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**AND VIA EMAIL**

**RE: East Boulder Mine AM4 – Comments on Draft Environmental Impact Statement**

Dear Messrs. Jones and Grosvenor:

The Montana Mining Association (MMA) appreciates the opportunity to comment on the draft Environmental Impact Statement (EIS) prepared by the Montana Dept. of Environmental Quality (MMA) and the U.S. Dept. of Agriculture, Forest Service (FS), Custer Gallatin National Forest (CGNF) regarding Amendment No. 4 to the FS plan of operation and DEQ operating permit for Stillwater Mining Company’s (SMC) East Boulder Mine. Amendment No. 4 will authorize construction of Lewis Gulch Tailings Storage Facility (TSF) and the Dry Fork Waste Rock Storage Area (WRSA), which are critically important infrastructure to enable continued production of the only U.S. source of platinum and palladium, which the U.S. Government has identified as critical and strategically important minerals.[[1]](#footnote-1)

As Montana’s state-wide trade association for the mining industry, MMA is dedicated to promoting the responsible mining of Montana’s vast metal and mineral resources. MMA’s membership includes major mining companies operating in the state, small miners, and service providers. Collectively, through the responsible extraction of Montana’s vast mineral resources, these companies play a critical role in Montana’s economy. The hard rock mining industry in Montana provides over 18,000 direct and indirect jobs and adds over $7 billion dollars annually to Montana’s economy.[[2]](#footnote-2) Responsible mining is a cornerstone of Montana’s economy.

The East Boulder Mine, specifically, is an integral part of the Montana economy. As the DEIS notes, the East Boulder Mine provides almost 500 direct jobs in Sweet Grass, Stillwater and Park counties, with an average wage of approximately $150,000, and is also responsible for creating over 1,400 indirect jobs. The mine also provides a critical domestic supply of platinum and palladium, which are strategically important minerals for reducing hazardous air pollution from vehicles and are a key component in advanced battery technology necessary to decarbonize the economy.

MMA commends the agencies for the robustness of the DEIS. As intended by both MEPA and NEPA, the DEIS takes a “hard look” at the environmental impacts of the proposed action and a range of reasonable alternatives. Accordingly, our comments focus on two items. First, as NEPA and MEPA both require, the DEIS provides some discussion of the benefits of the proposed action and the negative environmental impacts of the no-action alternative. However, the negative impacts of the no-action alternative are understated. Second, the agencies correctly considered, but did not carry forward for detailed analysis in the DEIS, several unreasonable alternatives. We urge the agencies to quickly finalize the EIS and issue their respective decisions authorizing these projects necessary to extend the life of the East Boulder Mine.

**THE NEGATIVE ENVIRONMENTAL IMPACTS OF THE NO-ACTION ALTERNATIVE ARE SIGNIFICANT**

MEPA requires DEQ to analyze the beneficial aspects of the action alternatives and the “adverse environmental, social, and economic impacts of the project’s non-completion.”[[3]](#footnote-3) Similarly, revisions to NEPA recently passed by Congress require CGNF to include in its analysis of the no-action alternative an “analysis of any negative environmental impacts of not implementing the proposed agency action.”[[4]](#footnote-4) The DEIS provides a cursory discussion of the benefits of the proposed action in Section 1.2.3 highlighting that the proposed action ensures an additional 11-14 years of domestic production of critical minerals, vital to the US economy and the country’s climate change goals.

The DEIS also notes that the premature closure of the East Boulder mine that would be caused by adopting the no-action alternative would have significant economic repercussions for the region. The no-action alternative would result in the loss of almost 500 direct, high paying, jobs and over 1,400 indirect jobs in Sweet Grass, Park and Stillwater counties at mine closure.[[5]](#footnote-5) The premature closure of the mine would result in a significant loss of tax revenue for Sweet Grass County and the state of Montana – in 2021 SMC paid well over $20 million in state and local taxes.[[6]](#footnote-6)

However, the negative impacts of the no-action alternative are not just local and are significantly more profound. As the DEIS notes, the East Boulder Mine, along with the Stillwater Mine, is the only domestic platinum and palladium mine. Demand for these critical minerals is rising and analysts predict that demand will outstrip supply by almost 900,000 ounces in 2023.[[7]](#footnote-7) Moreover, the majority of platinum and palladium production outside of the US is in South Africa, Zimbabwe, Russia, and China. Russian and Chinese controlled mines operate with significantly less environmental control and oversight and their track record of environmental harm is well documented.[[8]](#footnote-8) Premature closure of the East Boulder Mine will almost certainly result in additional production from these sources and increased impacts associated with their poor environmental controls. Forcing the premature closure of the East Boulder Mine and exporting the environmental impacts associated with satisfying the nation’s demand for platinum and palladium will simply result in greater overall environmental impacts.

Moreover, looking at the big picture, extending the life of the East Boulder Mine makes sound environmental sense. The majority of the infrastructure and surface disturbance necessary to continue operating the East Boulder Mine is already in place. The no-action alternative would result in prematurely retiring that infrastructure without responsibly producing available mineral resources, which reduces the marginal utility of the existing investment and surface disturbance. While all human activity has environmental impacts, maximizing the utility of an existing operation like the East Boulder Mine to produce minerals for which demand is only increasing is environmentally sound decision-making.

Further, the SMC Met Complex in Columbus, Stillwater County is dependent upon the product from the East Boulder Mine to operate economically and efficiently. Discontinuation of operations at East Boulder would significantly and negatively impact the operation of the Met Complex and could result in a closure that would not only expand the environmental impacts discussed in the previous two paragraphs but would also result in further and more drastic impacts to the regional and state economy.

Lastly, SMC has established a track record at its Montana operations as one of the most environmentally responsible mining operators in the world, regularly and voluntarily going above and beyond existing regulations and taking exceptional measures to work in cooperation with the communities affected by its operations and creating an innovative collaborative model via its Good Neighbor Agreement with Northern Plains Resource Council. Forcing the premature closure of the East Boulder Mine through the no-action alternative would ignore these extraordinary examples of responsible mining, community involvement and be the epitome of short-sighted decision making.

**A FILTERED/DRY STACK TAILINGS ALTERNATIVE WAS PROPERLY REJECTED AS AN ALTERNATIVE FOR DETAILED ANALYSIS.**

In preparing the DEIS, the agencies considered an alternative that would have “required SMC to design and construct a filtered tailings storage facility (FTSF) to meet their tailings storage needs,” but properly declined to carry the alternative forward for detailed analysis in the DEIS because it is not a “reasonable alternative” for NEPA purposes and is not achievable under current technology nor economically feasible for MEPA purposes .[[9]](#footnote-9) CGNF prepared an independent analysis of the feasibility of a filtered tailings alternative based on its review of numerous documents prepared by or for SMC and other available information, which determined that “studies conducted to date have not established the feasibility of producing a geotechnically stable filtered tailings product that could be transported and placed in a FTSF that will remain free-standing and stable, and would result in a reduction in environmental risk.”[[10]](#footnote-10) The DEIS also noted that an FTSF would not be subject to the rigorous design review and oversight of a designated Engineer of Record and Independent Review Panel under the MMRA.[[11]](#footnote-11)

Specifically, the agencies found that because the sand portion of the tailings are separated and used as backfill material, technology does not currently exist at scale that can reliably and consistently dewater, transport, and place the slime portion of the tailings in a manner that would result in a stable and self-supporting FTSF that is not susceptible to catastrophic failure.[[12]](#footnote-12) The documents in the record support this determination. SMC has continually assessed the feasibility of implementing filtered tailings at the East Boulder mine for over two decades and repeatedly determined that it is infeasible.[[13]](#footnote-13) Most notably, in 2020 SMC commissioned Knight Piesold to conduct a best available technology study on tailings management for the East Boulder Mine (the BAT Study), which concluded that the existing conventional slurry tailings management was the best available technology for the site.[[14]](#footnote-14)

Several commenters during the public scoping process asserted that filtered tailings is considered best available technology for tailings management; this is an over simplification and therefore not correct. As the Knight Piesold BAT Study notes, there is no “one size fits all solution to tailings management and site specific conditions must drive the determination of the best available technology for any operation. Accordingly, the fact that other operations have implemented a FTSF does not mean that such a facility would be recommended or even feasible for the East Boulder Mine.

The record also supports the agencies’ focus in this analysis on the feasibility of filtered tailings management for the slime portion of the tailings only. During public scoping, several commenters noted that filtered tailings management may be more feasible for the whole tailings rather than just the slime portion. However, as the record demonstrates separation of the sands and slime is necessary to effectively utilize almost half of the tailings generated as backfill material and would result in a marked increase in the volume of tailings needing to be placed on the surface.[[15]](#footnote-15)

While the infeasibility of implementing filtered tailings management using current technology alone supports the agencies’ decision not to carry the alternative forward for detailed analysis, the agencies also assessed whether there would be any environmental benefits of implementing filtered tailings. The agencies correctly determined that even if the alternative were feasible, the differences between filtered tailings and conventional slurry management (i.e., the proposed action) were negligible if not non-existent.[[16]](#footnote-16)

It is also worth noting that many of the NGO’s that submitted comments during the public scoping period requesting the agencies analyze an alternative requiring filtered/dry stack tailings management and touting the purported “environmental and public safety benefits” of the same,[[17]](#footnote-17) are also on record with other projects in questioning the safety and efficacy of filtered/dry stack tailings management where it has been proposed or is being implemented. For example, David Chambers from the Center for Science in Public Participation, whose comments during public scoping suggested a FTSF would be a better management alternative, recently submitted comments regarding the expansion of the FTSF at the Greens Creek Mine in Alaska highlighting perceived “longstanding problems” with managing tailings in an FTSF.[[18]](#footnote-18)

Similarly, in opposing the Twin Metals projects in Minnesota, many of the same commenters suggesting consideration of an FTSF here, raised concerns regarding the significant liquefaction and other alleged risks associated with FTSFs in climates with significant temperature variation and precipitation.[[19]](#footnote-19) These examples highlight the simple fact that there is no one size fits all solution to tailings management and that while a FTSF may be a “reasonable” alternative at some mine sites, the use of a FTSF is not a panacea and is not appropriate for every site or operations. Here, the agencies carefully analyzed the issue and properly determined that requiring filtered tailings management is not sufficiently feasible to warrant detailed analysis as an alternative under MEPA or NEPA.

**CONCLUSION**

MMA appreciates the opportunity to provide the agencies with comments on the DEIS and commends the agencies for preparing a robust document that satisfies the objectives of both NEPA and MEPA. MMA urges the agencies to expeditiously finalize the EIS and approve Amendment No. 004 to the East Boulder Mine plan of operation and operating permit to ensure the longevity of the East Boulder Mine.

Thank you for your consideration and attention to our request,

*MSVincent*

Matt Vincent,

Executive Director

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1. D*EIS*, at 1-8. [↑](#footnote-ref-1)
2. Report: *The Economic Contribution of Montana’s Hard Rock Mining Industry*, University of Montana Bureau of Business and Economic Research, May 2023. [↑](#footnote-ref-2)
3. MCA § 75-1-201 (1)(b)(iv)(C)(III). [↑](#footnote-ref-3)
4. *See,* H.R. 3746 (Fiscal Responsibility Act), 42 U.S.C. § 4332. [↑](#footnote-ref-4)
5. DEIS, at 3-399. [↑](#footnote-ref-5)
6. DEIS, at 3-397. [↑](#footnote-ref-6)
7. Hannah Ward-Glenton, *Platinum Demand Predicted to Surge This Year, Leaving a Near 1-Million-Ounce Deficit*, CNBC (May 15, 2023), <https://www.cnbc.com/2023/05/15/platinum-demand-predicted-to-surge-this-year-leaving-the-market-undersupplied.html>. [↑](#footnote-ref-7)
8. Marianne Lavelle, *How Norilsk, in the Russian Arctic, Became One of the Most Polluted Places on Earth*, (Nov. 28, 2021), [https://www.‌nbcnews.‌com/news/world/norilsk-russian-arctic-became-one-polluted-places-earth-rcna6481](https://www.nbcnews.com/news/world/norilsk-russian-arctic-became-one-polluted-places-earth-rcna6481). [↑](#footnote-ref-8)
9. DEIS, at Appendix B-4. Pursuant to 40 C.F.R. § 1508.1(z) a reasonable alternative must be “technically and economically feasible and meet the purpose and need of the Proposed Action.” [↑](#footnote-ref-9)
10. *Id.* [↑](#footnote-ref-10)
11. MCA §§ 82-4-376 and 82-4-377 [↑](#footnote-ref-11)
12. *CGNF*, Filtered Tailings Memo (May 22, 2023). [↑](#footnote-ref-12)
13. Letter submitted to the CGNF by Sibanye-Stillwater, Re: East Boulder Mine – Conceptual Lewis Gulch Filtered Tailings Storage Facility – Additional Information (May 16, 2023). [↑](#footnote-ref-13)
14. *Knight Piesold*, Stillwater and East Boulder Mines: Tailings Management – Best Available Technology Study. (Dec. 22, 2020). [↑](#footnote-ref-14)
15. *Rough Stock Mining Services LLC*, Whole Mill Tailings as a Backfill Alternative (March 2023). [↑](#footnote-ref-15)
16. *CGNF*, Filtered Tailings Memo (May 22, 2023); *see also*, Letter submitted to the CGNF by Sibanye-Stillwater, Re: East Boulder Mine – Conceptual Lewis Gulch Filtered Tailings Storage Facility – Additional Information (May 16, 2023). [↑](#footnote-ref-16)
17. East Boulder Mine Amendment 004 EIS Scoping Comments, submitted by Benjamin J. Scrimshaw, Earthjustice; Bonnie Gestring, Earthworks; and Joe Josephson, Greater Yellowstone Coalition (July 15, 2022). [↑](#footnote-ref-17)
18. Comments on the Draft Supplemental Environmental Impact Statement (DEIS) for the Greens Creek North Extension Project #57306 (May 22, 2023). [↑](#footnote-ref-18)
19. Common concerns with the environmental protectiveness of filtered tailings in area like southeastern Montana include instability caused by saturation of the dry stack from precipitation or ice lenses forming between layers of the dry stack. [↑](#footnote-ref-19)