysis of effects to populations of fish and wildlife, alteration of substrate, water levels, water flow, water quality, migration corridors, food supply, a change in breeding and nesting areas, and animal travel corridors associated with aquatic ecosystems.

Under the Corps' substantive evaluation criteria for all CWA, Section 404 permits, the Guidelines, mitigation is a sequential process of avoidance, minimization, and compensation. Compensatory mitigation is not considered until after all appropriate and practicable steps have been taken to first avoid and then minimize adverse impacts to the aquatic ecosystem. Only upon clear demonstration of compliance with the first two steps in the mitigation sequence does the Corps take the third step, which would be addressed during the review of a DA permit application for the proposed undertaking, should one be submitted.

Avoidance measures are the planning strategies that entirely eliminate the discharge of fill material into the aquatic ecosystem to achieve the project purpose. A key requirement of compliance with the avoidance sequence of the Guidelines is to show whether or not an aquatic resource can be completely avoided. Minimization entails measures to reduce or diminish the impacts to aquatic resources.

There are two overarching themes that affect how the mitigation sequencing is conducted. One is that although the burden of proof for satisfying these steps rests with the permit applicant, the Corps must rely upon its own analysis in making a finding of compliance or non-compliance with the Guidelines. The applicant must provide information that is sufficient to determine compliance, so the Corps can make a timely permit decision. In order to determine if project component locations can be shifted to avoid or minimize impacts, a functional or aquatic site assessment is required.

Because the proposal would result in the loss of waters of the U.S., including wetlands, the EIS should include a mitigation section that contains a discussion describing how impacts to waters of the U.S. are to be avoided and minimized. This

information must be specific to the proposed work and sufficient for the Corps' Guidelines analysis.

**Public Interest Review:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest (33 CFR 320.4). To the extent appropriate , the public interest review would include consideration of policies as described in 33 CFR 320.4(b) through (r), which include conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, needs and welfare of the people.

Evaluation of the probable impact that the proposed activity may have on the public interest requires a careful weighing of all the factors that are relevant to the project. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments.

The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process of these factors.

As a cooperating agency, the Corps intends to use the existing and affected environmental information gathered during the SEIS to evaluate public interest factors. The Corps also considers all comments received during the public process, whether in response to a Public Notice or a Public Hearing. In so doing, the Corps must determine that a proposal is not contrary to the public interest in order to issue a permit.

**Other Laws:** As the U.S. Forest Service (USFS) is the lead Federal agency for the SEIS, the SEIS should include any necessary consultations under Section 7(a)(2) of Endangered Species Act, the Essential Fish Habitat provisions of the Magnuson Stevens Fishery Conservation and Management Act, and Section 106 of the National Historic Preservation Act, including tribal consultation, includes consideration for effects of the activity that is proposed in waters of the U.S., including wetlands, for which a DA permit authorization would be required.

**National Environmental Policy Act (NEPA) Analysis:** The issuance of a permit under CWA, Section 404 constitutes a federal action subject to the requirements of NEPA, including the preparation of an EIS. The USFS is the lead federal agency developing an EIS for this project, and the Corps is participating in the NEPA process as a cooperating agency. In this role as cooperating agency the Corps will continue to provide input regarding expertise within our jurisdiction, and appreciate the USFS facilitating the incorporation of resource information and analysis into the NEPA document to streamline the environmental process and provide the information the Corps needs to make a permit decision.

The Corps appreciates the opportunity to comment. Please contact Randal Vigil via email at Randal.P.Vigil@usace.army.mil, by mail at the address above, or by phone at (907) 790-4491, if you have questions.

Sincerely,

Randal P. Vigil
Project Manager