Data Submitted (UTC 11): 10/28/2020 6:00:00 AM First name: Alan Last name: Haslam Organization: Midas Gold Idaho, Inc. Title: Vice President, Permitting

Comments: Please see attached comment letter from Midas Gold Idaho, Inc. This letter offers comments on the portions of the DEIS devoted to surface water and groundwater quantity and quality in the Affected Environment (Sections 3.8 and 3.9) and to the potential Environmental Consequences of the project on surface water and groundwater quantity and quality (Sections 4.8 and 4.9).

Midas Gold Idaho, Inc. (Midas Gold) appreciates the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS). Clearly, the document represents a substantial effort by many individuals to compile and convey a very large volume of information and analysis regarding the Midas Gold proposed Stibnite Gold Project (SGP). The synthesis of hundreds of documents developed from a much greater multitude of data values, statistical analyses, and modeling projections into a single draft product is a noteworthy accomplishment, and Midas Gold is pleased to have been a stakeholder in its development.

In its comments, Midas Gold wishes to respectfully offer its perspective and insight to assist in clarifying and improving content for the Final Environmental Impact Statement (FEIS). This letter offers comments on the portions of the DEIS devoted to surface water and groundwater quantity and quality in the Affected Environment (Sections 3.8 and 3.9) and to the potential Environmental Consequences of the project on surface water and groundwater quantity and quality (Sections 4.8 and 4.9), for your consideration in developing the FEIS. Our comments are summarized below, and for your convenience, comments have been provided in a tabulated format (included as Attachment A) that references each appropriate subsection heading, page number, and paragraph.

1.0 Sections 3.8 Surface Water and Groundwater Quantity and 3.9 Surface Water and Groundwater Quality - Affected Environment

We believe Sections 3.8 and 3.9 overall provide a reasonable characterization of water quality and quantity for existing surface water and groundwater conditions at the Stibnite Gold Project (SGP) site. The summary of baseline surface water and groundwater monitoring data from recent years, combined with citations to numerous agency reports and published technical papers, yields an appropriate representation of current conditions at the site. The sections point to the influence of both natural mineralization and legacy mining activities on surface water and groundwater quality. They point to elevated levels of arsenic and antimony in groundwater and in the East Fork of the South of the Salmon River (EFSFSR) and some of its tributaries and elevated mercury in Sugar Creek, but also note that most constituents are below regulatory criteria at the site.

## 2.0 Section 4.8 Surface Water and Groundwater Quantity - Environmental Consequences

We believe that Section 4.8 generally portrays the five alternatives in a reasonable manner. In several places, it points to several hydrologic factors making Alternative 2 (the Modified Plan of Restoration and Operations [Modified PRO]) superior to other action alternatives, largely through the mitigative provisions proposed as part of Alternative 2. It also notes projected streamflow alterations that make Alternative 3 decidedly less attractive than other action alternatives.

One statement in Table 4.8-1 seems to raise concern about long-term recovery of the bedrock aquifer, relative to expectations for the alluvial aquifer, but we found no discussion or support for this concern in the section narrative. The alluvial and bedrock aquifer will maintain their hydraulic connectivity after mining and reclamation, and long-term recovery of the bedrock aquifer is not likely to be a concern. We suggest re-examining this matter and either discussing it more fully (i.e., supported by evidence in the document narrative or appendices) or

revising the statement in the Final Environmental Impact Statement (FEIS).

3.0 Section 4.9 Surface Water and Groundwater Quality - Environmental Consequences

We believe that Section 4.9 generally provides a reasonable evaluation of surface water and groundwater conditions associated with the five alternatives. We do, however, offer the following comments on some of the content in Section 4.9.

Midas Gold provided a Water Quality Management Plan (WQMP) to support the DEIS preparation. Design criteria for the WQMP were derived from conditions specific to the Modified PRO (DEIS Alternative 2), and thus the DEIS discussion of water quality for Alternative 2 acknowledged the benefits of treatment with respect to surface water quality. We note that the WQMP states that it could be readily adapted to each of the other alternatives. Because the DEIS authors did not have quantitative projections regarding water treatment for Alternatives 1, 3, and 4, the discussions of water quality for those alternatives can be considered very conservative, because actual conditions under those alternatives would be better than stated in the DEIS when water treatment is included. The FEIS should emphasize that Midas Gold would comply with federal Clean Water Act and Idaho permitting and other regulatory requirements for any feasible alternative that it undertakes and water quality effects would be limited accordingly.

Section 4.9 makes four independent references to a "Biotic Ligand Model criterion" to assess predicted future copper levels. Currently, there are limited water quality data to inform the model, so only estimates can be made of potential criteria. We suggest the FEIS refer to Biotic Ligand Model output as "estimates of copper criteria" to avoid future conflict or confusion when sufficient data are available to calculate actual criteria.

For Alternatives 1, 3, and 4, Table 4.9-12 projects substantial increases in dissolved mercury at modeled stream nodes after closure, relative to baseline levels, but the accompanying text notes that the values in the table do not consider water treatment which would remove mercury from tailings storage facility (TSF) consolidation water prior to any discharge to surface waters. The elevated levels of dissolved mercury were also used to make a rough projection of methylmercury concentrations in the stream. Because water treatment would be provided to ensure compliance with Idaho surface water quality criteria, the values in Table 4.9-12 dramatically overstate the anticipated dissolved and methylated mercury concentrations anticipated to be present in surface waters. The discussion of Alternative 2 is more accurate in stating that it "would have no discernible effect on (methylmercury) concentrations in the mine site streams." If Table 4.9-12 is included in the FEIS, a footnote should be added indicating that the mercury levels are based on model output that do not consider water treatment that would be required to meet water quality criteria.

Section 4.9 makes more than 20 references to the Idaho Pollutant Discharge Elimination System (IPDES) permitting process to protect surface water quality but does not make any reference to the establishment of Points of Compliance under Idaho's Groundwater Rule to regulate groundwater quality. This may give readers the impression that protection of groundwater quality is not being addressed, but it is a primary component of IDEQ's role for the SGP. The FEIS should make specific reference to the Point of Compliance Process as a mechanism for ensuring groundwater management consistent with Idaho regulations.

Section 4.9 states that water quality for Alternatives 1 and 2 during mine operations would be the same but for the effects of water treatment under Alternative 2. As noted above, water treatment described in Alternative 2 could be provided for Alternative 1 (or other alternatives). But more importantly, it should be clarified that for Alternative 2, the elimination of the West End development rock storage facility (DRSF), extending the Meadow

Creek diversion channel liner, and the piping of low flows in the stream diversions around the TSF and DRSFs would all contribute to better surface water quality under Alternative 2 than for Alternative 1. We suggest that this section be clarified in the FEIS.

Midas Gold understands potential impacts to fish resulting from an increase in water temperature are a concern for the SGP and for the public. We appreciate the effort undertaken in the DEIS and the breadth of the temperature analysis with respect to potential impacts on fish. We recommend some clarifications to present the analysis more clearly, better inform the reader of the context for the temperature analysis, and describe actions to mitigate and minimize potential impacts. These recommendations are: (1) including a description of the conservative assumptions in the Stream and Pit Lake Network Temperature model and of the sensitivity analyses employed in the discussion of potential effects of climate change,

(2) describing measures proposed to mitigate impacts described in the WQMP, (3) comparing simulated values to temperature criteria in a manner consistent with previous agency discussions and United States Environmental Protection Agency guidance, and (4) acknowledging that temperature is one factor in evaluating suitable habitat, and that temperatures near or above certain temperature criteria should be interpreted within the full context of habitat conditions.

Section 4.9 generally characterizes projected conditions for the No Action Alternative as being equivalent to existing conditions, with little recognition of the potential water quality improvement expected to result from the removal and repurposing of legacy materials by Midas Gold under the action alternatives. We submit that the No Action Alternative would continue water quality conditions as they are now and would not result in the water quality improvements that would occur under other action alternatives. This should be explicitly acknowledged in the FEIS.

The Cumulative Impacts subsection includes substantial discussion of potential sedimentation impacts from roads and utility corridors for each alternative in the prior subsections, but there is no mention of the reduction in sediment transport expected to result from restoration work on Blowout Creek, with the exception of a brief mention of the creation of "step pools" in Alternative 4. Blowout Creek has been documented by the United States Geological Survey as the largest sediment source in the upper EFSFSR, so actions proposed by Midas Gold to reduce that sediment loading should be considered in parallel with the potential for sediment loading from road and utility crossings.

The Summary of Section 4.9 points to potential sources of water quality degradation as a result of the SGP. However, there is only one brief mention of the anticipated water quality improvement from removing and repurposing legacy mine wastes. Removal of legacy materials is referenced a number of times in the individual discussions of each alternative, but this information is not carried through to the Summary. The Summary also does not mention the reduction in sediment transport expected to result from restoration actions on Blowout Creek. These omissions may result in some readers missing the information on water quality improvements because they only review the Summary section. We suggest that the FEIS should include reference to both positive and negative potential effects in its Summary sections and should consider all aspects of water quality.

## 4.0 Water Rights Comments

In addition to the comments above, we identified content related to water rights issues in Chapters 3 and 4 that we believe warrants comments from Midas Gold. Our intent in providing these comments is to provide insight and clarification regarding water rights for consideration in preparing the Final EIS.

The text in Chapters 3 and 4 of the DEIS extends the Wild and Scenic River designation of the Salmon River to the EFSFSR without basis and with the implication that water rights and water use in the EFSFSR will be evaluated against the wild and scenic character. Consideration of "Wild and Scenic eligibility values" for the

EFSFSR is not an appropriate consideration by the Idaho Department of Water Resources (IDWR) under state law when evaluating a water right application. The water rights discussion in Chapter 4 of the DEIS would benefit from clarifying language to more accurately describe the anticipated water right applications and associated impacts, existing minimum streamflow water rights and the Wild and Scenic River water rights, and the IDWR administrative procedures. We suggest that these clarifications be made in the FEIS.

The DEIS language partitions the water right application by water source, therefore attributing specific diversion rates to groundwater and surface water. However, the anticipated industrial use water right seeks authorization for total diversion rate of 9.1 cubic feet per second (cfs) from the combination of all designated groundwater points of diversions and surface water runoff, and storage of up to 500 acre feet of surface water runoff. The industrial use water right application should be described accordingly in the FEIS.

Additionally, the DEIS Chapter 4 Section 4.8.2.1.3.1 text quotes a surface water (contact water) diversion of 3.47 cfs as the cause of a 12 percent baseflow reduction in the EFSFSR below Sugar Creek. This assertion is not substantiated in that (1) the water right application will seek authorization to divert 9.1 cfs from a combination of all sources (rather than specifically 3.47 cfs of contact water), and (2) contact water is primarily generated during snowmelt, high-flow periods that do not coincide with baseflow conditions. Because contact water is available primarily during high-flow periods, the impact to surface water baseflow due to diversion or storage of contact water will be negligible. We suggest that this section be clarified in the FEIS to be consistent with Midas Gold's anticipated water rights application.

Additionally, the discussion of minimum streamflows in DEIS Chapter 3 and Chapter 4 would benefit from more specific detail and clarity. The subordination of minimum streamflow water rights on the EFSFSR, the South Fork Salmon River, and the Salmon River to future DCMI (Domestic, Commercial, Municipal, and Industrial) uses is a condition affecting Midas Gold's anticipated industrial water right application. In the current DEIS language, the EFSFSR minimum streamflow water right, 77-14190, is described such that this water right asserts a subordination to future water rights. While this water right does assert certain limitations on the system, Midas Gold's anticipated industrial enjoys the benefit of non- subordination. This is information that should be more clearly distinguished in all discussion of minimum streamflow water rights in the FEIS.

Further, DEIS Chapter 4 text suggests that if injury to existing water rights is anticipated during the IDWR analysis the water right application will be denied. This assertion does not consider that, in instance of existing water right injury, mitigation can be provided to prevent injury. Indeed, water storage is subordinate to the federal reserved water rights in the Salmon River and, in this situation, Midas Gold is planning to mitigate for this use. This planned mitigation should be clarified in the FEIS and considered in response to DEIS comments received on this topic.

SEE LETTER ATTACHMENT FOR TABLE PROVIDING EXTENSIVE EDITS/SUGGESTIONS: ATTACHMENT A-1: Stibnite Gold Project DEIS Surface and Groundwater Quantity (Sections 3.8 and 4.8) Comments Compilation Table