

April 20, 2020

Mike McCrum Red Devil Mine Project Manager BLM Alaska State Office 222 W. 7th Ave. #13 Anchorage, AK 99513

RE: Comments on Proposed Plan for Red Devil Mine

The Kuskokwim Corporation (TKC) was formed in 1977 when ten Alaska Native Claims Settlement Act (ANCSA) village corporations located along the middle region of the Kuskokwim River merged their land and resources to provide more opportunities and resources for all shareholders. The Red Devil Mine site is on 10 acres of land managed by BLM, and has been selected for conveyance, pursuant to ANCSA, to The Kuskokwim Corporation (surface estate) and the Calista Corporation (subsurface estate). As the future holder of the surface estate, TKC is a major stakeholder in the remediation of the mine site.

Over the past 20 years, TKC has been actively tracking BLM's actions and proposals for cleanup of the mine site throughout the post mine life, up to and including this proposal. We have provided input throughout the years, some has been considered, some has not The outcome of the cleanup plan will directly impact our communities and our shareholders' wellbeing, now and into the future.

We would like to identify our concerns about the proposed alternative for remediation of the Red Devil mine site in hopes of assisting BLM to get to a final plan that assures the current and future safety of TKC and Calista shareholders and our communities, and the health of the Kuskokwim River.

The following are comments and associated questions pertaining to the Proposed Plan:

 Pg. 12 – The first sentence states "Groundwater COC concentrations in the area near Red Devil Creek are strongly influenced by the presence of tailings and waste rock", implying elevated concentrations of COC's relative to background conditions. However later the statement is made "it is reasonable to assume that concentrations of COCs in groundwater after excavation would be similar to those observed in bedrock in the upper elevations of the watershed". It is not understood how it reasonable to assume COCs would return to baseline conditions in an impacted section of the watershed. The summary goal is vague that "the BLM will develop long-term groundwater quality objectives based on post-remediation conditions and background water quality data". Why can't these be established now, pre-excavation? Can naturally occurring conditions be established as the goal? Table 2 provides some limited Groundwater Remedial Goals which seems to contradict the above statement that objectives will be established in the future.

- 2. It would be helpful to have a summary table of total volumes of material to be excavated under the various evaluated scenarios. For example, it is not stated what total volumes of materials will be excavated for the SW3 scenarios including Red Devil creek sediments and sediments at the Kuskokwim River mouth. It is stated that 940 yd³ of material will be excavated from the Monofill #2 and 1,700 yd³ of old tailings.
- 3. The description of the cover system for Monofill #2 is "geomembrane". Can this be further described? The follow-on text states that it will "inhibit" leaching – does this mean it will be semi-impermeable? It would be helpful to have more of a description of the geomembrane.
- 4. Alternative SW3C is stated on pg. 20 as meeting Applicable or Relevant and Appropriate Requirements (ARAR's). However, it is not clear that ARAR's will be met for groundwater quality, as previously discussed on pg. 12. The text on that page again states that the BLM will, in the future, "develop long-term groundwater quality objectives". This does not appear consistent with ARAR's, which are defined on pg. 19 as presumably quantitative applicable federal and state statutes, regulations and other requirements. Is it the justified waiver that would be used to fulfill ARAR's?
- 5. Pg. 20 suggests that Alternatives SW3B and SW3D, which includes a bottom liner and a leachate collection system, would present "significant long-term operational challenges

related to leachate collection, storage and management". However, these challenges are not identified or described so it is not clear why this option is identified as rating low for implementation ability. Overall liners are commonly used at landfills, mining operations, and other solution recovery operations. The challenges appear more related to cost than implementation ability. It is appreciated that the alternatives include transportation of collected leachate offsite. Is this the driving challenge? There is no discussion here of the potential for on-site management.

- 6. It is not understood why Alternative SW3C has received a "most favorable" criterion rating for Long-Term Effectiveness, whereas Alternatives SW3B and SW3D are only moderately favorable. Having a liner in place ensures no long-term seepage into the groundwater system which is hydrologically connected to the Kuskokwim River. Also the Implementability evaluations are assign a "least favorable" criterion to Alternatives SW3B and SW3D which drives the overall selection of the cheaper Alternative SW3C. Lastly cost for all SW3 options are listed as "moderately favorable" despite the SW3B and SW3D options being twice as expensive as the selected preferred SW3C option. The Proposed Plan reads like cost is a driving factor to the Preferred Alternative decision, although it is not identified as such in Figure 4.
- 7. There is no discussion in the text regarding the potential for unintended adverse environmental impact to the Kuskokwim River as a result of planned sediment excavation activities at the mouth of Red Devil Creek. It is appreciated that the intent is to remove this source of contamination from the shore environment, but is there not a heightened risk of mobilizing contaminants in the process and potentially impacting fish populations? This is worth addressing at least in summary form for this Proposed Plan.
- 8. On pg. 22 it is not clear how the selected alternative would be protective of groundwater because the excavated materials would be "adequately isolated". Without a liner the materials are only partially isolated. The plan for long-term monitoring without pre-established COC goals for groundwater concentrations does not appear to meet the goal of being protective of groundwater.

9. The plan does not address the impacts of the groundwater in direct relation to the existing population that is currently using individual wells near the mine site and the waste storage site. The closest individual lives approximately ½ mile downhill from the proposed waste storage site. The resident has been living at that location full time for over 40 years and utilizes an individual well for water. The proposed plan does not address impacts to the immediate population near the site.

Please provide answers to these concerns, as well as directly address solutions in the Proposed Plan for the Red Devil Mine cleanup.

Sincerely

Andrea Gusty President & CEO The Kuskokwim Corporation

CC via email: Chad Padget, BLM Alaska Tisha Kuhns, Calista Corporation U.S. Senator Lisa Murkowski