Nevada Mineral Exploration Coalition

The "Voice" of Nevada Exploration

https://cara.fs2c.usda.gov/Public//CommentInput?Project=50516

January 6, 2023

U.S. Forest Service, Payette National Forest
Attn: Linda Jackson, Payette Forest Supervisor
Stibnite Gold Project
500 North Mission Street, Building 2
McCall, ID 83638

RE: Comments on the Payette and Boise National Forests' Supplemental Draft Environmental Impact Statement for the Stibnite Gold Project

Dear Ms. Jackson:

Introduction

The Nevada Mineral Exploration Coalition (NMEC) is submitting these comments on the October 2022 Supplemental Draft Environmental Impact Statement (SDEIS) that the Payette and Boise National Forests (Forest Service) have prepared for Perpetua Resources Ltd.'s (Perpetua's) Stibnite Gold Project (SGP) in Valley County, Idaho. These comments augment the comments we submitted in October 2020 that focused on how the SGP will become the Nation's only domestic antimony mine.

The NMEC is a grassroots coalition of individuals and small businesses who make up the exploration, research, and development segments of the mining industry. Our goal is to promote and preserve the natural resource exploration industry of Nevada and the Western US. NMEC members use state-of-the-art science and technology to search for and develop the natural resources in the areas where we work and we generate jobs, economic activity and considerable tax revenues. We bring in new capital, commonly from out of the country, all of which is spent domestically. We find the mines of the future, ensuring the long-term economic well-being of Nevada and the Western US.

The SGP will Become the Nation's Only Domestic Antimony Mine

Because many NMEC members have expertise with gold deposits that contain antimony, we know from experience that the antimony grades at most gold deposits are not high enough to warrant producing antimony as a byproduct of gold production. The Stibnite deposit is different because it has sufficient antimony grade and size to make it feasible to recover the antimony as a byproduct of the gold processing operation.

The Department of Defense's December 19, 2022 announcement[1] that it has awarded Perpetua a $24.8 million Title III Defense Production Act (DPA) grant to advance the SGP demonstrates the uniqueness of the SGP and its importance to the country. This announcement states that the antimony at the Stibnite deposit is "the sole domestic geologic reserve of antimony that can meet Department of Defense (DoD) requirements[2]." Given the special characteristics of the antimony at the SGP, timely development of this project is clearly urgent for national defense.

The following excerpts from DoD's announcement provide additional information highlighting the importance of the Stibnite deposit and the SGP:

> "This investment is essential to ensure the timely development of a domestic source of antimony trisulfide for the manufacture of small arms and medium caliber cartridges, as well as many other missile and munition items."
>
> "This action reinforces the Administration's goals to increase the resilience of our critical mineral supply chains while deterring adversarial aggression."

NMEC interprets the DoD's announcement to imply the country's antimony supply chain is vulnerable, which compromises the U.S. military's preparedness.

According to the U.S. Geological Survey's (USGS') 2022 Mineral Commodity Summaries[3], no marketable antimony was mined during 2021 in the U.S. We imported 84 percent of the antimony metal and oxide we needed, with most of the imports coming from China. This statistic coupled with DoD's characterization of the SGP as the only antimony reserve that meets the military's technical specifications clearly means the SGP needs to be built and operated as soon as possible to strengthen our antimony supply chain and reduce our reliance on China and other foreign countries for this critical mineral. The only way for this to happen is for the Forest Service to expedite publication of its Final Environmental Impact Statement (FEIS) for the SGP and issue the Record of Decision (ROD) approving the SGP.

In our October 2020 comments on the DEIS we expressed concerns that Chapter 3.2 of the DEIS failed to discuss the importance of the Stibnite deposit as a unique domestic antimony resource. The above-cited DoD characterization of the Stibnite deposit as "the sole domestic geologic reserve of antimony that can meet Department of Defense (DoD) requirements" verifies that the Stibnite deposit is geologically unique.

We were disappointed to see that the Forest Service did not heed our suggestion to discuss the geologically special characteristics of the Stibnite deposit in Section 3.2 in the SDEIS. We suggest that Section 3.2 of the FEIS include a discussion of the special characteristics of the Stibnite antimony deposit and how these characteristics define a compelling need to produce the antimony contained in this deposit.

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[1] https://www.defense.gov/News/Releases/Release/Article/3249350/DoD-issues-248m-critical-minerals-award-to-perpetua-resources/

[2] *Ibid.*

[3] https://pubs.er.usgs.gov/publication/mcs2022

In expanding Section 3.2 of the FEIS with this essential information, the Forest Service should cite Chapter C on antimony in the 2017 U.S. Geological Survey (USGS) publication entitled: "Critical Mineral Resources of the United States—Economic and Environmental Geology and Prospects for Future Supply" (USGS Professional Paper 1802)[4], which describes the Yellow Pine/Stibnite deposit as the largest antimony resource in the United States.[5] Page C2 of this report shows the Yellow Pine/Stibnite gold-antimony deposit on a map of worldwide antimony deposits that illustrates the scarcity of antimony resources.

The FEIS should put the Yellow Pine/Stibnite antimony deposit into the proper context by explaining that development of this deposit is the country's *only identified opportunity* to have a domestic source of mined antimony in the foreseeable future. Moreover, the DoD's December 19, 2022 announcement has put the country on notice that the mineralogical and/or metallurgical properties of the stibnite mineral (Sb_2S_3) at the SGP are the only known antimony that satisfies the military's technical specifications for manufacturing the armaments the military needs for national defense. These essential facts about the SGP need to be presented in the FEIS because they should influence and expedite the Forest Service's decision to approve this project.

Remining at the SGP Will Remediate the Site and Validate the Administration's and Congress' Directives to Obtain Critical Minerals from Historic Mines

Most of the mine waste piles at the Stibnite mine site were produced decades ago during World War II and the Korean War when the federal government was involved with emergency mining operations at Stibnite to produce the antimony and tungsten the U.S. military needed for these war efforts. The SGP entails remining and reprocessing some of these historic mine wastes that contain residual gold and antimony that can be economically recovered, and remining other mine wastes that do not contain valuable minerals and placing them in engineered containment facilities to isolate them from the environment.

Both remining activities are important environmental restoration measures that will remove legacy materials from area streams (primarily Meadow Creek) where they are leaching arsenic, antimony and other contaminants into the watershed. The remining components of the SGP and the recovery of antimony from some of the legacy mine wastes are precisely the type of remining activity that recent critical minerals policies have identified as a potential source of critical minerals.

The remining aspects of the SGP are consistent with the Biden Administration's and Congress' recent directives to evaluate remining of historic mine wastes as a viable source of critical minerals. Several of these remining directives are described below:

- Executive Order 14017 "On America's Supply Chains"

  On February 24, 2021, President Biden issued Executive Order 14017 (EO 14017) "On America's Supply Chains." EO 14017 directed the Secretaries of Commerce, Energy, Defense, and Health and Human Services to complete a supply chain review in 100 days and

[4] Schulz, K.J., DeYoung, J.H., Jr., Seal, R.R., II, and Bradley, D.C., eds., 2017, Critical mineral resources of the United States—Economic and environmental geology and prospects for future supply: U.S. Geological Survey Professional Paper 1802, 797 p., https://doi.org/10.3133/pp1802.
[5] Id., Page C8.

specified that the Secretary of Defense must prepare "a report identifying risks in the supply chain for critical minerals."

- 100-Day Report: Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth

The June 2021 report "Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth," which is the 100-day Supply Chain Review Report prepared in response to EO 14017, is directly relevant to the SGP because this report explicitly requires the Secretaries to evaluate reprocessing mine wastes as a viable source of critical minerals.

- The 2021 Bipartisan Infrastructure Bill/Infrastructure Investment and Jobs Act

On November 15, 2021, President Biden signed the 2021 Bipartisan Infrastructure Law. This bill, which is also called the Infrastructure Investment and Jobs Act (IIJA), includes a section devoted to critical minerals (Section 40206). Section 40206 of the IIJA notes that permitting delays are a principal factor in creating the nation's dangerous reliance on foreign countries for critical minerals, and directs the Secretaries of Agriculture and the Interior to prepare a report within one year to make recommendations to streamline the permitting process.

The IIJA created a $510.7 million scientific research program for the USGS and directed that most of this funding be used for critical minerals research. As part of the IIJA-funded critical minerals research program, the USGS is studying the potential for critical minerals in mine waste. Interestingly, the photograph on the USGS' website page discussing the IIJA-funded critical minerals research program features a photograph of a handsome stibnite specimen[6].

The SGP stands at the crossroads of these recent critical minerals policies. The successful development of the SGP and domestic production of the antimony that the U.S. military has identified as having unique characteristics that satisfy its demanding technical specifications will demonstrate the viability of remining historic mine wastes for critical minerals. This is another reason why the SGP is a project of national importance.

Conclusions

The Forest Service's FEIS and ROD approving the SGP are the gateways to developing the SGP. The Forest Service should strive to achieve these milestones as early as possible in 2023 so the important environmental restoration measures and antimony production can get underway.

In closing, NMEC believes the Forest Service has a duty to complete the permitting process for the SGP as quickly as possible. This duty must respond to the following obligations:

- Approving the SGP will provide the Payette and Boise National Forests with an important opportunity to restore this blighted area and improve the overall health of these National

[6] https://www.usgs.gov/special-topics/bipartisan-infrastructure-law-investments/science/bipartisan-infrastructure-law-1

Forest System lands, consistent with the Agency's core mission "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations[7];"

- Perpetua is proposing to use private-sector resources to redevelop and restore the Stibnite mine site and estimates this will cost the Company $1.1 billion. Because it is highly unlikely that the Forest Service will receive $1 billion of future funding from Congress to remediate this site, the Forest Service needs to capitalize on Perpetua's unique proposal to invest the resources necessary to make significant improvements in the environmental and ecological conditions at the Stibnite Mine area;

- The Forest Service must not delay or obstruct the SGP from becoming an important part of the economy in central Idaho where it will create thousands of jobs for the life of the mine, bring economic prosperity and diversification to this area, and pay local, state, and federal taxes;

- The Stibnite gold-antimony deposit is geologically unusual because unlike most gold-antimony deposits, it has sufficient antimony grade and size to make recovering the antimony as a byproduct of the gold processing operation economically viable. As such, it is the only identified opportunity to have a domestic source of mined antimony in the foreseeable future; and

- The Forest Service must respond to the U.S. military's urgent need for the antimony from the SGP, which is the only known source of antimony that can satisfy the military's technical specifications for manufacturing specific weaponry.

Each of these obligations creates urgency for the Forest Service to expedite issuance of the ROD approving the SGP. In light of these obligations, NMEC urges the Forest Service to do its part to supply the military with antimony, strengthen our domestic antimony supply chain, reduce our reliance on China for this mineral, and facilitate the private-sector remediation of the environmental and ecological problems at this legacy mine site.

Thank you for this opportunity to submit these comments on the SDEIS. Please do not hesitate to contact me if you have any questions.

Sincerely yours,

David R. Shaddrick
NMEC President

[7] https://www.fs.usda.gov/about-agency/meet-forest-service