

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

October 27, 2020

RE: Comment letter for Stibnite Gold Project Draft Environmental Impact Statement No. 20200165

Dear Ms. Jackson,

I am Richard E. Deery, a retired federal employee. I worked for the US Bureau of Land Management for 42 years. I am a geologist. I hold a Bachelors in Geology and a Masters in Engineering Geology and I am a Registered Geologist/Certified Engineering Geologist (OR). I spent the majority of my Federal career doing Mining Law Administration. From 2010 to 2019 I was the Mining Law Administration Program Leader for USBLM headquarters.

For a decade, I taught the Mining Law Modules to both USFS and USBLM personnel at the USBLM's National Training Center. In the course of my career, I have written regulations, developed policy guidance and while serving on a detail to the House Resources Committee, drafted legislative language on the mining law, critical minerals and NEPA. I served as USBLM representative on the National Science and Technology Council (NSTC), Subcommittee on Critical and Strategic Mineral Supply Chains. During my last several years, I worked with others from the Department of the Interior on the government-wide critical minerals strategy in response to Executive Order 13817.

I appreciate the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Midas Gold Stibnite Gold Project. I am pleased to see the project proposal, scoping results and analyses record and supporting documents that the USDA Forest Service (USFS) have made available on its website for the Stibnite Gold Project. Please take my comments that follow into consideration during your review and decision-making process. I will address three issues that are associated with this project and its approval. First, I will address mining law matters which will undoubtedly arise in any post-approval litigation. Second, I will address critical minerals as they apply to our national interests and to this proposal. Third, I will address the analysis carried out by USFS as laid out in the DEIS.

MINING LAW MATTERS

As a result of my working, teaching, and leading USBLM's mining law program, I am very familiar with the operation of General Mining Law, as amended (RS §2319 - §2352, U.S.C. §22 – §54). The General Mining Law explicitly grants to citizen and those who have declared their intent to become citizens:

- The right to access public lands open to mineral entry; and
- The right to use and occupy public lands open to mineral entry for mineral exploration and development purposes, including the location of mining claims.

It's important to note that these rights apply to all lands that are open to operation of the General Mining Law. In plain English, it means any public domain lands that are not withdrawn or closed

to the operation of the law. The rights are not defined by or restricted to lands where mining claims have been located. For some time now anti-mining advocates have advanced unsupported legal arguments asserting that the rights granted under the mining law are only available to citizens who have located mining claims which are supported by a valid discovery. These arguments are ill-founded and based on manifestly false readings of both the statute and its implementation by the Department of the Interior. The Department which receives this power from 43 U.S. Code § 2. The Secretary of the Interior exercises all executive duties regarding the public lands of the United States. The Secretary has delegated the preparation of legal direction on these matters to the Office of the Solicitor. The formal opinions of the Office of the Solicitor provide the final word on what are the rights granted under General Mining Law and how they are to be recognized.

Mining law rights are not unfettered rights because mineral explorationists and miners must comply with Federal surface management regulations for locatable minerals that establish a number of environmental protection mandates. Three sets of regulations guide the activities of citizens exercise of rights under the mining law. On lands managed by USBLM these regulations include the regulations at 43 CFR 3715 and 43 CFR 3809. On lands managed by the USFS these regulations are at 36 CFR 228A.

In the preamble to the final regulations for 43 CFR 3809 November 1980, the USBLM responded to comments on the definition of mining activities in the following manner:

“...One comment observed that the definition of the term "mining operations" was unclear as to "whether the operations take place on or off the claim" and indicated that no significant activities should take place off the mining claim unless authorized by some other law. This is not technically correct. One does not need a mining claim to prospect for or even mine on unappropriated Federal lands. The definition was designed to include those operations on a mining claim and uses incidental thereto on Federal lands, and does not inhibit "the miner's right to conduct initial prospecting prior to discovery" as one comment suggested or prior to location..." (45FR 78903, November 26, 1980)

This point is reinforced in the August 17, 2020 Department of the Interior Solicitor's Opinion M-37057 "Authorization of Reasonably Incident Mining Uses on Lands Open to Operation of the Mining Law of 1872," which states:

“A mining claim is not a condition precedent to conducting or obtaining authorization to conduct reasonably incident mining uses on open lands.”

This is simply the latest in a series of formal Solicitor's Opinions developed by the Department of the Interior since 2001, all in response to attempts to limit the rights of the citizens conducting mineral exploration or development activities under the terms of the General Mining Law. As noted above, mining law rights are not unfettered rights because of the requirements to comply with Federal surface management regulations. Further all activities, whether on or off a mining claim must be reasonably incident. On USBLM administered land this must include compliance with the regulations at 43 CFR 3715 Use and Occupancy Under the Mining Laws. I am the principle author of that regulation.

On National Forest System (NFS) lands, like those in the Payette and Boise National Forests where the proposed Stibnite Gold Project is located, the Forest Service's 36 CFR Part 228 Subpart A regulations (the 228A regulations) mandate mineral operations to minimize adverse

environmental impacts where feasible (36 CFR 228.8). These regulations establish environmental protection criteria for a wide array of environmental media (e.g., surface water and groundwater quality and air quality) and environmental resources (e.g., wildlife and fisheries). The 228A regulations also mandate reclamation once mineral activities are completed (36 CFR 228.8(g)).

As explicitly stated in the definition of operations at 36 CFR 228.3, the 228A regulations apply to all NFS lands open to mineral location regardless of whether there are mining claims on the land:

“All functions, work, and activities in connection with prospecting, exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto, including roads and other means of access on lands subject to the regulations in this part, *regardless of whether said operations take place on or off mining claims.*” (emphasis added)

In addition to the environmental protection mandates in the 228A regulations, the Forest Service must also determine that proposed mineral activities comply with the “reasonably incident to mining” mandate in 30 U.S.C. § 612(a). The Forest Service’s Surface Use Determination Handbook¹ defines the reasonably incident statutory standard in 30 U.S.C. § 612(a) as meaning:

“...reasonable and necessary uses of National Forest System lands for purposes that reflect sound practices that avoid or minimize adverse environmental impacts and are required for the various stages of operations. For a use to be reasonably incident, the type and level of use must be appropriate to the stage of operations and extent of information on the mineral resource.”

The proposed use and occupancy of NFS lands in the Payette and Boise National Forests and the ancillary uses proposed in the PRO for the waste rock and tailings storage facilities, buildings (mine office, maintenance, warehouse, and other buildings), fences, etc., are obviously reasonably incident to the proposed mining and mineral processing operation.

I’ll add that if the ancillary facilities are proposed on public lands with mining claims that is open to the operation of the mining law, the discovery status of the claims in question is irrelevant. Mining Law rights to use and occupy lands for mineral purposes extend to all lands subject to the mining law. As the above-noted new Solicitor’s Opinion states “A mining claim is not a condition precedent to conducting or obtaining authorization to conduct reasonably incident mining uses on open lands.” Because presence of a mining claim does not define rights under the Mining Law to use the land for mineral purposes, it follows that the discovery status of a claim similarly has no bearing on the Mining Law rights. For so long as the lands remain open to the operation of the law, the mining claim merely records the project proponent’s interest in the lands within the mining claim.

I do not doubt that anti-mining interests will raise ongoing litigation over Rosemont Copper Company’s proposed use of mining claims for its mine waste disposal facilities in the Coronado National Forest in Arizona. They will likely use the term “valid claim” to mean a claim with a discovery of a valuable mineral deposit and will assert that only valid claims have Mining Law rights to use NFS lands for mineral purposes including ancillary uses. They will assert that this litigation is somehow binding of the Federal decision makers for this project. The Payette and Boise National Forests should not be distracted by these assertions because the Arizona District Court’s ruling in this litigation has been appealed, the ruling is not consistent with long-

¹ Forest Service Handbook 2809.15, Chapter 10, effective date 08/31/2006.

established mining law principles and case law, and most certainly does not establish a precedent to be followed when making a final decision.

CRITICAL MINERALS

Pursuant to the Executive Order, the Secretary of the Interior, in coordination with the Secretary of Defense, and with other relevant executive branch agencies developed and submitted a list of 35 minerals that are defined as critical to the nation's economy to the Federal Register on May 18, 2018 (83 FR 23295). That listing including antimony.

The proposed project includes mining and processing of antimony-bearing ores and would produce antimony as a by-product of gold mining. By-product production not an uncommon means of producing antimony, which is found in the mineral Stibnite. The town and project are named for the mineral. Stibnite is a mineral and one that is even rarer in concentrations and quantities that allow for economic extraction. Antimony is a metalloid, a material utilized in many industrial and defense applications. It is a major component in many fire retardants used across the manufacturing and consumer products spectrum, including the ubiquitous Federal fire service "Yellow Shirts." A fact I suspect that is not lost on those that wear those clothes to protect themselves during wildland fire operations. Although used in small amounts in many of these applications, it is never-the-less a vital component.

Historically China has been and still is the world's primary producer of antimony and uses its market control of the supply chain to further its expansionist political, military and economic interests around the world. Their manipulation of the antimony markets has gone on for decades, has been the subject of World Trade Organization litigation, and includes use of trade embargoes and export tariffs and other restrictions to cripple foreign businesses or countries that rely on its supplies. The vast majority of the parts of the antimony supply chain are either outright owned or predominantly controlled by the Chinese government.

On October 23, 2020 an article appeared in the online tabloid Global Times, which is an imprint of the Chinese Communist Party's long-published *People's Daily* Newspaper. That article cited the use of antimony as a potential economic weapon. The article stated;

"...Besides a group of 17 rare-earth metals that China can cut supplies to the US for the latter's crackdown on Chinese companies, the Chinese government has another seven nonferrous metals vital for US defense and high-tech industries up its sleeves in reserve for retaliation, a senior expert said on Friday.

China's newly-passed law on export controls will pave the legal grounds before the government can utilize the seven metals in an export control way of fighting back, Zhou Shijian, a senior research fellow at the Center for US-China Relations at Tsinghua University, told the Global Times on Friday.

The metals, some of which China has been supplying the US since World War II in a metal-for-loan scheme, are of great value to US defense, information technology, aeronautics and aerospace.

China has an absolute advantage against the US in four of seven metals - tungsten, tin, antimony and molybdenum - in terms of supply, Zhou said.
..."

(emphasis added – see <https://www.globaltimes.cn/content/1204459.shtml> for the original article)

It is important to note that the *People's Daily* and its imprints like the Global Times, are official mouthpieces of the Chinese Communist Party and therefore of the government of the People's Republic of China (PRC). The government of the PRC is following a doctrine first seen in the West in a 1999 publication entitled *Unrestricted Warfare*. The central premise of this strategy is that the first rule of unrestricted warfare is that there are no rules, with nothing being forbidden. Thus, using any means available to disrupt or delay development that is necessary for minerals, economic or military security of an opponent (aka the United States) is appropriate. In a sense anything from a banker to a bullet becomes a weapon and there are no distinctions between the military and civilian parts of an economy.

In reality, China has long been using access to materials to “persuade” companies to set up manufacturing in China. One of the best examples is the loss of thousands of US jobs and manufacturing capability by General Electric (GE) in their micromotors, generators and lighting business sectors to China who by manipulating the raw and process materials chains for much needed critical minerals forced GE to abandon its US plants one by one.

China is rapidly building its military and exerting its influence in Africa, South America and more importantly in the South Pacific. They are fully aware of the importance of mined raw materials, including antimony, to their defense sector (and ours) where it is widely used in munitions, explosives and high technology military hardware. In fact, China passed an ‘*Export control*’ law to provide it with a “legal basis” before the WTO when threatening to restrict rare earth elements and other critical raw materials in order to retaliate against countries and companies it does not like (NikkeiAsia, October 17, 2020). While not quite a declaration of economic warfare with the United States in particular, it certainly comes close. The United States government, its agencies and its personnel should never allow themselves to be knowingly or unknowingly used in furthering the economic or strategic objectives of the PRC. Positions advocated by groups or individuals that further the economic or strategic objectives of the PRC or any other country must never be allowed to influence a USFS decision on this project proposal or any other project.

CRITICAL MINERALS - STIBNITE AND ANTIMONY

The importance of the antimony reserves and resources at Stibnite was recognized in the September 10, 2020 addition of the project to the High Priority Infrastructure Project (HPIP) Permitting Dashboard – the first and only mine development project in the U.S. to be so included. Information on HPIPs is published on the Council on Environmental Quality website and provides for enhanced coordination between federal agencies to get projects permitted and into operation. In the case of Stibnite, the project can provide a domestic supply of critical minerals for economic and national security while restoring a long abandoned and contaminated historic mine site.

These goals, in addition to those in Executive Order 13817 (December 20, 2017) *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals*, provide impetus for expediting the NEPA and permitting processes for the Stibnite project. Given the statements by PRC “experts” regarding access to antimony resources as a means of economic or strategic retaliation that I noted above, the near-future operation of this project is in the best interests of the United States.

Further, the site at Stibnite was critical for the US war effort in WWII as the major source of antimony (90%) and tungsten (40%) for the allied war effort. The damages resulting from that emergency development under war time conditions left this site immensely scarred and contaminated. Left untouched as some would have it, will continue to place a burden on taxpayers to pay for restoration on a catch-as-can budgetary basis. A properly and timely permitted modern mine can once again provide critical materials to serve US needs and do so with the benefit of cleaning up and restoring those historic damages. In short, the often maligned concept of re-mining works when properly deployed to address problems of the historic past mining.

DEIS AND THE ADEQUACY OF SCOPING

From the available information I believe the time and effort to scope the project were sufficient to identify key issues of concern to the local community and forest users. Public meetings, mailings and Federal Register notices provided more than adequate information for stakeholders to gain an understanding of the project components. In addition, the extended comment period provided for public review and comment on the DEIS and it is sufficient. I urge you to terminate the comment period at the scheduled time to avoid further delays in the project as there has been sufficient scoping and disclosure to meet the requirements of the National Environmental Policy Act (NEPA).

DEIS AND ADEQUACY OF THE ALTERNATIVES

Section 2.8 of the DEIS outlines the range of alternatives that were evaluated in Appendix G of Midas Gold's Plan of Restoration and Operations (PRO) and in the DEIS. It explains why many of the alternatives considered are not economically or technically feasible or do not result in any meaningful environmental benefits. Thus, they did not warrant further or more detailed evaluation in the DEIS.

This analysis ultimately reduced the large number of components to four action alternatives that evaluate various project components and infrastructure elements. The analysis incorporates Midas Gold's analyses of various project options described in their PRO (Appendix G) and takes a hard look at those carried forward along with other options developed by the USFS. Design criteria were used at the conceptual scale and in more focused detailed reviews to screen potential alternatives and disclose potential impacts just as NEPA requires. The project elements that were studied and screened included alternatives that could have impacts including:

- Evaluation of open pit versus underground mining methods;
- Evaluation of possible tailings storage facility locations, construction methods and associated water management;
- Evaluation of project infrastructure component locations;
- Evaluation of ore processing methods;
- Fish passage options;
- Development rock storage facility siting and management options;
- Former breached hydropower reservoir dam restoration options;
- Evaluation of site access options including public access through and around the site;
- Mine and infrastructure power options;
- Employee housing;

Project components were analyzed and compared using the design criteria and other factors to screen the various elements and develop an overall site layout to minimize environmental and ecological impacts and still meet the project proponent's objectives by:

- Proposing the location of infrastructure on previously disturbed areas where reasonable and practical;
- Avoiding or if not possible, mitigating wetlands impacts where feasible and practical;
- Proposing activities in a fashion to protect anadromous fish populations and restore and enhance stream channels and wetlands that were altered or impacted by historic mining, logging, roads, a smelter and a townsite;
- Improve surface and groundwater quality;
- Removal of long-term existing fish passage barriers;
- Remove and re-processing and placement of unlined WWII era legacy tailings that are impacting ground and surface water quality into a properly engineered modern tailings storage facility;
- Recovery and reuse of former waste rock and spent heap leach ore for construction materials and isolating these materials from future interaction with the environment;
- Revegetation of a large area previously impacted by a century of logging, mining and fire to reduce loss of soils, sedimentation into the adjacent watershed and improve botanical and wildlife diversity and habitat;
- Implementing watershed-scale sediment control actions, such as repairing the former reservoir dam sediment fan and removing or mitigating impacts from historic rock dumps and former mine and townsite facilities;
- Reducing fossil fuel consumption by use of solar power and grid power (much of which comes from hydroelectric power generation facilities) versus use of diesel generators for processing facilities, thereby reducing emission of greenhouse gases; and
- Developing site layouts to avoid landslide and avalanche prone areas to protect workers, site visitors and the public.

The USFS alternatives screening criteria described in Section 2.8 appropriately consider both positive and negative environmental impacts. They outline the tradeoff studies completed to frame the decision-making process. Components were evaluated on their technical and economic feasibility, environmental soundness and whether the respective alternatives met the project proponent's and the agency's purpose and need under the 36CFR228 regulations and under NEPA. The alternatives screening process which reflects the application of sound engineering and environmental practices, was comprehensive, detailed, and ensured that the USFS took a "hard look" at the project proposal as required by NEPA. This process ultimately identified the four project alternatives that are evaluated in detail in the Draft EIS.

I believe selection of Alternative 2 is appropriate as the preferred alternative to be carried forward to the Final EIS and ROD. I also suggest the USFS and cooperating agencies continue to work with Midas Gold to develop additional mitigation measures and minimize impacts where practical and reasonable as the project advances.

DEIS AND SITE ACCESS

Two routes to the site were evaluated in the DEIS: 1) the project proponent's preferred route along Burntlog Road (Alternative 1-3); and 2) an existing road network along Johnson Creek and Stibnite-Yellow Pine Road (Alternative 4). The road proposed by Midas Gold in their plan, along Burntlog Road (Alternative 1) as modified in Alternative 2 seems to be the best choice for life of

mine site access compared to Alternative 4 along the existing Johnson Creek/Stibnite-Yellow Pine roads as described in Section 2.6.4.1 of the DEIS. The benefits of the Alternative 2 route include:

- Avoidance of river-parallel roads, which reduces the risk of potential spills and lowers risks of fugitive dust and sediment delivery to adjacent streams;
- Avoidance of numerous winter avalanche sites and rock falls;
- Reduces potential traffic conflicts and reduces congestion along the well-used Johnson Creek and Stibnite-Yellow Pine roads;
- Eliminates mine truck traffic through residential communities along Johnson Creek Road and Yellow Pine;
- Responds to public requests for an access route through the site received during project scoping.

The Burntlog route also has less impact to linear streams, wetlands impact, and a lesser acreage of impact on Riparian Conservation Areas than the Alternative 4 route. Thus, it seems like a win-win since it is the best choice from a safety perspective and from an environmental impact standpoint. Although it was appropriate for the USFS to consider Alternative 4, the most logical choice is the Alternative 2 road network because it best satisfies the alternatives screening criteria, one of the most important being traffic safety.

DEIS AND TAILINGS STORAGE

The proposed tailings storage facility (Alternatives 1, 2, and 4) was sited to provide a high factor of safety. This is an important consideration and makes common sense given the site conditions, geology and geotechnical considerations described in the plan, DEIS and supporting documents (DEIS, Section 2.3.5.7; Plan of Operations, Section 11.2.1, pp. 11-2 to 11-5; Appendix G, Section 8.3, pp. 29-54).

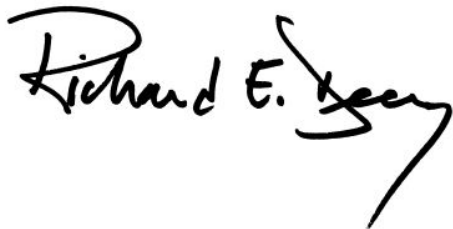
The downstream construction method, with the development of a large rock buttress for the embankment provides for a secondary stability feature and is possible because of the site conditions at the proposed site. Construction of a similar feature in the Alternative 3 location would require placement of material in an otherwise relatively unimpacted drainage, which is something that should be avoided if possible and practical.

The water management plan for the tailing facility is proposed to be a closed circuit (“zero discharge”) facility which is to be commended (PRO, Section ES.15, p. ES-17; PRO, Section 11.7, pp. 11-7 to 11-10). Section 2.8.3 of the Draft EIS (and Appendix G of the PRO in tables T3, T4, T5, pp. G48, G52, G53) present an evaluation of possible construction methods, siting considerations and other elements which leads me to believe the selection of Alternative 3 is the wrong choice.

The DEIS evaluates two tailings sites carried forward from the larger options discussed in the operator’s plan: 1) the Meadow Creek Valley site listed as Alternatives 1, 2, and 4; and 2) the East Fork of the South Fork of the Salmon River site as Alternative 3. The Alternative 3 tailings facility location would impact a relatively intact and undisturbed reach of the East Fork South Fork of the Salmon River and would disturb approximately 100 more acres than the Meadow Creek site. If Alternative 3 were selected, the large pile of historic tailings and spent ore sitting in an unlined facility in the Meadow Creek valley would remain in place contrary to one of the purposes and goals of the project to “...*minimize adverse environmental impacts on National Forest System (NFS) surface resources...*” (DEIS, Executive Summary Section 3.1, p. ES-5).

Any positive consequences of selecting Alternative 3 and tailings disposal location in the East Fork of the South Fork of the Salmon River compared to the Meadow Creek location in Alternatives 1, 2 and 4 are far outweighed by the negative impacts of use of that site. The selection of Alternative 3 also fails to meet the purpose and need of the Army Corps of Engineers, a cooperating agency, to fulfill their mandate to meet requirements of Section 404 of the Clean Water Act relating to wetlands impacts.

Thank you for allowing me to comment on the DEIS for this project and I appreciate the effort the USFS has taken to review this project.

A handwritten signature in black ink that reads "Richard E. Deery". The signature is written in a cursive style with a long, sweeping tail on the final letter.

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