



June 15, 2020

Mary Erickson, Forest Supervisor  
Custer Gallatin National Forest  
PO Box 130  
Bozeman, MT 59771

Dan Walsh, Chief  
DEQ, Hard Rock Mining Bureau  
PO Box 200901  
Helena, MT 59620-0901

**Re: GNA Council Comments on East Boulder Mine Stage 6 Tailings Storage Facility Expansion Project Draft Environmental Assessment, May 2020**

The following comments to the United States Department of Agriculture (USDA) Forest Service and Montana Department of Environmental Quality (DEQ) on the East Boulder Mine (EBM) Stage 6 Tailings Storage Facility Expansion Project Draft Environmental Assessment (EA) released in May 2020, are submitted on behalf of the Cottonwood Resource Council (CRC) representing the East Boulder River and Boulder River watershed and their local community members together with Northern Plains Resource Council (NPRC) and Stillwater Protective Association (SPA). CRC, NPRC and SPA (the Council or Councils) are partners in the Good Neighbor Agreement (GNA) with Stillwater Mining Company (SMC).

The Councils as a result of the Good Neighbor Agreement (GNA) have actively participated in the development and review of the East Boulder Mine Stage 6 TSF Expansion design process as well as other aspects of the TSF dealing with annual inspections by the Engineer of Record (EoR), independent inspections, the Independent Review Panel (IRP) and observation of Emergency Preparedness Plan coordination with local first response agencies. Also, as part of the GNA the Councils have been involved in the identification, monitoring, and mitigation of impacts related to the discharge of nitrogen from the East Boulder Mine TSF and the decision by SMC to ultimately place a liner below the embankment waste rock beginning with TSF Stage 3. Our participation has included that of both our technical advisors, Jim Kuipers P.E. and Sarah Zuzulock P.E. as members of SMC's Technical Review Committee, as well as in-depth discussions involving the Councils and SMC staff and management.

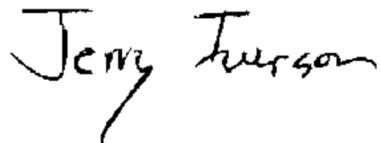
As a result the Councils are confident that the EBM Stage 6 TSF design process has been conducted in a manner that is exemplary both in terms of ensuring the current industry standard of care has been applied to the design, operations and closure of not only Stage 6 but essentially the entire existing TSF as well, and also that is unprecedented in terms of the level of substantive participation in the pre-permitting design and development process by a public interest stakeholder. The GNA recognizes SMC's right to conduct its mining operations provided the company complies with the requirements of the GNA. SMC has met its obligations in that regard and the Councils endorse SMC's proposed plan with the mitigation identified in the EA.

The Councils would also like to recognize the extent to which the EBM Stage 6 TSF EA has recognized and responded to our EA Public Scoping Comments. Those comments recommended that the EA consider: Effects to human health and safety from a TSF failure; Effects to property values from a TSF failure; Mitigation of long-term potential for TSF failure; and Mitigation of potential for reclamation failure. We also suggested that “stable landform closure” and “geomorphic landform design” be discussed with respect to reclamation as well as climate change. The EA is highly responsive to our scoping recommendations and the Councils are appreciative of the effort that was undertaken by the agencies as well as EA contractor.

Beyond recommending some clarifications which follow, the primary comments the Councils have on the EA are with respect to closure and post-closure water management and treatment, and the identification of the Forest Service and Montana DEQ rules and regulations having different application as to whether the agencies can address long-term monitoring and maintenance such as for erosion impacting soils and vegetation and ensuring long-term TSF safety. The Councils comments on closure and post-closure water management and treatment and financial assurance are addressed in SMC’s comments on the Draft EA with respect to current water management plans/modifications that may have a bearing on certain water management sections of the EA. The comments would only add that the Draft EA relies on information from the 2012 EIS that should be reviewed as to basis and accuracy when financial assurance estimates are updated.

The Councils believe that Montana’s rules and regulations with regard to reclamation plans and financial assurance need to account for the potential for long-term monitoring and maintenance. In addition, the Councils have discussed this issue extensively with SMC and the company has indicated it recognizes the need for reasonable, science-based contingency plans and financial assurance as a way of addressing the concerns with respect to long-term monitoring and maintenance raised by the Councils and identified in the EA. The Councils also appreciate the opportunity that has been provided by the DEQ and Forest Service to discuss these concerns. As a result, rather than suggest this subject be addressed by the EA, the Councils look forward to participating in future discussions afforded us through SMC and the GNA with regards to this subject. We anticipate this will occur as the existing EBM 5-yr financial assurance review is completed, the financial assurance review for the Stage 6 TSF ROD is performed, and the Forest Service, hopefully together with the DEQ, conducts a comprehensive mine-site review of the plan and financial assurance including with respect to long-term monitoring and maintenance.

Sincerely,



Jerry Iverson, Good Neighbor Agreement Task Force Chair

Cc: Matt Wolfe, Stillwater Mining Company

### **3.2.4.2. Proposed Action Alternative**

According to the EA (p. 3-8) *In absence of a dam breach analysis for the Stage 6 TSF, considering its maximum solids storage and/or maximum likely fluid storage, a more quantitative comparison of the risk difference between the No Action Alternative (Stage 5) and Proposed Action cannot be inferred.* The EA further notes that there is no Stage 5 dam breach analysis, and the only analysis available is for a Stage 3 dam breach.

**Comments:** The EA should be more explicit as to why a Stage 3 dam breach analysis is a suitable analog for a Stage 6 dam breach analysis. Mitigation should require a Stage 6 dam breach analysis to be performed and applied upon construction of Stage 6.

### **3.2.4.3. Cumulative Impacts**

According to the EA (p. 3-9), *Additionally, during post-closure, the TSF is expected to continue to desaturate and densify naturally. Based on these factors and the assumption the TSF will no longer impound water, the susceptibility of the tailings to liquefaction is expected to continue to decrease with time. Ongoing review by the IRP will help assure proper establishment of operational and closure conditions to mitigate risk of adverse impacts (see Section 1.7.2.2, Montana Metal Mine Reclamation Act).*

### **3.3.4.1. No Action Alternative - Long-Term Public Safety**

According to the EA (p. 15), *The tailings would naturally consolidate and dewater as they self-drain, and this results in reduced pore pressure in the tailings slimes and corresponding reduction in the risk of long-term failure.*

**Comments:** Tailings studies performed on behalf of SMC show that without intervention beyond that presently proposed in the Stage 6 reclamation plan, such as the inclusion of wick drains combined with additional loading, the susceptibility of the tailings to liquefaction is not expected to decrease with time. However, the tailings flowability in a liquefaction event is expected to be decreased as a result of planned reclamation measures.

*Since the original TSF was permitted, finer than anticipated tailings are being generated resulting in “slimes” tailings being stored in the TSF. Placement of a woven geotextile over the tailings at closure to assist in traversing and placing the waste rock cap is being considered for the Stage 6 TSF (Knight Piésold Ltd. 2020). This geotextile layer beneath the capping layers and over the TSF slimes adds reinforcement. Reinforcement would assist in the construction as waste rock is placed for the cap and would assist in the short term following cover placement as the underlying slimes desaturate and strengthen. The tailings surface would be soft and subject to deformation and differential settlement, and strengthening the tailings surface through the addition of reinforcement would be beneficial (Haley & Aldrich 2020b). (p. 3-21)*

**Comments:** Experience at SMC's SWM Nye TSF Closure shows that geotextile woven geotextile is necessary in at least areas due to fine grained tailings characteristics for safety reasons as well to implement the installation of the cover material.