WMC
WOMEN'S MINING COALITION

January 9, 2023

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

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

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

Dear Ms. Jackson:

I. Introduction

The U.S. is fortunate that Perpetua Resources Ltd. (Perpetua) is proposing to develop the Stibnite Gold Project (SGP) in Valley County, Idaho to produce gold and the critical mineral, antimony, because this project will achieve two important missions:

1. It will clean up an area where World War II- and Korean War-vintage mine wastes are degrading water quality and preventing fish migration; and

2. It will supply the country with an urgently-needed domestic source of antimony.

The U.S. Department of Defense's (DoD's) December 19, 2022 announcement to award Perpetua up to $24.8 million in a Title III Defense Production Act grant describes the SGP as having "the sole domestic geologic reserve of antimony that can meet Department of Defense (DoD) requirements."[1] DoD knows the antimony at the SGP is suitable for military applications because the federal government "produced antimony trisulfide for the U.S. ammunition industrial base during World War II and the Korean War[2]" from the Stibnite Mine. This emergency wartime mining effort created the mine wastes that are currently leaching arsenic, antimony, and other contaminants into the Stibnite mine area watershed and obstructing fish migration corridors.

In light of the national importance of the SGP, the Women's Mining Coalition (WMC) is submitting these comments on the Supplemental Draft Environmental Impact Statement (SDEIS) for the SGP that the Payette and Boise National Forests (Forest Service) published in October 2022. WMC is quite familiar with the SGP based on our detailed review of the Forest Service's

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

August 2020 Draft Environmental Impact Statement (DEIS). Our comments on the SDEIS augment our October 2020 comments on the DEIS.

Both our October 2020 comments and this letter express WMC's strong support for the SGP because this project will remediate a legacy mine site that has been degrading water quality and impeding fish migration for over 80 years. Additionally, as is evident from the DoD's recent announcement, the SGP is important to our Nation because it will become our only domestic antimony mine. The SGP will also generate many socioeconomic benefits for the communities near the mine and for the State of Idaho.

The SGP is a unique opportunity for Idaho and the country to benefit from Perpetua's proposal to use private-sector resources to redevelop the Stibnite Mine and restore the environment at this World War II-vintage mine. As discussed in detail in these comments, the many environmental restoration and economic benefits associated with the SGP, coupled with the country's urgent need for this domestic antimony deposit, dictate that the Forest Service should approve this project as soon as possible. WMC cannot imagine any circumstance in which delaying approvals for this project to redevelop and remediate the Stibnite Mine and produce antimony would make any sense for the environment, the State of Idaho, and the country at large.

About WMC

WMC is a grassroots organization with over 200 members nationwide. Our mission is to advocate for today's modern domestic mining industry, which is essential to our Nation. WMC members work in all sectors of the mining industry including hardrock and industrial minerals, coal, energy generation, manufacturing, transportation, and service industries. We convene Washington, D.C. Fly-Ins to give our members an opportunity to meet with members of Congress and their staff, and with federal land management and regulatory agencies to discuss issues of importance to both the hardrock and coal mining sectors.

WMC members have extensive experience with the National Environmental Policy Act (NEPA), the U.S. Mining Law, and the Forest Service's 36 CFR Part 228 Subpart A surface management regulations governing locatable minerals and mining activities pursuant to the U.S. Mining Law. We have provided comments on numerous NEPA documents for proposed locatable mineral projects on public lands administered by the U.S. Bureau of Land Management (BLM) and on National Forest System lands administered by the Forest Service. Some WMC members also have expertise in preparing third-party NEPA documents. Lastly, our Advisory Council is made up of industry experts from all facets of the mining industry. Based on this experience, WMC is well qualified to review the SDEIS and to provide these comments.

II. The U.S. Urgently Needs the Antimony that will be Mined at the SGP

Based on the DoD's December 19, 2022 announcement, it is clear the U.S. military urgently needs the antimony contained in the Stibnite gold-antimony deposit. The DoD awarded a $24.8 million Title III Defense Production (DPA) grant to Perpetua to help the Company "complete environmental and engineering studies necessary to obtain a Final Environmental Impact Statement, a Final Record of Decision, and other ancillary permits." The following statements from DoD's December 19, 2022 press release underscore the importance of the SGP to the Nation:

> "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."

As the Nation's "sole domestic geologic reserve of antimony that can meet Department of Defense (DoD) requirements," there can be no doubt that obtaining antimony from the SGP is essential for our national defense and security.

Our October 2020 comments on the DEIS described WMC's longstanding concerns about the Nation's reliance on foreign countries for many critical minerals, including antimony. We noted that the U.S. Geological Survey's 2020 Minerals Commodity Summaries[3] showed that the U.S. imported 84 percent of the antimony the country used in 2019. Over one-half of this antimony was imported from China. Today, the country's import reliance on China for antimony remains the same. We continue to import 84 percent of the antimony we need, with much of it coming from China[4]. DoD's Title III DPA award in support of the SGP suggests that DoD considers this substantial import reliance to be an untenable situation for the U.S military and a significant threat to national security.

In addition to its critical military applications, antimony from the SGP will be used in utility-scale storage batteries. In August 2021, Perpetua announced that it had entered into an agreement to supply a portion of antimony production from the SGP to Ambri Inc. ("Ambri"). Ambri is a U.S. company that has developed an antimony-based, low-cost liquid metal battery for the stationary, long-duration, daily cycling energy storage market. The antimony-based Ambri battery combines technological innovation with commercial applications for low-cost, long lifespan and safe energy storage systems that will increase the overall contribution from renewable sources to help enable

[3] https://pubs.er.usgs.gov/publication/mcs2020
[4] https://pubs.er.usgs.gov/publication/mcs2022

the transition to green, carbon-free power grids[5]. The clean energy use of antimony is another compelling reason why the SGP is so important to the Nation.

III. The Clarity and Consistency of the Impact Analysis Can be Improved in the Final EIS

Although your October 21, 2022 Dear Reader Letter announcing the availability of the SDEIS accurately characterizes Perpetua's Modified Mine Plan (MMP) as "reducing surface disturbance and anticipated environmental impacts," the SDEIS does not clearly or consistently describe these environmental improvements. The data presented in the SDEIS (especially in the figures and tables) clearly show the project will substantially improve water quality in the project area and downstream from the project and restore miles of stream and fish habitat. The Forest Service needs to improve the consistency and clarity of the text of the Final EIS, which can be readily accomplished by editing the document to ensure consistency and to make more use of the figures and tables that illustrate and quantify the water quality improvements and the stream segments that will be restored.

A. The Executive Summary Lacks Clarity and Consistency

The Executive Summary needs to present a more balanced discussion of impacts. As written, it does not clearly describe the environmental benefits associated with the proposed restoration activities in the MMP. Instead, the Executive Summary emphasizes adverse impacts rather than giving equal weight to the water quality improvements and habitat restoration that would result from the MMP. The Environmental Consequences chapter of the SDEIS contains abundant and detailed analyses and data that clearly show water quality and fish habitat/stream restoration improvements. However, these beneficial impacts are not clearly or consistently discussed in the Executive Summary.

The Executive Summary also omits two significant environmental restoration measures integral to the MMP:

1. Constructing Stibnite Lake in the backfilled Yellow Pine Pit to mitigate the loss of the Yellow Pine pit lake fish habitat area and to minimize fluctuations in stream temperatures; and

2. The reclamation activities that will eliminate the significant sedimentation problem at Blowout Creek.

It is inappropriate to exclude these beneficial impacts from the Executive Summary. The Executive Summary should explain that Perpetua added Stibnite Lake to the MMP to respond to public

[5] https://www.investors.perpetuaresources.com/investors/news/2021/perpetua-announces-antimony-supply-agreement-for-ambri-battery-production

comments received on the DEIS about temperature fluctuations in this segment of the East Fork of the South Fork of the Salmon River (East Fork) and the need to replicate the lake habitat that currently exists in the Yellow Pine Pit.

WMC notes that words that would typically be used to describe beneficial impacts are used sparingly or are completely absent from the Executive Summary. For example, the word "positive" is used only once in the Executive Summary to describe public health and safety benefits (see Page ES-26.) The word "positive" is not used to describe the documented water quality improvements or the restoration of stream and fish habitat.

The word "improve" is used on Page ES-15/16 to describe water quality impacts. However, it is used in a confusing way stating:

> The MMP would improve some of the existing water quality conditions observed in Meadow Creek and the East Fork SFSR by removing and repurposing legacy mine wastes. However, the 2021 MMP would have direct permanent impacts on water quality, as it would contribute new sources of mine waste material to the East Fork SFSR drainage6.

This is the only acknowledgement in the Executive Summary that the MMP will improve water quality. But the second sentence shown above casts doubt on the improvements by suggesting that the new mine wastes would create direct and permanent water quality impacts without discussing the numerous project design features to prevent, limit, or mitigate impacts from the project development rock and tailings.

The Surface Water and Groundwater Quality section in the Executive Summary fails to clearly explain that the Site-Wide Water Chemistry (SWWC) predictive modeling results for the downgradient prediction node at YP-SR-2 clearly show water quality improvements during and after mining. The data presented in Figures 4.9-21 and 4.9-25 make it easy for the public to understand the beneficial water quality impacts because these figures clearly document that the MMP will improve water quality at YP-SR-2. The Executive Summary in the Final EIS needs to clearly state that the SGP will achieve significant reductions in arsenic levels (40 percent) and antimony levels (58 percent) as predicted at YP-SR-2, compared to baseline conditions. The Executive Summary should either reference Figures 4.9-21 and 4.9-25 or include these figures.

Another shortcoming of the Executive Summary is that it omits an overview of the substantial socioeconomic benefits from the SGP despite the fact that Section 4.21 of the SDEIS discusses these benefits in detail. Page ES-29 mentions increased tax revenue benefits, but the following page suggests there might not be net tax revenue benefits. Section 4.21 of the SDEIS presents quantitative information about the numerous socioeconomic benefits that should be summarized

[6] This paragraph also appears on Page 4-317 of the SDEIS.

in the Executive Summary to provide a complete synopsis of the socioeconomic benefits including but not limited to:

- $29.3 million in local income;
- $71.6 million in statewide income;
- $133 million in annual expenditures for goods and services in Idaho;
- 1,820 direct and indirect jobs during construction;
- 1,150 direct and indirect jobs during the 15-year operating period; and
- 190 jobs during closure and reclamation.

The Executive Summary's discussion of the potential for "boom and bust" impacts following mine closure completely ignores the opportunities the local communities will have to diversify their economies while the mine is operating. Invoking a "boom and bust" scenario based on the history of old mining camps is looking in the rearview mirror at an outdated concept that is not relevant to modern U.S. mining projects where mine operators work closely with community stakeholders and local governments to develop programs that will maximize a mine's long-term benefits to communities.

To significantly eliminate the potential for an economic downturn after the mine is closed, Perpetua established the Stibnite Foundation[7] with eight local communities. This foundation is a visionary profit-sharing contractual agreement that provides the participating communities with annual payments of a minimum of $500,000 or one percent of the mining operation's total comprehensive income less debt repayments. When reclamation starts, Perpetua will make a final contribution of $1 million to the Foundation. Prior to production, during the permitting and mine construction phases, Perpetua is making incremental donations and has already contributed $300,000 and given 150,000 shares of the Company's stock to the Foundation.

Neither the Executive Summary nor Section 4.21 of the SDEIS discuss the Stibnite Foundation and the community benefits that will be derived from this foundation. Because the Foundation is an important component of the socioeconomic benefits from the SGP, the Final EIS and Executive Summary should discuss the Stibnite Foundation so the communities in Valley and Adams Counties and other Idahoans can thoroughly understand the socioeconomic impacts and benefits that would result from the SGP. Similarly, both the Executive Summary and Section 4.21 of the Both the tax revenues from the SGP and contributions from the Stibnite Foundation will minimize the potential for boom and bust impacts. Therefore, the Final EIS should describe how local communities could use tax revenues and Perpetua's contributions to the Stibnite Foundation to make long-term investments to provide sustainable benefits long after mining is completed.

The Final EIS needs to use the data in the SDEIS and the Specialist Reports in order to be more transparent about the impacts and benefits associated with the SGP. Both the Executive Summary

[7] http://stibnitefoundation.com/

and the Final EIS should present a more balanced discussion of both the positive and the negative impacts. As currently written, the Executive Summary presents a partial and incomplete snapshot of the project that inappropriately minimizes the project benefits. WMC has the impression from reading the Executive Summary that the Forest Service has purposefully downplayed and under-emphasized the environmental benefits (especially the water quality improvements) that will result from the remediation activities integral to the MMP. The Final EIS should highlight these benefits and discuss them in the context of improving the environmental and ecological conditions in the Payette and Boise National Forests.

WMC understands that the Forest Service must remain impartial. However, NEPA requires agencies to disclose and give equal treatment to both the positive and negative impacts associated with a proposed action. The SDEIS and the Specialist Reports that augment the information in the SDEIS fully document beneficial impacts as well as the unavoidable or residual adverse impacts that would result from the MMP. The Final EIS needs to discuss this information in a more even-handed manner that does not inappropriately dwell on the adverse impacts while overlooking the beneficial impacts. Because no new information or different analyses are needed to disclose the full range of impacts associated with the SGP, this information can be synthesized and clarified in the Executive Summary in the Final EIS. This synthesis is mainly an editing task to ensure the Final EIS presents a more accurate and complete discussion of project impacts that is easier for the public to understand.

A reader-friendly easy way to improve the Executive Summary in the Final EIS would be to add a table that briefly lists the beneficial and adverse environmental, economic, and social impacts that would result from development of the MMP and the mitigation measures that would eliminate or reduce adverse impacts. This table would facilitate the public's understanding of how the MMP will affect the environment, local communities, and other stakeholders. Rather than having to read the entire Final EIS, the public could use this table to obtain a quick overview of the project impacts.

B. Section 4.9 Could be Improved by Editing for Consistency

A careful reading of Section 4.9 of the SDEIS reveals that the MMP will result in significant environmental improvements to sitewide water quality. However, it is not easy to arrive at this understanding because certain paragraphs in this section obscure this result by making statements that are inconsistent with the data in the document. Out-of-context localized or partial assessments that omit a bigger-picture evaluation and misstatements of facts that are correctly presented elsewhere in the document are other sources of confusion in this section.

The SDEIS and the Forest Service's August 2022 Water Quality Specialist Report include lengthy discussions of the results of the new SWWC predictive model. As explained in the Specialist Report, the SWWC model integrates the following water sources in the project area: surface water, effluent from the water treatment plant, groundwater (including the projected groundwater quality

beneath and downgradient from the tailings and waste rock disposal facilities), the backfilled Yellow Pine and Hanger Flats pits, and the West End pit lake. Figure 4.9-21 in the SDEIS, "Locations for Surface Water Chemistry Predictions Stibnite Gold Project, Stibnite, ID," clearly shows the SWWC predictive model results predict the MMP will significantly reduce the concentration of arsenic and antimony in streams in the project area compared to the existing baseline levels of these metals. This figure also shows that mercury levels remain the same after mining and are well below the regulatory standard.

Despite the fact that Figure 4.9-21 presents a very useful and easy-to-understand synthesis of the SWWC predictive modeling results, the SDEIS glosses over this important finding and fails to properly acknowledge this significant environmental benefit in a way that makes it easy for the public to understand that water quality improvements will be one of the main environmental accomplishments that would result from the MMP. This finding should be highlighted in the Final EIS as one of the most important indicia of environmental improvement that will result from the SGP.

The SDEIS creates confusion when it repeatedly states that the post-operational water quality will exceed water quality standards, because this statement creates the impression that meeting water quality standards should be the metric used to assess the project impacts and benefits. Comparing the post-operational water quality to surface water quality regulatory standards in a watershed that is designated as impaired under Section 303(d) of the Clean Water Act is meaningless and ignores the water quality improvements that the project will create. Although it is appropriate for the SDEIS to disclose that the predictive model shows that post-operational water quality will not meet regulatory standards, it is inappropriate to imply this finding represents a project shortcoming, with the implication that the MMP will not do enough to improve water quality.

As clearly shown in Figure 4.9-21, the post-operational water quality will not exceed the mercury water quality standards. Figure 4.9-21 documents that the MMP will not change the post-operational mercury levels in area streams, all of which are below the 12 nanogram per liter (ng/l) regulatory standard. Thus, the several statements in the text that the project will exceed water quality standards are not correct for mercury.

The Final EIS should clarify that the water quality modeling results that are presented in Figure 4.9-21 show that post-operational water quality will be significantly better than baseline conditions due to substantial reductions in arsenic and antimony levels. The Final EIS should eliminate the inconsistencies in the water quality discussion in the SDEIS. For example, the discussion on Page 4-251 of the SDEIS creates confusion by misrepresenting the modeling results at YP-SR-2:

> "Downstream of the project on the East Fork SFSR at node YP-SR-2 (below the confluence with Sugar Creek), predicted surface water chemistry *is largely unchanged from existing conditions* with some variability in predicted antimony, arsenic, and mercury concentrations during the operating and initial closure period (**Table 4.9-21** and **Figure 4.9-25**)." (italics added for emphasis, bold in the original.)

This discussion contradicts and is inconsistent with the data shown in Figure 4.9-21. (It also conflicts with the data shown in Figure 4.9-25 for the downstream monitoring point, YP-SR-2.) Both Figures 4.9-21 and 4.9-25 clearly show that there will be significant improvements in water quality at YP-SR-2 where the post-operational water quality is predicted to reduce antimony concentrations by 40 percent and antimony concentrations by 58 percent, compared to baseline conditions. It is completely incorrect to ignore these meaningful water quality improvements and misleading at best to state that water quality is "*largely unchanged from existing conditions.*"

Other sections of the SDEIS do a much better job of discussing the water quality improvements resulting from the MMP. For example, contrast the above-cited discussion on Page 4-251 with the discussion shown below on Page 4-522:

> "Under the SGP operations and closure, water quality of surface flow departing from the Operations Area Boundary would be the same or better than existing baseline conditions; therefore, there would not be impacts to the quality of downstream waterways..."

These dramatically different statements create confusion, which needs to be eliminated in the Final EIS by conducting a through editing of the document for consistency to ensure that it clearly and consistently discusses the data and modeling results that are presented in the SDEIS and the Water Quality Specialists Report. A more consistent discussion of the SWWC-predicted water quality benefits accruing to the project in the Final EIS will improve the public's understanding of the water quality benefits that would result from the MMP.

Another source of confusion are the lengthy and detailed discussions of groundwater quality in the SDEIS, which are misleading because they read as if they are final conclusions rather than the results of the groundwater quality component of the SWWC model. As clearly stated in both the SDEIS and the Water Quality Specialist Report, the ATSDR Public Health Assessment conducted for the existing mine site eliminated the groundwater as a drinking water pathway from consideration as a public health concern.

Discussing the results of the groundwater quality modeling as if these results show there will be an adverse impact blurs the distinction between environmental impacts and model inputs. The Final EIS should clarify that the groundwater modeling results are a model input and do not

represent an impact to a human receptor because the area groundwater is not a source of drinking water. The Final EIS should also explain that because the area surface waters are the ecological receptors for groundwater, the SWWC model appropriately incorporates the groundwater quality modeling results.

The SDEIS devotes numerous pages to discussing the predictive modeling results of operational and post-operational water quality at the model prediction nodes shown in Figure 4.9-21. Figures 4.9-22 through 4.9-25 present useful graphs showing the predictive modeling results at four of these nodes. Figure 4.9-21 clearly illustrates the benefits at the downstream node (YP-SR-2) in map view; Figure 4.9-25 is a graphical representation of the same benefits. The lengthy narrative could be shortened and improved by making greater use of Figures 4.9-21 through 4.9-25.

Figures 4.9-22 through 4.9-25 are easy to understand and present data that clearly documents the water quality benefits associated with the MMP. Both the Executive Summary and Section 4.9 would be greatly improved by adding a narrative summary that succinctly synthesizes the modeling results shown in these figures. The Final EIS should include a summary that helps the reader understand these results and that emphasizes that the downstream prediction node (YP-SR-2) is the best place at which to measure the overall water quality benefits from the MMP.

By making better use of Figures 4.9-21 and 4.9-25 and editing for internal consistency, Section 4.9 of the Final EIS can more clearly discuss the post-operational water quality benefits that would result from the MMP. The Final EIS should highlight these benefits with the objective of making it easier for the public to understand that the MMP will improve water quality. The discussion on Page 4-552 of the SDEIS, which states that water quality would be "the same or better than existing baseline conditions," is an example of a factually correct and clear statement that should be replicated in the Final EIS.

IV. Other Environmental Benefits and Environmental Protection Measures Associated with the SGP

A. Stream and Fish Habitat Restoration Benefits

In addition to improving water quality in the watershed, the SGP includes substantial stream restoration measures that would greatly improve fish habitat. The most notable improvement would be reconnecting the portion of the East Fork that currently dead ends in the Yellow Pine Pit. For over 80 years, fish have been unable to migrate along this segment of the East Fork due to the cascade into the pit that completely precludes fish migration.

The SGP will remedy this situation by constructing a fish passage tunnelway around the pit while it is being mined. This fish passage tunnelway is designed with features that are in common use and have proven to effectively enable two-directional fish migration. Once construction of the fish

passageway tunnel is completed, volitional fish passage will be possible for the first time in over four decades.

Starting in Mine Year 11, when the mined-out Yellow Pine Pit is backfilled, the East Fork stream channel will be restored as a meandering stream traversing the backfilled pit. To provide additional fish habitat enhancement, Stibnite Lake will be created to become the functional replacement of the lake habitat for fish that currently exists in the Yellow Pine Pit. Stibnite Lake will also help minimize fluctuations in stream temperatures, which was one of the concerns voiced in the public comments on the DEIS. The combined habitat restoration and improvement measures to construct the fish passageway tunnel to accommodate fish migration during mining of the Yellow Pine Pit, the restoration of the East Fork stream channel through the backfilled pit, and the addition of Stibnite Lake demonstrate Perpetua's environmental stewardship commitment and how the Company has gone the extra mile to restore and enhance the environment at the SGP.

WMC suggests that the discussion of the fish passageway tunnel needs to be clarified in the Final EIS. The SDEIS uses inconsistent terminology to discuss this tunnel which could confuse some readers. This feature is called a tunnel without mentioning that it will be built as a fish passageway throughout most of the SDEIS. For example, in Chapter 4, the first description of the tunnel as a "fishway" does not occur until Page 4-334. Problematically, much of Chapter 4 suggests the tunnel may create adverse impacts to fish. The fact this tunnel will provide immediate access for chinook salmon, bull trout, and steelhead to roughly 29 miles of stream habitat that have been blocked for over 80 years by the Yellow Pine Pit is not consistently discussed throughout the section on fish resources and fish habitat (e.g., Section 4.12.) Consequently, some readers may not understand that the "tunnel" (without qualification) and the "fishway" are the same structure. The Final EIS should more consistently and clearly describe the tunnel around the Yellow Pine Pit as a fish passageway.

The Final EIS should make more use of and highlight Figure 4.12-1 to clearly show the stream restoration accomplishments in numerous segments of the East Fork, Meadow Creek, and the East Fork of Meadow Creek. Although Section 4.12 presents a great deal of information, the discussion is not optimally organized. It needs to include a summary that describes the many stream restoration benefits shown in Figure 4.12-1. This shortcoming can be readily addressed in the Final EIS using the data presented in the SDEIS.

Finally, the SDEIS should give Perpetua proper credit for adding Stibnite Lake to the MMP in response to public comments on the Draft EIS that raised concerns about the loss of the lake habitat with the removal of the Yellow Pine Pit Lake during mining. The Company should be commended for modifying the SGP and adding Stibnite Lake to the MMP. This modification to Perpetua's project proposal is an excellent example of how the NEPA process can improve and refine a proposed project.

B. Voluntary Environmental Design Features

Table 2.4-13 of the SDEIS entitled "Proponent Proposed Design Features" lists the numerous voluntary measures called "Environmental Design Features (EDFs)" that Perpetua has committed to implementing to provide an extra level of environmental protection and stewardship. The EDFs go beyond the extensive federal and Idaho State regulatory requirements that are listed in Table 2.4-12. The voluntary EDFs are intended to further avoid impacts or minimize them as much as possible. As described in Section 2.4-9, "the EDF's may have the effect of reducing and/or eliminating potential environmental impacts of the SGP." Perpetua has committed to so many EDFs that Table 2.4-13 is 11 pages long.

Perpetua's EDFs augment and enhance the comprehensive and effective Forest Service and state regulatory requirements, best management practices, and likely permit conditions listed in Table 2.4-12. These regulatory requirements plus Perpetua's voluntary EDFs, will ensure a high level of environmental protection at the SGP. It is clear from Tables 2.4-12 and 2.4-13 that the Forest Service, the Idaho State regulatory agencies, and Perpetua have worked constructively together to develop an environmentally sound project that will minimize adverse environmental impacts, achieve numerous environmental and socioeconomic benefits, and supply the U.S. with a critically important domestic source of antimony.

C. Socioeconomic Benefits

Many WMC members have first-hand experience with the types of socioeconomic impacts and benefits associated with a multi-year, large mining project like the SGP. Based on our review of Section 4.21 on Social and Economic Conditions in the SDEIS, it is clear that the SGP will create high-paying jobs and generate local and state tax revenues that will benefit Valley and Adams Counties and the State of Idaho for at least 20 years.

Section 4.21 presents the results from the IMPLAN economic modeling software, which is a well-known socioeconomic impact assessment methodology that is widely used to evaluate how proposed projects will affect nearby communities. For example, EIS documents prepared by the U.S. Bureau of Land Management (BLM) have used IMPLAN for the socioeconomic analyses for several Nevada gold mines[8]. Based on the widespread use of IMPLAN to evaluate the socioeconomic impacts of gold mines on rural communities in Nevada and the presentation of the IMPLAN modeling results in EIS documents for these other proposed mining projects, WMC has

[8] See for example: BLM's Long Canyon Mine Plan at https://eplanning.blm.gov/eplanning-ui/project/39007/510; BLM's Goldrush Mine Project Draft EIS at https://eplanning.blm.gov/eplanning-ui/project/2012544/510; and BLM's Draft EIS for the Gibellini Vanadium Mine at: https://eplanning.blm.gov/public_projects/2000633/200380099/20064333/250070515/Gibellini_Vanadium_Project_DEIS_July_2022_508.pdf

confidence that the results of the IMPLAN modeling effort for the SGP are a data-driven reasonable prediction of the likely socioeconomic impacts and benefits associated with the SGP.

As explained in Section 4.21.2.2 of the SDEIS, "IMPLAN was used to estimate regional or local economic impacts and the data used are compliant with the Data Quality Act (Section 515 of Public Law 106-554)." Given that the data used in Section 4.21 and the use of that data in the IMPLAN analysis comply with the Data Quality Act, the socioeconomic impact analysis presented in Section 4.21 of the SDEIS clearly complies with the NEPA requirement to take a hard look at socioeconomic impacts.

'WMC is aware that a third-party report prepared by the Idaho Headwaters Economic Study Group (Headwaters) entitled "An Evaluation of the Potential Socio-Economic Impacts of the Proposed Stibnite Mine on Valley County, Idaho" speculates that Perpetua will not obtain goods and services locally and consequently questions the IMPLAN modeling results for the SGP. This speculation is nothing more than an unfounded prediction designed to foment local concerns about and opposition to the SGP. This conjectural forecast completely ignores Perpetua's track record of constructively working with local communities to ensure they will benefit from the SGP.

Headwaters' skepticism inappropriately fails to consider Perpetua's corporate values, the Company's approach to responsible mineral production, its sustainability goals[9], and its actions to implement these goals by creating the Stibnite Foundation[10]. The Foundation is emblematic of SGP's commitment to benefit area communities. As discussed in Section III of these comments, this foundation is a far-sighted, generous, and voluntary agreement that guarantees the communities will benefit from the SGP. The Forest Service and the public should disregard the Headwaters report because it conjures up a hypothetical scenario that is incongruent with Perpetua's actions and the Company's commitments to the communities.

V. The MMP is the Gateway to Achieving Comprehensive Cleanup of the Stibnite Mine

Although the MMP will significantly improve the environment in the Stibnite Mine area, some problematic legacy mine features will continue to leach metals into area streams after mining is completed because they are located outside of the MMP project area. As described in Section 1.3 of the SDEIS, Perpetua, the Forest Service and the U.S. Environmental Protection Agency (EPA) entered into an Administrative Settlement and Order on Consent (ASAOC) in January 2021 that is designed to remediate the legacy features outside of the MMP project boundary. The ASAOC is a phased restoration agreement. Phase 1 is underway. Phases 2 and 3 outline conceptual site restoration measures that Perpetua may be able to pursue in the future if and when Perpetua is producing gold and antimony from the Stibnite Mine.

[9] As documented in Perpetua's 2021 Sustainability Report, the Company's sustainability goals are: safety, environmental responsibility, community involvement, transparency, accountability, and integrity and performance. See https://perpetuaresources.com/wp-content/uploads/Perpetua-Resources-2021-Sustainability-Report.pdf

[10] *Op cit.,* http://stibnitefoundation.com/

Recognizing the compelling need to address several of the features outside of the MMP boundary, Phase I of the ASAOC started in July 2022 and allows Perpetua to voluntarily eliminate or reduce contaminant sources as quickly as possible in areas identified as being time-critical. The Forest Service and the EPA are directing and supervising the ASAOC Phase I remediation activities, which will cost Perpetua $12 million to complete. Under the terms of Phase I, Perpetua was required to provide the agencies with a $7.5 million performance bond.

As described in Section 1.3 of the SDEIS, the ASAOC Phase I actions are anticipated to be completed by 2025 and are intended to immediately improve water quality. The Phase I activities include constructing stream diversion ditches to divert water away from legacy mine wastes that are contaminating area streams, removing approximately 325,000 tons of legacy development rock and tailings from locations in Meadow Creek and the East Fork that are currently adversely impacting water quality, and conducting baseline studies at five historic mine adits that are discharging mine drainage.

Phases 2 and 3 of the ASAOC give Perpetua the option to remediate additional legacy mine features located outside the MMP project boundary. However, these phases are contingent upon the SGP receiving project permits and will require additional baseline data and engineering studies. Because there is insufficient information at this time to analyze the environmental impacts associated with Phases 2 and 3, they are not included in this NEPA document as reasonably foreseeable future actions.

Collectively, the MMP and Phases 1, 2, and 3 of the ASAOC would achieve a comprehensive, site-wide restoration and cleanup of the Stibnite Mine site. As such, the combination of these four activities represents "the gold standard" for addressing the legacy environmental problems at Stibnite. All parties should do everything possible to facilitate the performance of all four phases. The potential future pursuit of Phases 2 and 3 of the ASAOC represents an extremely important opportunity to achieve a permanent, site-wide environmental solution at this historic mining district. However, this future is unachievable without the MMP, which is the foundation for restoring the site and is also the economic driver that would enable the Phase 2 and 3 environmental restoration measures.

The substantial but incomplete restoration of the Stibnite Mine site that will be achieved by implementing the MMP illustrates the complexities at some legacy sites where only a portion of the site may be economically feasible to restore through redevelopment. The substantial but partial cleanup under the MMP is an excellent case study of how a partial cleanup can be a worthwhile goal. It is also useful in the bigger policy dialogue about remediating abandoned mines. For more than two decades, constructive dialogue about cleaning up abandoned mines has been complicated and even thwarted by demands for unrealistic cleanup requirements that have substantially chilled both the private and the public sectors' abilities to get involved with legacy sites.

Perpetua's MMP illustrates the substantial environmental improvements that can result from a partial cleanup and stands for the concept that "pursuit of the perfect must not be the enemy of the good." The MMP initiates a path to a site-wide, comprehensive cleanup that will be achieved through incremental steps (e.g., Phase I of the ASAOC, the MMP, and the future potential Phases 2 and 3 of the ASAOC.) As such, the phased cleanup model at the Stibnite Mine could potentially be a template for other legacy mine sites.

Section 4.21.2.2 of the SDEIS states that Perpetua is proposing to invest $1.1 billion to construct the SGP. With no other company, federal or state agency, community, or conservation group offering to make a similar investment, it should be obvious to all stakeholders that without Perpetua's MMP, the Stibnite mine site will not be cleaned up. Therefore, the MMP and the contingent and optional ASAOC Phases 2 and 3 future remediation activities are a unique opportunity to clean up the Stibnite mine site.

To capitalize upon this opportunity, the Forest Service, the U.S. Army Corps of Engineers, and the Idaho state regulatory agencies need to approve the MMP as quickly as possible so the MMP remediation can get underway and hopefully enable (i.e. help pay for) the future expanded remediation envisioned under Phases 2 and 3 of the ASAOC. All stakeholders should support this well-conceived long-range plan to pursue comprehensive cleanup of this legacy mine site.

VI. The Rosemont Case is a Narrow Opinion that Only Fits the Site-Specific Facts at the Proposed Rosemont Copper Project

Judging from recently published opinion pieces and comments on the 2020 Draft EIS, certain project opponents are asserting that the 2019 Arizona Federal District Court's decision in *Center for Biological Diversity et. al. v. U.S Fish and Wildlife Service et. al.* (the "*Rosemont"* case)[11] should be applied to the SGP. Their assertions are without merit because the ruling in *Rosemont* was decided based on the site-specific geological and land configuration facts at Rosemont. This decision cannot be extrapolated to other mineral deposits and proposed mining operations where the geologic conditions are not analogous to Rosemont.

In *Rosemont,* the record before the District Court unequivocally documented that the lands proposed for the Rosemont Project's waste rock and tailings storage facilities were not mineralized and that mining claims had been located on these lands. Based on these specific facts, the District Court ruled that these mining claims were invalid.

However, this decision cannot be simplistically exported to other mineral deposits and proposed mining projects where the site-specific facts are different. Because each mineral deposit is geologically unique, the correct mining claim and/or mill site configuration must be similarly site

[11] D.C. Nos. 4:17-cv-00475-JAS, 4:17-cv-00576-JAS, and 4:18-cv-00189-JAS

specific to accommodate the geologic facts. Because the on-the-ground situation at Rosemont is unique to Rosemont, the District Court's ruling is not a blueprint for any other proposed mining project. Consequently, the District Court's *Rosemont* opinion is not applicable to the SGP or to any other proposed mine because no two mines or mineral deposits are identical.

The Ninth Circuit Court of Appeals[12] ruling in *Rosemont* discusses the difference between mining claims and mill sites stating: "The Mining Law allows mining companies to occupy federal land on which valuable minerals have been found, as well as non-mineral federal land for mill sites..." Mill sites can be used for development rock and tailings storage facilities and other ancillary uses needed to support a mining operation. Figure 3.9-3 in the SDEIS "Stibnite Mining District Geology," clearly illustrates where mineralized zones are located at the Stibnite Mine. Perpetua is proposing to locate the tailings impoundment and associated embankment/buttress on lands in the Meadow Creek drainage that are not mineralized. Mill sites could be located on these non-mineral lands pursuant to Section 42 of the Mining Law.

As discussed in Sections 1.10.3.1 and 1.10.3.2 of the SDEIS, the Forest Service eliminated two alternatives from detailed analysis that pertain to the applicability of the Mining Law and the Forest Services' 36 CFR Subpart 228A surface management regulations for locatable minerals[13]. These alternatives were likely suggested by project opponents who are seeking to force fit the *Rosemont* decision to the SGP. As explained above, the *Rosemont* case is a one-off judicial ruling that is confined to the site-specific geological facts at the Rosemont Project. Therefore, it is not applicable to the Stibnite mineral deposit – or to any other mineral deposit. The Forest Service has thus correctly decided to not evaluate these alternatives in detail in the SDEIS. The Final EIS should similarly dismiss these alternatives from further consideration.

VII. Conclusions

Approving the SGP is the only logical decision because this important project will accomplish three significant objectives:

1. It will substantially cleanup a historically mined area where unregulated wartime mining is seriously degrading the environment;

2. The U.S. military urgently needs the antimony that will be mined at the SGP because it is "the sole domestic geologic reserve of antimony that can meet Department of Defense (DoD) requirements;"[14] and

[12] Case No. 10-17585, Page 45.
[13] Section 1.10.3.1, "Changes to the Mining Law" and 1.10.3.2 "36 CFR Part 251 Land Uses"
[14] https://www.defense.gov/News/Releases/Release/Article/3249350/dod-issues-248m-critical-minerals-award-to-perpetua-resources/

3. The antimony from the SGP will be used in antimony-based, utility-scale storage batteries that will help facilitate the transition to carbon-free renewable energy power generation[15].

WMC urges the Forest Service to complete the NEPA process as quickly as possible in 2023 so the site cleanup activities can begin and to address the Nation's urgent need for the antimony at the SGP. There are no valid reasons to delay or deny approval of this nationally significant project.

The Forest Service is in the ideal position to develop the Final EIS and Record of Decision for the SGP because the agency has conducted an exceptionally thorough NEPA analysis for this project. By preparing the August 2020 DEIS and the October 2022 SDEIS, the Forest Service (and the U.S. Army Corps of Engineers) have satisfied all NEPA requirements to take a hard look at all reasonable project alternatives and their potential environmental impacts, and to incorporate public comments in both documents. Additionally, the public has had more than ample time (75 days for each document, adding up to a cumulative five month-long public comment period) to submit comments on the DEIS and the SDEIS. This far exceeds the 45-day comment period required for a draft EIS document per CEQ's NEPA regulations at 40 CFR § 40 CFR § 1506.11(d). There is no justification for extending the public review period for the 2022 SDEIS beyond the January 10, 2023 comment submittal deadline.

WMC appreciates that the Forest Service identified an Agency Preferred Alternative in the SDEIS, the Burntlog Route, and urges the Forest Service to retain this as the Agency Preferred Alternative in the Final EIS. Based on the environmental, public safety, and practical reasons why the Burntlog Route is superior to the Johnson Creek Route discussed in Section 2.7 of the SDEIS, it is obvious the Burntlog Route is the right choice.

In the November 8, 2021 letter to Idaho Congressmen Mike Simpson and Russ Fulcher (see Attachment 1), Mary Farnsworth, the Forest Service Intermountain Region Regional Forester, states the Forest Service spent $5.2 million on several cleanup actions at Stibnite between 1993 and 2012. The contaminated streams in the Stibnite Mine project area attest to the fact that these actions and the associated expenditure of taxpayer monies did not effectively remediate this site where substantial quantities of arsenic, antimony, and other contaminants continue to leach out of the legacy mine wastes, and legacy mine features continue to prevent fish migration.

Perpetua's MMP is the only identified option for remediating the Stibnite Mine site. There are no other entities stepping up to the plate and offering to invest $1.1 billion to redevelop and restore this site. The enormous billion dollar difference between Perpetua's proposed investment at Stibnite and the Forest Service's paltry $5.2 million investment to date is a compelling reason for the Forest Service to approve the MMP in 2023. If the Forest Service does not approve the SGP in a timely fashion, WMC is concerned that the Stibnite mine site may once again become an arsenic-

[15] *Op cit.,* https://www.investors.perpetuaresources.com/investors/news/2021/perpetua-announces-antimony-supply-agreement-for-ambri-battery-production

belching abandoned mine where the existing environmental problems will persist long into the future and remain a blight on the Payette and Boise National Forests.

Thank you for this opportunity to submit these comments on the SDEIS for this important project. Please do not hesitate to contact us if you have any questions about our comments.

Sincerely yours,

Emily Hendrickson
WMC President

Debra W. Struhsacker
WMC Co-Founder and Board Member

Attachment 1: November 8, 2021 letter from the Intermountain Region Regional Forester, Mary Farnsworth, to Idaho Congressmen Mike Simpson and Russ Fulcher

Attachment 1

November 8, 2021 Letter

From:
Intermountain Region Regional Forester, Mary Farnsworth

To:
Idaho Congressmen Mike Simpson and Russ Fulcher

USDA United States Department of Agriculture
Forest Service
Intermountain Region
324 25th Street
Ogden, UT 84401

File Code: 2160
Date: November 8, 2021

The Honorable Mike Simpson
U.S. House of Representatives
2084 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Simpson:

Thank you for your letter of October 1, 2021, cosigned by Congressman Russ Fulcher, regarding the Stibnite Gold Project. I apologize for the delayed response.

Thank you for sharing your appreciation for the Forest Service's work reviewing this project. Perpetua Resources submitted a refined Proposed Action for the Stibnite Gold project, referred to as ModPRO2, to the Forest Service in December 2020. One of Perpetua's stated reasons for updating the Proposed Action is in response to public comments on the August 2020 Draft Environmental Impact Statement (DEIS), specifically minimizing anticipated environmental impacts and reducing proposed new surface disturbance.

Perpetua submitted technical reports describing the refined Proposed Action's projected environmental effects. Some methods used in these technical reports to estimate impacts are different than those used in reports for the August 2020 DEIS. As a result, some of the predicted environmental impacts are different than those described in the August 2020 DEIS.

The Forest Service and cooperating agencies are conducting a detailed review of the ModPRO2 information. Due to the changes in the Proposed Action, alternatives, and environmental effects for some resources, the Forest Service decided to prepare a Supplemental DEIS for the Stibnite Gold project instead of proceeding with a final DEIS. Publication of the Supplemental DEIS is scheduled for spring 2022. The Forest Service estimates that the final EIS will be available in late 2022 and a record of decision in summer 2023. This project's advancement remains a priority for the Payette National Forest and the Forest Service Intermountain Region.

Regarding Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability in the Stibnite Mining District, the Forest Service has been party to the following Federal consent decrees:

- Mobil Corporation (2000)
- Oberbillig Estate (2003)
- Bradley Mining Company (2012)

The settling federal agencies received a covenant not to sue in these decrees for protection from future CERCLA claims in connection with the Stibnite Mine site.

The Spent Ore Disposal Area (SODA) referenced in your letter and in the 2000 settlement agreement with Mobil Corporation is on private land and is therefore U.S. Environmental Protection Agency (EPA) CERCLA jurisdiction. The Forest Service does not have additional information regarding the EPA's decisions on the referenced cap or how those decisions contributed to current site conditions. I recommend contacting the EPA regarding these matters.

The U.S. Department of Agriculture (USDA) received approximately $36,000 from the 2003 Oberbillig Estate settlement for the Stibnite and Cinnabarne sites. USDA's Forest Service also received approximately $160,000 from the 2012 Bradley Mining Company settlement for the Stibnite and Springfield Mine sites. All these funds were used to cover a portion of the cleanup costs incurred at Stibnite Mine. The Forest Service conducted several cleanup actions between 1992 and 2013 at a cost exceeding $5.2 million. There is currently no other settlement funding for Stibnite Mine.

Thank you again for your interest in the Stibnite Gold Project. Should you have further questions, please contact Kathryn Conant, Intermountain Regional Director of Lands and Minerals, kathryn.conant@usda.gov. A similar response is being sent to Congressman Fulcher.

Sincerely,

MARY FARNSWORTH
Regional Forester

Enclosure (1)

cc: U.S Representative Russ Fulcher

Congress of the United States
Washington, DC 20515

October 1st, 2021

Mary Farnsworth
Regional Forester
United States Forest Service
Intermountain Region
324 25th Street
Ogden, UT 84401

Dear Ms. Farnsworth:

We are writing to express our appreciation for the work and collaboration between you and your staff and Perpetua Resources in moving forward with the review of the Stibnite Gold Project.

We are impressed by its scope, the significant thought that has been put into rehabilitating the area, and the conservation measures that will take place prior to, during and at the conclusion of the project. It is imperative that the area will be left in much better environmental condition than it is today. We are very pleased that the project managers are aware of and embrace the notion that for their project to succeed, they must make conservation the highest priority while they create a path for success for this very important and critical business venture.

As you are aware, this appears to be a unique project in which conservation, business, and national security can all be advanced. The development of the project would provide the first real means to clean up a historically neglected and still contaminated site, leaving it in a much more stable, clean, and environmentally sound state going forward, in addition to improving conditions for fish. For Idahoans, this will mean significant business opportunity with economic benefits, job creation, and care for our environment. It will also provide much needed strategic and critical minerals for the security of our nation and help to decrease our reliance on foreign nations, which is of great importance to us.

Given the need for this project to move forward, we are hopeful that you and your staff will be able to maintain the timeline for completing the new Supplemental Draft Environmental Impact Statement with the apparent goal of a Record of Decision by June of 2023.

In addition, we would like to get your input on the status of apportioned CERCLA liability within the area. We have been told that the Stibnite Mining District has been subject to multiple Federal consent decrees under the Superfund law where the federal agencies involved with the site have attempted to resolve their liability for site cleanup. These included the U.S. Department of Agriculture, the Department of the Interior, the Department of Commerce, the Department of Defense, the General Services Administration, and the Environmental Protection Agency.

We have been made aware that in the 2000 Mobil Oil consent decree, the United States apparently reserved a right to enforce Mobil's financial obligation (not to exceed $1.1 million)

for the costs of building "an impermeable cap" at an area of the Stibnite Site known as the Spent Ore Disposal Area (SODA). That consent decree indicated that if Mobil were to build the cap on the SODA site, the company would receive a credit. From previous trips to the Stibnite Site, it appeared that the "impermeable cap" called for at the SODA site in the Mobil Oil consent decree was never built. We are advised that as a result, an estimated ten tons of arsenic has loaded into Stibnite's surface and groundwater since the time from when the cap was supposed to have been in place. Can you please provide information as to why the cap was not built on SODA and if the Federal government ever pursued Mobil Oil to build the impermeable cap on SODA as called for in the Mobil Oil consent decree?

Lastly, we understand that in 2012, several of the Federal agencies mentioned above once again attempted to resolve their CERCLA liability in the Bradley Mining Company consent decree. Cleanup funds from several sources were identified for many contaminated sites in that consent decree, including Stibnite. Can you please provide us with information on what, if any, funds from the 2012 Bradley consent decree may have been dedicated for any cleanup actions specific to the Stibnite Mining District?

There is no doubt that this is a very complicated and complex process that involves numerous private parties and governmental agencies who were involved in what was historically a very important government operation that resulted in consequential environmental degradation to the area. We believe your answers to the prior questions will provide significant clarification and assist all parties involved in the current regulatory process.

We want to thank you again for all your efforts on this project and look forward to your response to our inquiries above. Please feel free to contact our offices in Washington, D.C. for any reason regarding this or any other subject relating to our federal lands. We look forward to your response no later than October 22nd, 2021.

Sincerely,

Russ Fulcher
ID (01)

Mike Simpson
ID (02)