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Title:

Comments: Hello,

I earlier wrote you a formal request for extension of the comment period for the Stibnite Mine DEIS to 120 days on the basis of unsound hydraulic analysis. That email I wrote after reading only the hydraulic modeling section, which I initially did out of professional interest. The shortfalls there led me to read further. I have now had time to scan other sections of the document and have become increasingly concerned with the lack of depth demonstrated in this assessment of the costs/benefits of this project at many levels. My last email was written as a professional. This is written as a concerned citizen and taxpayer.

There are many examples world wide of mining companies taking advantage of local communities then leaving without being held properly accountable for the long-lasting impact of the mines. One recent example is the Gold King mine spill, which sent ~3 million gallons of toxic waste through my home town of Durango, Colorado in 2015. My grandmother died of a rare cancer associated with heavy metal contamination in groundwater, something not uncommon in Colorado mining districts. The inevitability of long lasting impacts of this type is the reason companies like Midas have to be held to strict standards through the review and implementation of rigorous environmental review. After a quick scan of the EIS it seems this assessment is in great need of further work.

I have summarized a few of my concerns below:

Lack of Rigorous Geomorphic Analysis

Assuming the best-case scenario outlined in the hydraulic models (Section 4) the groundwater impacts of this mine will last for 100 years. Keeping low toxicity levels in the South Salmon watershed requires that the integrity of their "lined channels" and holding ponds lasts for those 100 years. Research suggests (eg. Amundson 2015, Lamb et al 2013, Mudd 2015) that even in relatively stable landscapes hill-slope processes will greatly alter the surface stress-state on these time scales. Failure to address the effects of soil creep, rilling, debris flow, and land-sliding on holding structures is a massive over-site with potentially devastating (and long-lasting) impacts throughout the river system. I saw nothing even approximating a true analysis of these processes, without which the assumptions of the hydraulic model projections are completely invalid. It is essential that geomorphologists with expertise in this field are consulted to ensure the long-term stability of the mine catchments and channels. This is my most pressing concern and one that will be shared by many scientists who think about landscape evolution processes.

Fish Passageways

It is noted in the DEIS that "There exists a reasonable probability that the project will not be able to volitionally pass fish safely, timely, or effectively" (Appendix J3 p.6). There are three academic papers cited in the mine companies design for the fish tunnels (Wollenbaek et al. 2011, Rogers and Cane 2011, Gowens et al 2003), however these papers only loosely describe potential fish passageways for unrelated species of fish in different habitats. The Stibnite mine threatens the habitat of (among others) Chinook Salmon and Bull Trout, both of which have protected status and are integral parts of the local ecosystem and fishing resource. The final EIS should include a quantitative analysis of the applicability of these fish passages for local conditions and species, with a focus on the impacts of the potential loss of spawning habitat on Chinook populations. It should also include a more in depth destruction of what is meant when they say ~ 100000 fish could be "potentially affected" (DEIS p.4.12-17). The state of modern ecological science dictates that, in considering the potential loss of fish, the loss of biomass to the rest of the ecosystem be considered as well. This would include predators such as bears and eagles, as well as impacts on the availability of valuable soil nutrients generally derived from decomposing Salmon. The potential loss of those 100000 fish should be considered in the assessment of

recreational resources as well.

Recreation Economy

Idaho is known worldwide for its pristine wilderness and vast recreational resources including hunting, fishing, boating, hiking and more. It is easy to see that industrial mining combined with the degradation of fish habitat and the increased traffic on the roads that access the mine site will greatly alter the wilderness surrounding the mine site at great detriment to future tourism opportunities. The Bureau of Economic Analysis estimates that Idaho's nearly \$8,000,000,000 outdoor recreation economy supports almost 80,000 jobs across the state. With this in mind it is important to consider the economic impacts of the mine on this booming economy. It is easy to see how increased heavy traffic, water contamination, and habitat degradation have very real potential to impact this economy, something that needs greater attention in consideration of this project. It is also necessary to include an economic recovery plan for effected industries in the event of a spill, which could affect people ranging from hunters and fisherman, to raft companies on the Salmon and Snake Rivers, to farmers in the Columbia Basin. The Gold King spill in my hometown was devastating to the local economy and destroyed many local businesses. In light on this it is necessary to include a plan for reparation in the case of a spill.

It is especially troubling given the low numbers cited as contributions to the local economy. ~1000 jobs for a decade are not enough to sustain local communities, especially considering a substantial percentage will go to non-local specialized labor. The implementation of these projects is generally associated with increased housing costs in surrounding communities due to the emplacement of a transient work force that will take their money elsewhere without significantly helping local economy. Some basic searches suggest that most of the profits from the Stibnite mine would go to Canadian investors, while most of the actual processing (which equates to jobs and profit) will be outsourced to "Asia". I would like to see a cost/benefit analysis of the Midas economic proposal as compared with projections of a recreation based economy.

Thank you for considering my comments. I sincerely hope that through the review process a more satisfactory EIS can be drafted and disseminated to the public.

	Please resp	ond to acknow	ledge that ye	ou have	rad and	considered	my comment.
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Sincerely,

Nate Klema