January 9, 2023

Linda Jackson, Payette Forest Supervisor

Payette National Forest

500 N Mission Street, Building 2

McCall, Idaho 83638

Re: Stibnite Gold Project – comment on the Supplemental Draft Environmental Impact Statement

Dear Ms. Jackson,

My name is Dr. Karen Balch. I am a private-practicing mobile veterinarian who works alongside my husband, Olin Balch, DVM, MS, PhD, primarily here in Valley and Adams Counties but also statewide. We are both USDA and APHIS federally accredited veterinarians in Idaho.

**I am asking the Forest Service to exercise its authority to choose the No Action Alternative, which is “no new mining”.**

**Personal History and Opinion on the Overall Process**

For the past 17 years, we have been fulltime residents in Cascade where we live on the North Fork Payette River, a major migratory pathway rich in raptors, swans, herons, pelicans, cranes, geese, varieties of waterfowl and passerines. As a passionate wildlife photographer, I am blessed to literally photograph all these birds, as well as mammals such as otters, mink, beaver, raccoons, skunks, deer, and coyotes literally from my backdoor. But I have also photographed otters in winter, and a small elk herd standing in the middle of the South Fork Salmon. One day I photographed a cow elk crashing through the river to get its calf to the other side.

Idaho is truly rich in wildlife. But as a veterinarian, I am very concerned about the impacts of global warming in waterways amid drought conditions. And I am very concerned about the impacts of “emerging diseases” and the increased risk of zoonotic diseases that are transmitted between wildlife species and humans or vice versa. Parvovirus from the soil on people’s shoes was introduced to naïve wolf populations studied by Dr. Rolf Peterson on Isle Royal. It destroyed the existing population of wolves but fortunately were reintroduced after much debate. I anticipate all types of impact on numerous species in the proposed SGP area. Animals could be affected by loss of suitable reproductive habitat in winter like, wolverines. The constant noise, light, and human activity could easily impact relocation or dispersal of animals. I do not believe the impacts of various wildlife is calculable due to the enormity of this project, noise pollution, light pollution, constant human occupation, etc.

Additionally, I am an active conservationist and promote the importance of stewardship to preserve and protect healthy habitat for wildlife. In the late ‘70s through the early ‘90s, I proudly worked for the US Forest Service in the Gifford Pinchot NF as a forestry technician primarily in fire control when women were just entering fire suppression. I supervised a Fuels Management crew, was Squad Boss rated for project forest fires, staffed a fire lookout, drove a water tanker as fire prevention patrol, and climbed trees to collect superior cones. I was proud to work for an organization wearing a green suit with a brass badge, or black ash covered, smoke smelling Nomex fire gear from slash burning. I believed in the Forest Service and its mission as stewards of the forest.

However, in 2012, Midas Gold Corp. proposed exploration for possible future mining of gold, silver, antimony at the Stibnite, Yellow Pine mine site. As one the of the first citizen appellants, I began to feel that the USFS appeared to be “advocates” in promoting the mining company rather than representing the American public who own the federal lands. I was perplexed why it seemed that the USFS seemed to be acting on behalf of the mining companies. But it’s a perception that has persisted throughout this whole process to me. Sadly, I have felt throughout this ongoing process review that the USFS is more of an adversary rather than a non-biased referee. Maybe that’s because I oppose this project on every level and perceive that “by the powers that be” this project is a slam dunk given just moving through the required steps.

**Environmental Contamination and Water**

Mining as proposed by the Stibnite Gold SDEIS profoundly threatens the quality and inherent safety of surface water and ground water. Contaminated water (containing arsenic, antimony, and mercury) in turn literally endangers all downstream micro-biota, aquatic habitats and species, including Snake River Chinook Salmon, Snake River Steelhead Trout, and Columbia River Basin Bull Trout. All these fish are legally designated “threatened” under the Endangered Species Act. Fish and fresh-water crustaceans are one of the most common sources of methylated mercury that can biomagnify or concentrate throughout trophic levels of food chains, including avian and mammalian species, and humans via food consumption. Heavy-metal pollution starting at the headwaters of the East Fork South Fork Salmon River contaminates all downstream waters, ie. creeks, streams, tributaries, rivers ultimately amassing at the Columbia River into the Pacific Ocean, the destination of the anadromous fishes – Chinook salmon and steelhead. With Chinook salmon estimated as 90 percent of Orca whales’ diet, decreased numbers of salmon for food in part are causing starvation and disease in these magnificent animals.

Pollution of any sort degrades nature. As a veterinarian, I have unique working knowledge of biological processes across species, including various disease etiologies (or causes) that can present in various diseases. I have professionally investigated real and potential poisoning of domestic animals. With warmer temperatures, we are seeing more cyanobacteria in water bodies that can kill animals quickly by neurotoxins that have no reversal. I am particularly concerned about “emerging diseases” and zoonotic diseases (diseases that are transmissible between animals and humans). Causes of zoonotic diseases may be fungal, bacterial, viral, endo- or ectoparasitic, infectious, or toxicosis, such as those caused by heavy metals. Currently, bald eagles are dying of lead toxicosis that is excruciatingly painful. In 2017, the Asian Longhorned tick was discovered in the US and is spreading rapidly indicating yet another vector-borne tick on the radar. The impact of human activities year-round with transportation of potentially lethal chemicals inevitably will have an impact on wildlife but I do not believe that exactly how is fully understood.

Notably, the level of heavy-metal toxicity associated with historic mining at the Stibnite site is sufficient that the EPA proposed Stibnite as a Superfund site on the National Priorities list in 2001 and a remedial investigation started in 2002. ([https://cumulis.epa.gov/supercpad/Site/index.cfm?fuseaction=second.schedule&id=1000236](https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.schedule&id=1000236)).

Unhealthy habitats weaken the immune systems of life forms making them susceptible to various diseases with increased morbidity and mortality. Increasing temperatures accompanying climate change directly or indirectly impact habitats and magnifies the adverse effects of environmental toxins such as heavy metals in water ways. An estimated one-third of tundra swans refueling and migrating through Coeur d’Alene, Idaho, will die of heavy-metal toxicity ingested from lake vegetation. For most of the 20th century, mining waste was discharged into the Coeur d’Alene River and tributaries.

In 2019, the US Department of the Interior and US Geological Survey completed the scientific investigations report titled: “Arsenic, Antimony, Mercury, and Water Streams near Stibnite Mining Area, Central Idaho, 2011-17.” In short, this study documents altered stream configuration and habitat in the study area. Dangerous toxin levels for aquatic and human life are directly associated with documented levels of arsenic, free cyanide, lead, mercury, silver, and zinc, and antimony. Even this most recent USGS study, many years after the most recent active mining activity in the Stibnite area, identified harmful levels of arsenic, antimony, and mercury contamination in those local waterways. From a veterinary perspective, I find this profoundly disturbing knowing that waters contaminated with heavy metals are the relied-upon water source for fishes, amphibians, insects, birds, domestic livestock, domesticated pets, wildlife and people. Heavy metal contamination of water ways is an evitable consequence of mega-scale mining, whether historical or contemporary.

I am also disturbed that the Forest Service allowed the British Columbia-based Midas Gold Corp. authority to author the 2019 Biological Assessment (BA) report referenced above. As U.S. Rep. Betty McCollum, Chair of the House Appropriations Subcommittee stated: “Allowing a mining company to author its own BA on its project's potential impacts to ESA-listed species creates potential conflicts of interest and undermines public confidence in the permitting process." In short, as the beneficiaries of the proposed mining were allowed to write the official Biological Assessment there is reason to wonder if the report was written to “whitewash” or “obfuscate” even more damning conclusions that potentially engender distrust of Midas Gold and possible efforts to strong-arm the federal agency that should be overseeing and scrutinizing the mining proposal, potentially casting doubts on the integrity and transparency of the Forest Service.

I have serious concerns about the resulting heavy-metal contamination in the East Fork South Fork Salmon River and all downstream flows that will inevitably be associated with any new commercial mining in the Stibnite area. Detrimental impact on our future recreation in and around any associated rivers, streams, lakes, and reservoirs is truly secondary to the ongoing profound harm to impacted ecological systems. Ongoing heavy metal poisoning of rivers simply threatens the diversity and robustness of aquatic life (in particular protected fish) and, if eaten frequently enough, other life forms such as ospreys, waterfowl, and even humans. Midas Gold’s proposal to bury the EFSF Salmon River and reroute legally “threatened” Chinook salmon, steelhead, and other fishes through a mile-long concrete tunnel is experimental at best with little to no supporting science. How would this tunnel effect other wildlife, such as bobcats, bears, wolves that could be swept in and possibly drown or be entrapped by materials that could collect in this tunnel? I request that all studies on the use and efficacy of “tunnels” be made available.

**Restoration, Cost and Bonding**

At the heart of Stibnite Gold Project’s public media campaign is a promise to heal the historic mining blight of the Stibnite area that occurred most recently 50 years ago and beginning well over a century ago. That damage is adjacent to and intrudes on the largest Primitive Area in the lower 48 states – the joined Gospel-Hump Wilderness and Frank Church River of No Return Wilderness.

Stibnite Gold Project’s concept of restoration is to redisturb the current Stibnite mine site and excavate at the minimum an additional 800 acres of undisturbed wildlife and fish habitat. Two of three enormous mining pits projected to be left permanently on the landscape in perpetuity with single-layer liners that will eventually leak. All liners leak eventually due to the natural permeability of materials that also have defects. It is sobering that a 6.5 magnitude earthquake rolled through Idaho’s Sawtooth mountain range on March 31 of this year. With an epicenter area 45 miles west of Challis, the center of this major earthquake was only a few dozen miles east of Stibnite. This was the second largest earthquake in Idaho history, and even 3 months later the area is experiencing a string of aftershocks, some registering as high as magnitude 4.8 (Idaho Statesman, June 25, 2020). Earthworks’ 2013 U.S. Gold Mines Spills and Failures Report study that all 27 active U.S. gold mines had experienced at least one pipeline spill or other accidental release.

In addition, how would this mining operation fair in the face of a massive forest fire? Our area has historically been subject to forest fires, and in 2020 the Buck Fire was just a few miles from Johnson Creek which has been proposed as one access possibility. And the fire was even closer to the proposed Burnt Log Road route which just skirts the wilderness boundaries. While forest fires are a natural phenomenon, what happens when a holocaust fire burns right over the top of a mining operation with filled with toxic chemicals or over giant vats filled with cyanide? And where are the financial liabilities if a fire is started from heavy equipment sparks as is common in summer. What is the liability of the USFS if citizens recreating in the forest are injured by activities associated with Perpetua’s mining?  
  
Obviously, mining companies are commercial enterprises which must generate monetary profits for their owners and stock holders or cease to exist. Restoring the Idaho landscape back to its pre-mining pristine habitat does not directly make money for mine owners or stock investors, but rather is simply a cost of doing business. All successful businesses regulate and minimize the cost of doing business. While Stibnite Gold Project website states, “Midas Gold is committed to following all of the modern regulation practices and financial assurance calculations so we can restore the site,” details specifying the actual particulars of bonding are not available.

What is the monetary amount of the bond? What formula is used to calculate bonding and by whose calculations?

What are the terms of the bond that the government is requiring for actual mining to begin?

Historically, western United States is littered with abandoned mines – literally mined out with now-forgotten owners having declared bankruptcy to avoid additional costs. As an example, Montana’s Zortman and Landusky gold and silver mines, originally owned by the Canadian company Pegasus Gold Corp, went bankrupt and folded 20 years ago. As of March 2019, that abandoned mine continues to leave a legacy of water pollution and a cleanup bill nearing 100 million dollars that is expected to continue in perpetuity. Consider Colorado’s Summitville Mine that has cost American taxpayers over $100 million in EPA cleanup and in 2021 Colorado state taxpayers were handed back a mine estimated to cost $2 million annually in perpetuity or “forever” – it’s the mine that keeps on giving. In hindsight, how should a mining site that is permanently polluted, such as Summitville, be bonded so the public is not burdened by substantial costs forever?

Given the past history of polluting exhausted gold mines abandoned in western United States, Stibnite Gold Project must provide robust financial evidence of fiscal bonding before permitting should even be allowed. And to appreciate the litany of devastation and death from cyanide gold mining see the list of gold mining disasters resulting from dam failure, cyanide leaking into the environment and inappropriate toxic waste discharge related to gold mining using gold cyanidation technique (https://en.wikipedia.org/wiki/List\_of\_gold\_mining\_disasters and the human loss of life).

What assurances does the American Public have that Stibnite Gold Project (SGP) under one of Perpetua Resources Corp.’s subsidiaries will not simply declare bankruptcy or sell its mining interests to another company leaving a bigger colossal toxic mess. I don’t see that addressed.

What assures that any mining company successors to SGP will be bound by any previous restoration agreements?

What iron-clad incentives or agreements prevent SGP from simply abandoning its stated restoration plans after having gutted more pristine Idaho wilderness and profited from whatever gold was mined?

**Wildlife**

I am extremely concerned about wolverines in particular. Some scientists suggest that wolverines should be officially listed as “endangered” under the ESA: the Payette NF and Boise NF have a seemingly permanent but small resident population of wolverines. Increased human activities around crucial winter denning areas could directly impact this animal whose literal existence is already of concern to scientists. As reported by Keith Ridler of the Associated Press in an article: “Tribe doesn’t want this Idaho mine to reopen but U.S. environmental review moves ahead” published August 15, 2020, “…The project includes about 500 acres of patented mining claims and 2,900 unpatented claims on the Payette National Forest and Boise National Forest.” How are resident wolverines being protected within Stibnite Gold’s mining area?

**Water**

Damage to water and water resources is among the worst environmental consequence of gold mining. As reported, gold mining in modern times is very destructive to water resources as evidenced in Nevada where there has been a huge gold mining industry. According to the US Geological Survey, some of the largest open-pit mines in northeastern Nevada have resulted in the water table dropping roughly 1,000 ft. in some areas. One gold mine may consume purportedly 100 million gallons per day. Water systems are commonly contaminated from cyanide, processing chemicals and acid mine drainage that runs off exposed rock. A Perpetua Official told me that 20 percent of the water for this project will originate from the East Fork South Fork Salmon River. Exactly how much water in quantity is that? And where is the other 80 percent coming from? During the Four Corners Fire of this year that occurred on West Mountain Road just across Cascade Lake, within a few days after initiating aerial attack an estimated 3.1 million gallons of water came from Cascade Reservoir; I have never seen that lake so low. I also adamantly oppose the use of Johnson Creek as the main route of transportation to the Stibnite Gold Project. Is it truly presumed that a toxic chemical spill, or diesel-gas spill couldn’t happen on the first day or earlier that operations begin.

**Indigenous American Rights**

Commercial gold mining at Stibnite violates the 1855 treaty rights of the Nez Perce Tribe which is legally recognized as a sovereign nation within the United States. In the early eighteen-hundreds, the Nez Perce Tribe occupied over 13 million acres of western America now identified as parts of western Montana, southeastern Washington, northeast Oregon, and, most relevant to this discussion, north-central Idaho. The 1855 treaty explicitly reserves a permanent homeland as well as “the right to fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.”

Stibnite Gold Project footprint is entirely within the Tribe’s aboriginal territory as well as within the area determined by the Indian Claims Commission to have been exclusively used and occupied by the Tribe. The Project is also located on the Krassel Ranger District of the Payette National Forest. The lands comprising the Payette National Forest are open and unclaimed and subject to the Tribe’s treaty-reserved rights. In my view, the 1855 Treaty with the Nez Perce Tribe supersedes the 1872 Mining Act both in time, legal priority, and importance regarding current mining at Stibnite.

In my opinion, honoring the 1855 Treaty with the Nez Perce Tribe is paramount priority at this time over the 1872 Mining Act, an antiquated act that has permanently destroyed many areas.

Consistent with the Nez Perce Tribe’s notion of hereditary stewardship of the land, the Tribe’s Department of Fisheries Resources Management currently spends $2.5 million dollars annually on hatchery supplementation, fishery research, and watershed restoration near, and downstream from Perpetua’s proposed mine. The Tribe’s work to restore Chinook salmon runs in the South Fork Salmon River watershed sustainably contributes to the area’s economy and quality of life.

I adamantly support the following words of the Chairman of the Nez Perce Tribe, Shannon Wheeler: “Allowing Midas (stet) Gold to move forward with their proposed mine will undo the hard work of so many. We have yet to see a mine that does more good than harm and it is our responsibility to look out for our future generations. This mine, if approved, will surely be to the detriment of those future generations.”

**Conclusion**

The Forest Service has the authority to approve or deny permitting over these magnificent lands as stewards for the American public that own them and for the Native American indigenous peoples who have lived in the area since time immemorial. The Nez Perce Tribe inhabited these lands for millenniums, and their cultural fabric is richly populated with fish, bighorn sheep, deer, bear and elk as well as botanicals for edible foods, medicines and for spiritual beliefs. Admittedly, I feel badly at the horrific history the Tribes endured as Western Europeans moved West taking whatever they wanted. While I can’t rectify the “Sins of the Fathers” I can emphatically say that “enough is enough.” I refuse to elevate a “gold mine” over the Tribes subsistence rights to healthy animals that are their food, basis for spiritual beliefs, and the center of the cultures that we stole from them. I can say I support the Tribe and these animals need to be healthy. The millions the Tribe has spent attempting to restore salmon runs has benefitted us all.

I truly hope that the US Forest Service – an organization that I was so proud to wear a “green suit” driving in “green fleets” or Nomex fire gear on firelines packing a Pulaski will remember its moral and ethical responsibilities. Hopefully the USFS managers will review the scientific literature, take a “drive up in the woods” and just see the South Fork Salmon River. I consider this river to be one of the most beautiful in the nation and is too priceless to risk degradation with cyanide vat leach mining. And a poster envisioning Smokey panning for gold or wearing a hard hat discussing issues with the mining big shots (while animals are sick or dying in the background) just doesn’t jive with the Smokey Bear image I know. Borrowing from former First Lady Nancy Reagan, “Just Say No.”

Respectfully,

Karen Balch DVM

Karen Balch, DVM  
North Fork Veterinary Service