U.S.D.A. Forest Service, Payette National Forest Attn: Linda Jackson, Forest Supervisor 500 North Mission Street McCall, ID 83638 October 22, 2020

RE: Comment letter from for Stibnite Gold Project DEIS No. 20200165

Dear Forest Supervisor Jackson,

I recently retired after four decades with the Bureau of Land Management (BLM), and a shorter period of time with the United States Forest Service. As a retired civil service employee who spent my career in land and mineral management, I submit herewith my comments on the Draft Environmental Impact Statement (DEIS) No. 20200165, for Midas Gold Idaho, Inc.'s proposed Stibnite Gold Project in the Payette National Forest, plus portions of other Forests under your authority.

Prior to my 2020 retirement, I served in numerous positions in the BLM. My most recent was as the Chief Mineral Examiner; the senior locatable minerals program lead for the BLM's HQ office. I was concurrently the head of BLM's National Mineral Team (NMET) and also as the Chair of the BLM's Mineral Examiner Certification Panel. During my time as the Panel's chair, I combined both the BLM and the USFS Panels to ensure better use of the professionals in both agencies. At retirement, I held Certified Mineral Examiner status from BLM and USFS, as well as BLM Certified Review Mineral Examiner status. Job titles don't always reflect job experience; my work was always multi disciplinary.

I worked in all phases of NEPA through my career. I'm familiar with the USFS surface management regs for locatable minerals at 36 CFR § 228 Subpart A. I'm generally familiar with the Stibnite region, having led a placer mining claim validity examination in the Gospel-Hump area during my USFS time.

Comments

It is rare that a land manager with any agency is presented with a plan of operations that is expected to result in a neat and well-operated mine, but one that *also* remediate past damage is rarer still. Midas Gold has presented the USFS with such an opportunity.

I believe that the DEIS meets the National Environmental Policy Act (NEPA) standards. The on-line reading room provides necessary supporting documents; important for someone who lives a large distance away but who is also an interested party. The DEIS (1) outlines the Midas Gold's proposed action, (2) the environmental study describes baseline conditions, (3) the potential effects of the company's proposed action, (4) alternatives, (5) effects of the proposed mitigation measures.

I recommend adoption of Alternative 2 as the Preferred Alternative for the Midas Gold's proposed project.

- It provides a maximum amount of environmental protection
- It's reasonable and consistent with both the USFS's Purpose and Need and the operator's rights to develop their mineral deposits under the 1872 General Mining Laws as amended
- It meets USFS regulations and other applicable laws, regulations and authorities.
- The additional changes and mitigation measures outlined in Alternative 2, all good modifications from the original proposal (DEIS Alternative 1) reduce impacts in a number of resource areas and provide additional mitigation measures.

I further recommend Adoption of Alternative 2 for commodity-specific reasons.

- Antimony is a critical mineral. It is within the purview of two recent Presidential Executive Orders (EOs). EO 13817 (signed December 20, 2017), A Federal Strategy To Ensure Secure and Reliable Supplies of Critical Minerals) and EO 13953 (signed September 30, 2020), Addressing the Threat to the Domestic Supply Chain from Reliance on Critical Minerals from Foreign Adversaries. Alternative 2 meets these directives.
- Fireproofing some related industrial uses of Antimony are often mentioned.
 Less often stated is that Antimony can substitute for lead in numerous uses that
 reduce toxicity in the environment. Anyone who lives or works in a house,
 apartment or building with copper plumbing built after the middle 1980s
 depends on antimony for safe water.
- Antimony replaced lead in plumbing solder. Before the middle 1980s, solder for
 plumbing contained about 40% tin and 60% lead. The lead could slowly leach
 into a home's drinking water. Antimony replaces lead in other types of solder
 and related alloys, also reducing their toxicity.
- Substitution is something we can all agree on. In an August 24, 2020 press release, Trout Unlimited (https://www.tu.org/press-releases/53306/ accessed 2020-10-22), made this statement "... Along with responsible development where and how it can be done safely, other strategies include developing alternative technologies and emphasizing recycling to reduce demand for new mines."
- All Antimony now used in the United States is imported; most from China.
- When one considers that the location of the Midas Gold proposal appears to be in the right place and well planned, it'll produce a critical mineral that can be used for substitution and reduce dependence on foreign sources.

Adequacy of Scoping

Project scoping began in July 2017. The DEIS was released in August 2020, giving roughly three years of deliberative time. At least four public meetings were conducted on the project; two in the Boise area and two near the project area. The scoping work

provided the public and stakeholders with more than enough time to gather information on the project. The Notice of Intent to Prepare an EIS and the availability of the DEIS were appropriately advertised and the comment period extensions provided adequate time for stakeholders to review information and prepare informed commentary on the DEIS. I urge you to keep to the current schedule. Including the most recent extension, members of the public have had 60% more time to comment on the DEIS than NEPA requires. Your Internet portal provides access to the DEIS and supporting documents. I do not believe that more delays in the comment part of NEPA are needed.

Midas Gold has been forthcoming with tours, webinars, open houses, and a good public information policy. They have made themselves available to groups, including those that oppose mining. The company is open and transparent about their proposed activities.

Alternatives: Adequacy

The company appropriately calls their Plan of Operation (POO) a Plan of Restoration and Operations (PRO). The PRO (POO) contains an appendix (G) that succinctly describes their design criteria, plus mine and support planning. It describes where they may have to leave valuable ore in the ground where mining it could cause additional problems. I think that the appendix is well-written and is as transparent as possible. At no time did I get the feeling that the authors were trying to hide anything. It appeared to me that the proposed operations are reasonably incident, will prevent undue & unecessary degradation, and are reasonable and necessary.

Reclamation & Restoration: Components

A century of mining at Stibnite left lasting environmental impacts. The site won't restore itself, and it would be too expensive for the USFS to undertake such a project on its own. Midas Gold has included the restoration in their proposal, to be completed at their own expense. That wetlands proposal in their mitigation plan offers a net gain of more than 300 functional units, a measure of wetland health. That's a 40% increase from today.

Restoration: Blowout Creek

The old hydroelectric reservoir at Blowout Creek is one of largest contributors of sediment into the local river system. The restoration plan is a good one. This component should be included in the final approval.

Tunnel for Fish Passage

Midas Gold's proposal to route the river through a tunnel is clever, and an evolutionary step in rerouting fish habitat around mining disturbances. The fish passage blockage in the area has been present since the late 1930s,through the early 1950s. It was caused by others—long before the 228A Regs were in place. Midas built into their mine proposal this plan to clear the pre-existing blockage with private funds. This creates post-closure riparian habitat and replaces long-ago given-up on fish passage for some 25 linear upstream miles. Even living in Arizona, I think this is a great idea. It

compares extremely well to analogous bypass projects I've seen in Montana, Alaska and Oregon.

Abandoned Mine Site Issues

Much of the mining and development at Stibnite occurred under the U.S. Government's wartime emergency production mandates during World War II and the Korean Conflict, in the pre-regulation years. Results noted in the DEIS and supporting documents include high levels of arsenic and antimony. These is probably from contamination, above natural levels and would require positive action to remedy.

Stibnite, ID is a highly mineralized area. Natural background concentrations for the same metals would normally be higher than nearby areas.

Please give consideration to what the natural background geochemical conditions at Stibnite and in the nearby similarly mineralized really are. Some natural water is "contaminated" by naturally occurring mineral outcrops, even without the influence of mining operations. It's probably impossible to improve water quality where the forces of nature that created the contamination without "help" from people. Fortunately, Midas has numerous years of water quality data covering the area of proposed activity and the surrounding area. Those should guide compliance targets because they can take into account the naturally high levels of arsenic, antimony, and other elements likely in the local rock, soil, sediments and water.

There are extensive piles of rock, tailings and other earth-moving disturbance left over from prior mining processing operations in the area. Midas proposes to place their facilities in these areas so as to not disturb additional ground unless necessary. Via their POO, Midas Gold will address critical legacy areas long in need of major repairs. It is also evident that Midas Gold developed their POO with a goal of sustainable mine closure.

CERCLA Matters

It's always a good to reduce the number of sites subject to CERCLA (Superfund) actions, and to prevent new ones. The site has been subject to past CERLCA (Superfund) Consent Decrees aimed at dealing with legacy impacts. Since a consent decree in 2012, no further action has been taken, but the DEIS reports that major water quality issues remain. Midas Gold acknowledges the CERCLA issues and has addresses them. An excellent example is Midas Gold's plan to reprocess tailings in the Spent Ore Disposal Area. That operation will remove any remaining valuable metal, and place the remaining tails into a better location that won't cause a water quality problem. Presuming that all proceeds regularly, this will be accomplished without the expenditure of public funds. Sooner is better than later.

Preferred Alternative, more detail

Alternative 2 addresses issues raised during scoping and additional analysis. NEPA requires a No Action alternative, but a No Action alternative would leave the toxic mess just as it is. I request the selection of Alternative 2 as the Preferred Alternative for the Final EIS and the Record of Decision, for the following reasons (in no particular order).

- It meets the requirements of the U.S. Law and USFS regulations.
- It has all around the best benefits for USFS resources.
- It remediates past unreclaimed damage.
- Public access and recreational benefits are maintained.
- It is in the public interest.

Additionally:

- The Burnt Log Access Route is a better choice for public and operator safety, wetlands, slope stability and watershed protection than the steeper gradient Johnson Creek and Stibnite-Yellow Pine route (Alt. 4).
- The Burnt Log Road keeps mine truck traffic away from residential areas.
- Both the Johnson Creek Road and Stibnite-Yellow Pine Road run parallel to major fish bearing streams unlike the Burnt Log route.
- Most of the proposed route along the Burnt Log road is an existing road and I
 think the benefits of the few temporary, small road extensions to complete this
 route to the site outweigh the impacts. The few road extensions would be
 reclaimed after mine closure.
- Midas Gold provided a chart with factors of the various routes to the site in their Appendix G. Please consider the factors in that review in your decision.
- The existing roads, e.g., Johnson Creek Stibnite Roads to the site, while used in the past, are not suitable for long-term use. The system is narrow with tight switchbacks, there are locally steep grades, it parallels a river with anadromous fish, and much is within a flood plain. This road system was built under wartime emergency conditions and there was little, if any, thought to environmental effects.
- The Burnt Log Route lies at higher elevations over most of its length, crosses creeks at safer angles instead of paralleling them and is less subject to dangerous geologic hazards.
- The company's tailings plan is one of the best that I have ever seen. It entails the construction of what's called a "downhill" tailings dam. The term "downhill" has nothing to do with the gradient of the surface that it's placed on. Instead, it means that as the tailings content of the impoundment increases, the dam is enlarged "downhill" from the impoundment, and is thus placed on solid ground. More common practice used "uphill" dams where the upward, or "uphill" expansion of the dam was placed on older tailings put in place when the impoundment was newer. The assumption was that the tailings material at the lower levels had solidified to the point where they could take the additional weight. That assumption wasn't always good. (A visualization of trying to stack bricks as a dam partly onto a caramel pudding lake can suffice as a thought

- model for an "uphill" dam.) "Uphill" tailings dams in Brazil have failed with loss of life and headlines. The facility at Stibnite will not be like those.
- The proposed tailings facility at Stibnite is surrounded on three sides by solid bedrock walls and the proposed dam site is in an ideal location.

Mining Claim Validity and Ancillary Use

Expending valuable resources and staff time to conduct unnecessary mining claim validity inquiries takes those funds and the staff away from more important tasks and seldom provides information relevant to decision-making. I have found this to be true with matters of the USFS as well as the BLM. Unless the land involved has been withdrawn from mineral entry, including statements, pro or con, in an environmental document about performing validity examinations before approval of a POO are a waste of time and space and can create controversy where there is none.

The 2001 DOI Solicitor's Opinion (SolOp) M-37004 on Ancillary Uses created lasting confusion. That SolOp could be viewed as requiring BLM or USFS to determine the validity of a mining claim validity prior to approving a Plan of Operations. SolOp M-37011, in 2005, expressly rescinded M-37004. Also in 2005, Solicitor's Opinion entitled "Legal Requirement for Determining Claim Validity Before Approving a Mining Plan of Operations," (M-37012) reminded us clearly established that BLM, or USFS acting for BLM, can conduct a claim validity determination on any mining claim at any time up until the claim receives a patent under Section 29¹ of the Mining Law but a claim validity determination is not required prior to approving a Plan of Operations.

Please take my comments into consideration and select Alternative 2 as the preferred alternative for the Final EIS and ROD. Thank you for this opportunity.

Sincerely,

Matt Shumaker (BLM, retired)

¹ The law that allows mining claims to receive fee-simple title remains in effect. The actual patenting of mining claims has been under moratorium via Budget acts since 1994. So the various SolOps that mention patenting reflect the law, even if they might not mention the moratorium.