Linda Jackson, Supervisor
Payette N. F.
500 N. Mission St. Bldg 2
McCall, ID 83638

i10/22/20

Dear Supervisor Jackson,

Enclose are my 7 Letters of Comment on the Stibnite Gold mine DEIS.

Earl Dibbs

[redacted]

RECEIVED 10/27/2020
by Brian Harris, USFS

THREATS POSED BY THE STIBNITE GOLD PROJECT

The dictionary defines the word "risk" as a "chance of injury, hazard or loss" and further as "the degree of probability of loss." Practically all of our daily activities involve a certain amount of risk like driving a car during rush hour traffic. However, Midas/Barrick's proposal calls for a number of risks that carry a high probability of catastrophic impact on the environment and people's lives for many years if things go wrong.

On a proposal as large and complicated as the Stibnite Gold Mine project, it is to be expected that there will be a great many risks. These vary considerably as to their likelihood for unfavorable impact to the environment and our concern.

Now for a list of risks that we who have worked with this proposal from its start in the fall of 2014 have identified as items of concern:

#1 The Threat of Acid Mine Drainage (AMD) and Toxic Metals, The majority of the gold bearing mineralization that Midas/Barrick is planning to mine is primarily sulfide in nature. (This is in contrast to the recent cyanide heap leach mining operations that were after ores that are oxide in nature.) Sulfide mining can lead to acid mine drainage (AMD), a condition that is toxic to fish. AMD has historically been a big concern for the mining industry as far back as Roman times and is well documented on the Internet. (Type: acid mine drainage in the search box at Google).

#2 The Threat to Fish, There is a real risk that this mine will pollute the Salmon River with mine wastes and kill fish. In addition to chemical pollution, there is a high risk of sediment pollution from open pits and mine roads. Sediment from mining in the 1980's was evident clear to Mackay Bar. The lower South Fork Salmon River is a major rearing area for wild salmon and steelhead and bull trout, all species listed under the Endangered Species Act. Salmon and steelhead are in record low abundance. The loss of even a few salmon and steelhead might jeopardize the species.

#3 The Threat of the Tailing Disposal Dam, Midas/Barrick has plans for a tailings disposal dam of compacted crushed rock and overburden material that is 420 feet high to retain a lake of waters that has been contaminated by mining. This structure would be taller than any building in Idaho. (The building at 8th and Main Streets in Boise is 323 feet tall including the spire.) The tailing dam is high on our list of Stibnite risks and concerns because dams built in this manner have a history of failure. Google: Mt Polley in BC, Canada, the Teton Dam in eastern Idaho, and the recent Edenville Dam failure in Michigan. A dam in Meadow Creek near the current proposal failed in 1964-65 destroying roads downstream to Yellow Pine.

#4 The Threat Posed by the Tunnel, Midas/Barrick has conducted an extensive core drilling program in the Stibnite area. This program has established that the most valuable gold mineralization is in the northern part of the Stibnite area near the "Glory Hole" and beneath

and immediately adjacent to the bed of the East Fork of the South Fork of the Salmon River (EFSFSR). It will be necessary to reroute the stream in order to dewater and mine this area. Midas/Barrick proposes to do this by means of an .8-mile tunnel through the steep slope on the west side of the stream.

Now tunneling was done before by the Bradley Mining Company that mined for antimony and tungsten during WWII as part of the war effort. The company constructed a tunnel through the mountain on the east side of the stream which was largely trouble free for mining purposes for the many years they were in operation. However, no thought was given to fish passage, and the anadromous fish habitat in the upper reaches of the EFSFSR and along Meadow Creek were inaccessible to fish.

Midas/Barrick is making a big point that they will correct this situation by restoring fish access to former spawning grounds by making their tunnel a virtual .8-mile-long fish ladder equipped with electric lighting to make it attractive to fish.

We have researched the matter of fish passage around dams and other obstacles and have never found a case where a tunnel has successfully been used for fish passage. A much shorter fish ladder in the East Fork just downstream from Stibnite proved dysfunctional because of channel scour and bedload movement into the ladder. We view this proposal by Midas/Barrick as an effort to counter the bad reputation that mining has for impact on the fishery resource and as a proposal that has a high risk of failure.

#5 Threats Posed by Snow Avalanches and Landslides, Stibnite is located well within Idaho's backcountry. This general area is all mountainous with V bottom canyons with steep side slopes and is subject to extreme weather conditions. The annual snowfall is quite heavy with snow on the ground for roughly six months each year. These factors combined with the steep terrain create ideal conditions for snow avalanches and landslides. These are risks that past mining operations at Stibnite have dealt with with varying degrees of success. In Canadian Superior days, a huge landslide within the Westend pit due to over steepening the mined area closed down mining for a long period while the company constructed a section of new haul road. The headwall of the Garnet Creek pit initiated a landslide there. Landslides along the EFSFSR have regularly cut off road access to the town of Yellow Pine and the Stibnite area. These are risks that are hard to predict as to time and place, but Midas/Barrick will have to be prepared to deal with them.

#6 The Threat Posed by Road Traffic, Hauling hazardous materials on low-standard roads year-round presents a safety risk. Also the everyday traffic on poor roads associated with a work force of approximately 500 people on site for the 20 year life of the mine including post mining reclamation is another safety factor to consider. Several petroleum spills have occurred on these routes in the past.

#7 The Threat of Earthquakes This area of central Idaho is prone to earthquakes. Although the actual time, place, and size of an earthquake cannot be predicted, the possibility of an actual quake is such that Midas/Barrack should have contingency plans in place.

#8 The Threat to Recreation Travel Travel by the recreating public in the vicinity of Horsethief Reservoir and Warm Lake is expected to fall off as tourists dislike sharing the roadways with heavy mining traffic. Thus an increase in the number of visitors in the McCall area can be expected.

#9 The Threat of a Biased Biological Assessment, (BA). The biological assessment is an important part of the preparation process for an EIS. This is the document that looks into all possible impacts of the project to a long list of natural resources. In the case of the Stibnite Gold mine, we who have been involved with the project since its inception have identified the potential impact to the anadromous fish resource of salmon and steelhead as our most important concern. These fish are on the verge of extinction and don't need another obstacle to their survival. The record of gold mining and the fishery resource has been one of incompatibility -the two just don't mix.

The usual procedure is for the Forest Service's interdisciplinary team of scientists specializing in various fields to write the BA or, at least, closely monitor the BA while it is being prepared by an outside firm. Midas/Barrick has petitioned and been granted permission from the Forest Service to write the BA. This is not a completely uncommon way to produce a BA but it has us wondering if the product will truly be unbiased. To us it is a real risk that comes across as a classic case of hiring the fox to guard the hen-house.

#10 The Threat of the Need for Long Term Water Treatment, This is one of the oldest risks that has been recognized as being applicable to the Stibnite Gold Mine project. This statement, and I will quote this verbatim, is on page 28 of the PFS under the subject of "Project Specific Risks".

"Water management and chemistry, which could affect diversion and closure designs and/or the need for long term water treatment".

Since the gold bearing mineralization that Midas is planning to mine is primarily sulfide, there is a probability that this will lead to an AMD situation that, once started, is very difficult to stop even after closure of mining operations. This creates the need for long-term water treatment that elsewhere has proven to be very expensive. This likelihood needs to be recognized in the EIS and in the calculation of the performance bond for the Project. (Type: Summitville Mine, long term water treatment in the search box at Google.)

#11 The Threat of an inadequate Financial Assurance, Midas's Public Relations people have always emphasized that the company is committed to restoring the site and leaving the area in better shape than they found it. That is a big promise and will require a big reclamation bond. Our risk is that the company will mine until the ore is exhausted, then declare bankruptcy,

move back to Canada, and leave a big mess for the American taxpayers. Indeed, this very thing happened with a Canadian mining company in Colorado. (Again, In the search box at Google, type: 'Summitville Mine, Colorado.) Let's be sure that the reclamation bond is of sufficient size to discourage such actions.

The Nez Perce Tribe has probably been adversely impacted by mining more than any other group in Idaho. The tribe has produced an excellent short film in opposition to the Stibnite Gold mine Project titled: "Dig for the Truth" that does a great job of telling their side of the issue. Type the title in the search box at Google.

Conclusion By law projects as large and complex as the proposed Stibnite Gold mine are required to prepare an Environmental Impact Statement (EIS) in keeping with the provisions of the National Environmental Policy Act (NEPA). For almost 50 years, NEPA has been the "Bill of Rights" for the environment. It is one of the nation's most important laws protecting public health and the environment. In the case of Stibnite, we are well along with the preparation of an EIS and are awaiting release of the Draft EIS that the Forest Service and the mining company have indicated will be in August 2020. The public will then have a specified time - usually 45 days - to make written comment on the document. This is the last opportunity that the public has to comment on a proposal that has the potential to change life styles for many of us for years into the future. The changes brought on by the above risks would affect not only Valley County Idaho but also a large part of the Pacific Northwest that is downstream from Stibnite. People will have to live with the consequences of this mine for a long time and should weigh in as to whether or not they view this project as a good idea while in the planning stage

Please make written comment to the Draft EIS when it is released. You can use the above list of risks as a check list for a starter.

[redacted]
July 2020

ACID MINE DRAINAGE (AMD)

THE MOST PROMINENT WAY IN WHICH WASTES HAVE POLLUTED SURFACE WATERS AND GROUND WATERS IS THROUGH ACID MINE DRAINAGE. THIS PROCESS BEGINS WHEN MINERALS COMMON IN MINING WASTE---USUALLY PYRITE OR OTHER METAL SULFIDE ORES— COMBINE WITH OXYGEN- RICH WATER TO FORM SULFURIC ACID. IN addition TO BEING HIGHLY CORROSIVE, THE ACID CAN DISSOLVE HEAVY METALS SUCH AS LEAD, ZINC, CADMIUM, AND COPPER THAT ARE LEFT IN THE TALINGS PILES OR EXPOSED THROUGH EXCAVATION. THE SOLUTION FLUSHES DOWNSTREAM, FOLLOWING THE REGULAR FLOW OF THE WATERCOURSE.

Commented [ED1]:

WHEN ACID MINE DRAINAGE IS SUBSTANTIAL, AQUATIC LIFE VIRTUALLY DISAPPEARS AND THE RIVER BOTTOM BECOMES COVERED WITH A LAYER OF REDDISH SLIME THAT OFTEN CONTAINS HEAVY METALS. ACID MINE DRAINAGE WATER CAN BE 20 TO 300 TIMES MORE ACIDIC THAN ACID RAIN. THE COPPER, GOLD AND SILVER INDUSTRIES, ALL PROMINENT IN THE WEST, HAVE THE HIGHEST POTENTIAL FOR CREATING SUBSTANTIAL ACID MINE DRAINAGE.

This was my submission to the Scoping process—most of my points are still valid.

July 13, 2017

The Case for Concerns with the Possibility of Acid Mine Drainage (AMD) and Water Quality Problems with the Stibnite Gold Mine Proposal

Ever since the public was made aware of this proposal for a large-scale mining operation at Stibnite several years ago, my chief concern with the proposal has been the potential for pollution of the Salmon River with AMD and mobilized metals and arsenic. Why am I so concerned? Because the geographic location of this proposal is in the headwaters of a tributary to the Salmon River, a Blue-Ribbon waterway, one of Idaho's crown jewels, and a national treasure. The Salmon River is recognized as one of the most important rearing streams for salmon and other sea going fish in the entire Columbia River Basin.

These concerns are based almost entirely on the track record of the mining industry with the mining of sulfide ores elsewhere in North America as documented on the Internet. I am greatly concerned with the lack of attention given to AMD and somewhat alarmed at the short shrift manner with which Midas has treated AMD and water quality matters. The issue of AMD is completely ignored in the PRO proper and only receives mention in the M3 Engineering & Technology Corp., Prefeasibility Study Technical Report that is included in the list of References on page 16-1 of the PRO. (The inclusion of this document in the list of References for the PRO means that this document is technically part of the PRO and subject to public review for NEPA purposes in the same manner as any other part of the PRO). This report is available on the Internet by typing: "Report Cover Page Midas Gold" in the search box at Google, and at "http://www.sedar.com, December 16, 2014."

Midas is proposing to mine, over a period in excess of ten years, large bodies of sulfide ores. They will use open pit methods below the ground water table in a mountainous area subject to heavy winter snowfalls and intense summer thunder storms in a drainage that is critical habitat for at least 2 endangered species. It is my feeling that this is sufficient information to raise the red flag for the likelihood of a serious AMD and mobilized metals problem.

The entire subject of AMD has been a big issue with the mining industry for years. Go to Google and type "Acid Mine Drainage" in the search box. There are 20 pages of information on this subject, each page having a list of 10 links.

Midas Gold has released for public viewing the following two documents describing in detail their plans for mining at Stibnite:

- Prefeasibility Study Technical Report, (PFS) Issue Date, Dec 15, 2014

- Plan of Restoration and Operation, (PRO) Released September 22, 2016

(Midas has made replacements and updates with changes to both of these documents. It is my understanding that the Forest Service has determined that these are not part of the NEPA process.)

We who have serious concerns with the potential of this proposal for possible downstream environmental impacts now have these two documents to review in detail.

At first glance, there is a great deal of similarity between these documents. Both are quite voluminous, in excess of 500 pages (the pages are not numbered consecutively). Both are well written and formatted with many maps and pictures in color. Although they appear to have come from different print shops, the first impression is that they are professionally prepared documents of a technical nature costing a great deal of money.

In spite of this similarity, there are differences which are important to the permitting process for the Stibnite Gold project. As my major concern with the project has been the potential for AMD and water quality issues, I will limit my detailed review of these two documents to these subjects. Therefore, the purpose of this write-up is to examine each document for its approach to Midas's plans for addressing water quality issues, primarily AMD.

Prefeasibility Study Technical Report (M3 PFS)
This document is available on-line. (In the search box at Google, type: "Report Cover Page Midas Gold Corp" and allow several minutes for it to down load as it is a long document.) The M3 Engineering & Technology Corporation of Tucson, Arizona is the leader for preparation of this document. This firm put together a team of seven Professional Engineers, not all of whom are with M3, to do the actual writing and M3 compiled the document. Their logo is on the cover as well as on the bottom of each page. The names of the seven engineers are on the cover and each one has a full page "Certificate of Qualified Person" toward the end of the document to establish his credibility. The apparent leader of the team, in that his name is at the top of the list, and he is responsible for more sections in the PFS than the other engineers, is Conrad E. Huss P.E, Ph.D., of the M3 Corp. Although I have a few concerns with this document which I will go into later, in my opinion, overall, this is a technical document that the M3 team can rightly be proud of. It's almost encyclopedic in its coverage of the many issues that are involved in a large-scale mining operation.

This PFS (let's call it the M3 PFS) has a Section 20 titled: "Environmental Studies Permitting and Social Community Impacts". Subsections 20.4 and 20.5 address "Geochemical Characterization and Mitigation". There is a page on "Acid Base Accounting Results", and the words acid generation and potential acid generating rocks (PAG) are used in several places. The author of this section, Peter Kowalewski, discusses the matter of testing for an AMD condition of the ore to be mined and draws this conclusion: "Despite their overall sulfide content, most of the samples contain

neutralization potential in excess of their acid generation potential." This, of course, is just what one would think Midas would like to hear, but as he uses the word "acid" and hints that there could be a potential for acid generation, Midas has elected to disregard this statement in the PRO.

On the matter of waste rock and the potential for AMD, he describes the testing methodology and draws this conclusion: "The results of the static geochemical test work demonstrate that the bulk of the Project waste rock material is likely to be net neutralizing and presents a low risk for acid generation. However, this prediction needs to be confirmed by the ongoing kinetic testing program since the majority of the Hangar Flats and Yellow Pine samples demonstrate an uncertain potential for acid generation based on the BLM criteria for Acid Base Accounting Data."

The points that I am making here are that, according to a team of highly qualified engineers, the project does, indeed, have a potential for AMD, and, at the very least, this needs to be recognized in subsequent documents that are part of the permitting process. Now, let's take a look at the second document.

Plan of Restoration and Operation (PRO)

The public was first made aware of this document by means of a "News Release" dated September 22, 2016. The Forest Service formally accepted this document to start the NEPA process. It was made available to the public in hard copy at the offices of the Payette National Forest and the Idaho Department of Lands in McCall, as well as on the Internet. I have only recently seen a hard copy, but prior to this, I have spent hours studying the on-line version.

This document was produced by the "Midas Gold Team" who signed the Introduction in long hand. In contrast to the M3 PFS, there is no information on the individuals who comprise this team or their credentials for working on a project of this magnitude. Also, in contrast, there is no "Date and Signatures Page" so the public is at a loss as to the date, and who actually prepared this document other than it was prepared in house by Midas Gold.

The list of References on page 27-1 has been shortened from slightly more than 6 pages in the M3 PFS to a single page. The one reference in the M3 PFS to a document with acid mine drainage in the title has been eliminated: (Miller S. . . .Procedings of the 4th International Conference on Acid Rock Drainage- Vancouver, May 6, 1992.)

Somewhat to my surprise, the M3 PFS is included in this list. A surprise as this was produced by "The Midas Gold Team", who has been working hard to eliminate all previous mention of this word 'acid" from their documents and here is a Reference giving considerable attention to this matter. The M3 PFS is the only document supplied by Midas that has any mention of the possibility of an AMD problem, and, as noted above, the M3 PFS does, indeed, address this issue.

The list of over nine pages of Abbreviations and Acronyms in the M3 PFS has also been reduced to a single page. The acronyms for anything containing the word "acid" (ABA , AP, ARD, AMD, and PAG) have been eliminated.

This really disturbs me. The PRO comes across to me as giving the same treatment and attention to a potential AMD problem as, say, to alligators. That is, there are no alligators at Stibnite, therefore, we don't have to talk about alligators. The same thing goes for AMD. We don't have an AMD problem at Stibnite, therefore, we are not going to talk about AMD.

- This constitutes an "absolute certainty" treatment of a no problem with AMD., a stance my geologist friends have cautioned me to avoid when dealing with large mineral deposits. There is just too much variation in mineral deposits to make "absolute certainty" predictions. The geology at Stibnite is such that it is imperative that AMD and water quality matters be addressed in the permitting process for the mine.

With the exception of the inclusion of the M3 PFS in the list of References as noted above, (I view this as a mistake on Midas's part and something that they are now regretting.) this approach is negating all the work Mr. Kowalewski did in the M3 PFS on the matter of the potential for AMD as discussed above, and might well account for the apparent lack of agreement between the two documents.

A friend, who is as equally concerned with the environmental impacts of a large scale mine at Stibnite as I am, has directed me to this site on the Internet that is somewhat germane to the Midas proposal:

- The EPA's "Technical Document (Acid Mine Drainage Prediction)" To view the document in its entirety, type the title in the search box at Google.

This document has been produced by the EPA to deal with the possibility of AMD in the U.S. There are a number of broad statements in the Introduction that I will quote here verbatim that are relative to the Stibnite proposal:

"The formation of mine acid drainage and the contaminants associated with it has been described by some as the largest environmental problem facing the mining industry."

"The U. S. Forest Service sees the absence of acid prediction technology, especially in the context of new mining ventures, as the major problem facing the future of metal mining in the western U.S. (U.S. Forest Service 1993)"

Then, to further strengthen my case that AMD and water quality matters should not be taken lightly, there are a number of documented case histories of AMD and metals and arsenic mobilization disasters. I will list a few of them here that can be viewed by, again, typing them individually into the search box at Google:

- Failed Promises-Water Quality Predictions Gone Wrong-Large Mines and Water Pollution
- Acid Mine Drainage Disasters
- Summitville Mine Disaster Colorado
- Zortman/Landusky Gold Mine Disaster Montana
- Earthworks Sulfide Mining 101

Now let's take a close look at several things in the M3 PFS that cause me concerns.

There is this statement under Permitting on page 1-21:

"Midas Gold's objective is to make the Project a fully integrated, sustainable, and socially and environmentally responsible operation through open communications and accessibility."

From the standpoint of a person interested in the environmental aspects of the Project, I am very glad that Midas is making this commitment for transparency in all their planning and that they promise not to withhold pertinent information from the interested public. However, from a cursory look at the M3 PFS, I have concerns that this is not always the case.

The M3 PFS has this statement under the heading of "Permitting Risks and Risk Management Strategy" on page 20-14:

"The water treatment facilities contemplated in this PFS have been proven at other mining operations located in very sensitive environments."

My concern is that there is no specific information as to the case histories of these other mining operations that have allegedly operated successfully in environmentally sensitive areas using mining techniques similar to those planned for at the Stibnite Gold Project. If this has been done elsewhere, why isn't this documented in detail in the M3 PFS? If Midas is so confident that they are on top of the AMD and the potential for pollution problems from the mobilization of metals and arsenic issues, and have plans to mitigate any problem, how about a detailed description of the methodology and techniques that they plan to use? This would do much to further Midas's claim for conducting a Project that is open to the public as put forth in their statement of overall objectivity.

I also have a concern with this statement in the M3 PFS that is under Conclusions on page 25-3:

"The Qualified Persons (QPs) of this Report are not aware of any unusual, significant risks or uncertainties that could be expected to affect the reliability or confidence in the Project based on the data and information available to date."

Again, it appears that the authors are attempting to downplay the issue of a possible AMD and mobilization of metals problem by completely ignoring the issue. But take a look at these statements under "Risks and Opportunities" on page 1-33... "high impact Project specific Risks and opportunities are summarized below..." There are five Risks listed for which additional information is required in order to mitigate. Four of these have no concerns to me, but the fifth certainly does. I'm quoting this Risk verbatim and am underlining the words long term water treatment as that is my top concern:

"Water management and chemistry, which could affect diversion and closure designs and /or the need for long term water treatment."

The need for long term water treatment upon closure is significant and somewhat of a predicament to the mining industry in that it is a need not welcomed by the regulatory people who would like to have a "maintenance free" closure. I have two concerns with mention of long term water treatment in the M3 PFS. First, the very fact that it is identified as a possible Risk is contrary to the preceding statement that the QPs were not aware of any significant risks, etc. In the first statement the QPs state that there are no significant risks under the heading of Conclusions. Then they reverse this determination and list long term water management under the heading of Risks and Opportunities as one of the high impact specific risks that require additional information in order to mitigate—an inconsistency that leads the reader to wonder if there are other similar inconsistencies in the M3 PFS?

My second and major concern with the listing of long term water treatment as a risk is that this is a rather common condition brought about by the creation of an AMD problem during the mining and processing of sulfide ores. There is little information in the M3 PFS to substantiate this hypothesis since the authors are going all out to downplay use of the word "sulfide" and the possibility for the creation of an AMD condition, but just what are the water quality factors that brought about the listing of long term water treatment as a risk if it's not AMD? This brings out the need for more attention to transparency in public relations on the part of Midas.

A little more on the subject of long -term water treatment: The Summitville mine in Colorado is listed above as one of case histories of a mining disaster involving AMD. Here, in my own words, is a brief summary of what I have learned about Summitville from reading several links about it on the Internet, and why I am so concerned with the possibility of the need for a long-term water treatment program at Stibnite.

Summitville has been the scene of historic mining for a long time (somewhat like Stibnite). Sometime in the mid 1980's a Canadian company started mining for gold on a large scale using open pit and heap leaching methods. This created an AMD problem that killed fish for a distance of 17 miles downstream in the Alamosa River. Upon closure of mining in 1995, the company started on a program of cleanup of the mine site that included treatment of a large volume of acid producing water but soon gave up and filed for bankruptcy in Canada. They then left Colorado, leaving a big mess for the

American taxpayers to cleanup. Shortly thereafter the EPA took over cleanup as a Superfund Site, spending something in the neighborhood of $155,000,000 to date on long term water treatment that will probably continue for hundreds if not thousands of years. The U.S. Geological Survey made an investigation of the matter (probably due to the large amount of public money required to remedy the public safety hazards) and made this statement in the conclusion of their investigation:

"Extreme acid rock drainage is the dominant long term environmental concern at the Summitville mine and could have been predicted given the geological characteristics of the deposit."

I have a fear that much the same thing will be said about the Stibnite Gold Project sometime in the distant future.

I want to provide a little more information on the Salmon River that I value so highly. As stated previously, this Project is located in the headwaters of a tributary to this river. Runoff from all of our natural streams is precious but the Salmon River is particularly special in this regard. Although entirely Idaho's river in that from its source in the Sawtooth Mountains to its mouth on the Snake River in Hells Canyon, the river is entirely within the state, this waterway is truly a national treasure. It is often said that it is the longest stream in the U.S. that is entirely within one state. It is completely free-flowing in that there are no dams or other man made obstructions. Sections of the river are paralleled by U.S. Highways, while other sections can be accessed by low standard roads and pack trails. There are sizable sections that have no roads or trails. Whitewater rafting and kayaking are popular on the main stem and several of the largest tributaries are considered to be world class. Power boating (jet boating) is permitted and popular on the main stem. The Salmon River was one of the initial waterways to be included in the National Wild and Scenic River System.

However, as the name indicates, probably the primary value of this stream is that it is an important fishery and rearing area for salmon and other sea-going fish. Historically the Salmon River has been recognized as the most important stream in the entire Columbia River system for its value as a salmon fishery.

It seems to me to be foolhardy to risk impacting this resource by permitting a mining operation that has a strong possibility of negatively impacting fisheries values by creating an AMD problem that is likely to be with us in perpetuity. This would be a dismal legacy to leave for the generations that follow us.

In summary of the above material, it is my contention that AMD and the mobilization of metals and arsenic is, indeed, a big concern to the mining industry. The attention Midas is giving to these matters in their PFS is grossly inadequate. The authors of the PFS undoubtedly know a great deal more about AMD than is covered in the M3 PFS, yet they have chosen to downplay the issue in the hope that they can somehow get the project permitted and on line without alarming the public as to the strong possibility of a serious AMD problem that might be expected to pollute the Salmon River in perpetuity. Both the

M3 PFS and the PRO fail to give the reader a proper perspective of the likelihood and Tseriousness of an AMD problem. This needs to be corrected in the EIS.

As stated at the start of the above write-up, I have pretty much limited my review to the proposed treatment of AMD and water quality matters. And how is Midas proposing to deal with these matters? By completely ignoring them and treating them as non-issues that they don't have to talk about. This approach reminds me of the story of the ostrich who sees trouble headed his way so he buries his head in the sand so he can't see reality. Does the Midas Gold team that produced the PRO that is being used to formally start the NEPA process really think that they could gain approval for this Project by completely ignoring AMD? The PRO calls for three open pits approximately 400 feet deep and the mining of sulfide ores This is a recipe for AMD, a condition quite common elsewhere with the mining industry in North America. It is true that the area has been extensively mined in the past without creating AMD conditions, and that there are large deposits of alkaline materials that can be used to neutralize the sulfides, but no mining company has ever mined sulfide ores at Stibnite to the large extent that Midas is planning to do.

One last thought and I will close this write-up.
This plan for a huge gold mine in the headwaters of the Salmon River by a Canadian company that has never mined before has a high probability of putting the Salmon in jeopardy of mining pollution that will last well into the future. The people of Idaho have an opportunity to comment on this matter during the 45 day scoping period for the Environmental Impact Statement (EIS) that is required by the National Environmental Policy Act (NEPA).
See http://fs.usda.gov./goto/StibniteGold

[redacted]

Sulfide Mining -The Case for a No Action Alternative

This document is intended to address sulfide mining at Stibnite, one of the most important things that needs to be addressed when considering the approval of a large scale, open pit mining operation. This subject has so far been largely ignored at Stibnite in spite of the fact that many professional people consider the problems connected with sulfide mining to be of major importance.

But before we examine the reasons why this subject has received such short shrift treatment, let's take a look at the chemistry and science that creates an acid mine drainage (AMD) condition that has a probability of polluting downstream waters and killing fish. This is a function of the geology of the ore body to be mined, so let's look at the geology of the gold bearing mineralization that Midas is planning to mine. All of the gold bearing mineralization at Stibnite is disseminated which in geologic terms means that the gold is very fine, not visible to the naked eye, widely scattered, and primarily found in pyrite grains. The gold ore is of two broad types: the oxides and the sulfides. The oxides are generally on top of the sulfides leading geologists to believe that when the earth was formed, these pockets of mineralization were probably all sulfides, top to bottom. Then in the course of millions of years Mother Nature oxidized the top portions of the sulfides by constant exposure to atmospheric conditions of rain, snow, sun, and wind.

The chemistry of the oxides is such that there is no danger of producing AMD. But not so with the sulfide ores. The chemistry here is really quite simple: sulfide ores plus moisture in any form in the atmosphere equals sulfuric acid (battery acid). This enters the water course with the name AMD that has a well -recognized record of polluting water courses and killing fish elsewhere.

All of the past open pit gold mining at Stibnite in recent years starting with the Canadian Superior operation during the 1970s and then followed by several other cyanide heap leaching gold mining operations under different ownerships, have been after the oxide ores, and avoiding the sulfides. Consequently, the oxides at Stibnite are almost a thing of the past while the sulfides are largely untouched.

People often ask me: "There has been a lot of mining at Stibnite in recent years with no concern with AMD, so why are you suddenly so alarmed with the Midas proposal?" The answer to this is quite simple: **sulfide mining. The mining of sulfide ores has a probability of creating AMD while the mining of** oxide **ores does not.**

Since Midas's Plan of Restoration and Operation, that was provided to the public in 2016 to start the formal NEPA process, is completely devoid of any mention of sulfide ores or the probability of an AMD condition, this is the answer to the question at the start of this document as to why sulfide mining has so far been ignored: Midas just doesn't want to talk about it.

Midas proposal is an entirely new ball game from what has taken place in the past at Stibnite. However, this proposal is not by any means unique in the mining industry. Problems with the mining of sulfide ores and the creation of AMD have been plaguing mining for a long time and go clear back to Roman times. These are well documented; there is a ton of material on the internet on the history of AMD including many, many pictures and several videos and short films of current mining operations that give one a good idea of just what is involved with a large scale, open pit mining operation.

I particularly like these six: (To view these cases in their entirety, type the title in the search box at Google).

Mining Truth on the Sulfide Mining Track Record—"Sulfide mining has a near perfect record of creating pollution. Despite its protests that it can be done safely, mining companies are unable to point to a sulfide mine that has ever been developed, operated and closed without producing polluted drainage from its operations."

Summitville Mine Disaster-Colorado Canadian mining company created water pollution problem killing fish. Declared bankruptcy, went back to Canada leaving a big expensive mess for American taxpayers.

Zortman-Landusky Gold Mine Disaster- Montana Since 1999, $77 million has been poured into healing this injured landscape. Almost $50 million of this has been public money.

Failed Promises-Water Predictions Gone Wrong Mining Companies polluted western waters-now taxpayers have to pay.

Thompson Creek Molybdenum Mine-Idaho largest mine. Regulators failed to recognize the potential for an AMD problem during the permitting process. This necessitated redo of the EIS when this problem developed upon mining.

USEPA'S "Technical Document (Acid Mine Drainage Prediction)"
This document has been produced by the EPA to deal with the possibility of AMD in the U.S. There are a number of broad statements in the Introduction that I will quote here verbatim that are relative to the Stibnite proposal:

"The formation of mine acid drainage and the contaminants associated with it has been described by some as the largest environmental problem facing the mining industry."

"The U.S. Forest Service sees the absence of acid prediction technology, especially in the context of new mining ventures, as the major problem facing the future of metal mining in the western U.S. (U.S. Forest Service 1993)".

Before I go to the Conclusion with this write up there is one more concern-and a major one- with sulfide mining and AMD at Stibnite. This is the probability of the **need for long -term water treatment**. With the mining of sulfide-ores it is almost inevitable that AMD will be created, and once created it is extremely hard to stop even after mining has ceased and the mine is closed.

Various techniques have been developed for dealing with this situation but to the best of my knowledge none has been completely effective. The Thompson Creek mine, Idaho's largest mine located near Challis, has been struggling with a serious AMD problem for years but they are not quite ready for closure and are yet to tackle the long -term water treatment issue. It will be interesting to see what Midas is proposing to do in this regard.

Conclusion: Now that we have had a little lesson in Sulfide Mining, how do we apply the above findings to the on-the-ground situation at Stibnite and avoid the creation of a lasting water quality problem?

To me the solution is clear, just leave the sulfide deposits as they are. They are not hurting anything now, but this will not be case if they should be mined.

"Acid Mine Drainage—Prevention is the Only Cure" Something that I picked up on the Internet

Earl Dodds

References: "Unearthing Justice, How to Protect Your Community from the Mining Industry" by Joan Kuyek

Acid rock drainage predictions: A critical review, Journal of Geochemical Exploration, volume 172, January 2017.

ACID MINE DRAINAGE (AMD)

THE MOST PROMINENT WAY IN WHICH WASTES HAVE POLLUTED SURFACE WATERS AND GROUND WATERS IS THROUGH ACID MINE DRAINAGE. THIS PROCESS BEGINS WHEN MINERALS COMMON IN MINING WASTE---USUALLY PYRITE OR OTHER METAL SULFIDE ORES— COMBINE WITH OXYGEN- RICH WATER TO FORM SULFURIC ACID. IN ADDITION TO BEING HIGHLY CORROSIVE, THE ACID CAN DISSOLVE HEAVY METALS SUCH AS LEAD, ZINC, CADMIUM, AND
COPPER THAT ARE LEFT IN THE TALINGS PILES OR EXPOSED THROUGH EXCAVATION. THE SOLUTION FLUSHES DOWNSTREAM, FOLLOWING THE REGULAR FLOW OF THE WATERCOURSE. WHEN ACID MINE DRAINAGE IS SUBSTANTIAL, AQUATIC LIFE VIRTUALLY DISAPPEARS AND THE RIVER BOTTOM BECOMES COVERED WITH A LAYER OF REDDISH SLIME THAT OFTEN CONTAINS HEAVY METALS. ACID MINE DRAINAGE WATER CAN BE 20 TO 300 TIMES MORE ACIDIC THAN ACID RAIN. THE COPPER, GOLD AND SILVER INDUSTRIES, ALL PROMINENT IN THE WEST, HAVE THE HIGHEST POTENTIAL FOR CREATING SUBSTANTIAL ACID MINE DRAINAGE.

Journal of Geochemical Exploration
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Acid rock drainage prediction: A critical review

Bernhard Dold ✉

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Highlights

- Standard Acid-Base Accounting does not account for complexity of the mineralogy of an ore
- Standard calculation factor of 31.25 overestimates neutralization potential, thus 62.5 is recommended.
- Kinetic testing does not give conclusive results in accordance with ABA.
- Automated quantitative mineralogy is the most appropriate technique for ARD prediction
- Trace element composition of the mineral assemblage is needed for ARD

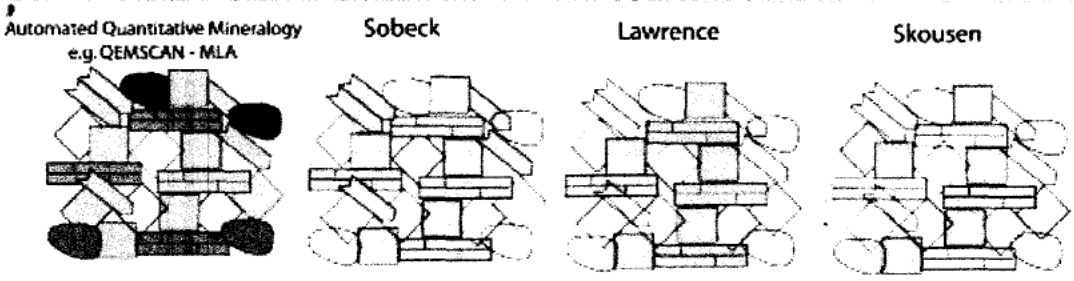
prediction

Abstract

Acid rock drainage (ARD) prediction is a very important issue in order to predict and prevent environmental pollution associated with mining activities. Nowadays, simple tests are widely applied and established in the mining and consulting business for ARD prediction. These tests have many known errors and problems, as that they do not account for the complexity of the mineral assemblage of an ore deposit, and therefore are not able to predict the geochemical behavior accurately. This critical review has the aim of first, highlighting the geochemical processes associated to the problems of ARD prediction. Secondly, the errors and limitations of the standard static and kinetic tests are highlighted. The currently applied calculation factor of 31.25 for sulfide acid potential calculation overestimates the carbonate neutralization potential by 100% in its geochemical assumptions. Thus, the calculation factor 62.5, based on the effective carbonate speciation at neutral pH, is recommended. Additionally, standard ABA procedure ignore the acid potential of Fe(III) hydroxides and/or sulfates and do not distinguish between different carbonate minerals. This can be critical, as for example siderite can be a net acid producing carbonate. Therefore, it is crucial to count on accurate quantitative mineral data in order to be able to accurately predict ARD formation and potential liberation of hazardous trace elements to the environment.

In many modern mining operations, quantitative mineral data is nowadays produced in order to enhance the recovery of the extraction process by the incorporation of geometallurgical information (e.g. quantitative mineralogy, mineral liberation, textural information, grain size distribution). Thus, the use of this very same existing data for ARD prediction can increase importantly the precision of ARD prediction, often without additional costs and testing. The only requirement is the interdisciplinary collaboration between the different divisions and data exchange in a modern mining operation.

Graphical abstract



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Keywords

Acid mine drainage; Prediction; Static and kinetic test; Acid-Base Accounting (ABA); Mining; Pollution; Sustainability

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Mine Closure 9/28/20

This is the last of the mining sequences—starting with Prospecting and Claim Staking then going through Exploration, Environment Assessment, Permitting, Start-Up, Operation, and finally ending with Mine Closure. Mine closure and rehabilitation are the last phases of the mineral development cycle. In many ways, this is the most important one of the sequence steps as this determines the condition of the site that is left for future generations.

Mine closure and reclamation are an expensive and lengthy process. If long-term water treatment is needed, this program might well have to function forever. The impacts of mining on the ground are felt in a huge way. The wastes left behind can burden future generations for a long time. Midas needs to maintain long -term responsibilities for long-term hazards or the mine of today will become the Mistakes of Tomorrow. This is true for all four alternatives.

Before there is a mine start-up, Midas needs a **Mine Closure Plan** that details the long-term nature of the various impacts and the need for long-term monitoring, and in some cases, even perpetual care. This post closure long-term monitoring is needed to ensure that the remedial efforts are successful and to detect any new environmental concerns. I request that the final EIS include both a detailed Mine Closure Plan and a detailed post-closure plan for each alternative.

Financial assurance needs to be in place to cover the costs outlined in the Mine Closure Plan as well as unforeseen events such as stability of the pit walls and earthquake activity.

In many cases mines have not been closed properly and are now in the hands of taxpayers through their governments as those who profited from them are long gone. I request that the Financial Assurance bond for Stibnite be set high enough to discourage Midas from abandoning the site and leaving the cleanup for the taxpayers.

References: "Unearthing Justice, How to Protect Your Community from the Mining Industry" by Joan Kuyek

"Hardrock Mine Financial Assurance Principles and Practice"' by the National Tribal Mining Workgroup (Training Session, Oct 11-12, 2017 in McCall, ID)

Earl Dodds

Item # 2

July 9, 2019

FOUR THINGS THAT YOU SHOULD KNOW ABOUT THE STIBNITE GOLD MINE

I have been following the Stibnite Gold Mine (SGM) proposal every since the public was made aware of the plans for a revival of mining on a large scale at this site in 2014. Stibnite has been the scene of much mining over a period approaching a hundred years but nothing on the scale of what Midas Gold is proposing.

The following four things are my principle points of concern with the current mining proposal:

First, Open Pits Midas plans to dig three open pits, only one of which is scheduled to be backfilled. (If you have never seen a mine open pit, you are probably due for a shock. These are giant, deep holes in the ground that will be hideous scars on Mother Earth for a long time, perhaps in perpetuity).

Second, Tailing Dam Midas plans call for a 420-feet-high tailings dam constructed of compacted rockfill, not concrete. This dam would be taller than the highest building in Idaho, (the building at 8th and Main in downtown Boise is 323 feet high). Dams constructed in this manner have a record of failure-think the Teton Dam in eastern Idaho and the Mount Polly disaster in British Columbia.

Third, Water Quality My chief concern with the Stibnite Gold project is with water quality, or as it is sometime know in industry: "Mine Influenced Waters (MIW)." In the case of Stibnite there is a high probability of MIW problems since much of the material that Midas is planning to mine is sulfide in nature. The mining of sulfide- ores leads to the creation of sulfuric acid (battery acid) and this brings about the condition of acid mine drainage (AMD) that has a high probability of polluting downstream waters and killing fish. AMD and MIW are well documented on the Internet, and as they can lead to the need for long-term water treatment, these are certainly matters that must be addressed in the permitting process.

Fourth, The antiquated 1872 Mining Law As a large portion of the lands that Midas is planning to mine are parts of the Boise and Payette National Forests, and therefore Federal lands, the Stibnite Gold proposal falls under this law that provides special treatment for mining. I could write a book about all the injustices that have taken place under this law. The public has been regularly ripped off both financially and environmentally for nearly 150 years. The one aspect of this law that I find particularly troubling, and I want to call to the attention of the public, is that the law requires no fees or royalties for the extraction of hardrock minerals. We just give the gold away free of charge in keeping with the 1872 Mining Law. Now here we have Midas Gold, a Canadian Company, proposing to produce in excess of 4 million ounces of gold valued at $1350/ounce over the 12 year life span of the mine. That's a lot of money to be giving away royalty-free to a foreign mining company!

For the reasons stated above and a lot more, the proposed Stibnite Gold Mine is clearly a bad idea for the public and the environment. Earl Dodds.

Long-Term Water Treatment 10/10/20

I feel obligated to use this opportunity to document the troubles with closure at the Summitville mine in western Colorado as the situation there is similar to Stibnite. The two mines, Stibnite and Summitville, have much in common in that the ownership of both is Canadian, both are brownfield sites in that there is a history of past mining at both sites with a large amount of ground disturbance. Both are primarily gold mines, and I believe that I am safe in saying that both were, or intend to, mine sulfide-ores.

I hope the similarity will end there as Summitville polluted 17 miles of the Alamosa River with mine wastes killing fish. The mining company then decided to close, went through the motions of starting on a long- term water treatment program but soon gave this up, declared bankruptcy, and moved back to Canada leaving a big mess for the American taxpayers to cleanup.

The USEPA took over the site, gave it a Superfund classification, installed expensive water treatment equipment, and entered into a long- term water treatment program costing $2M annually.

This the EPA did for 27 years, but that's not the end of the story. Recently the EPA has completely backed away from the site and turned all responsibilities at Summitville over to the State of Colorado, including the $2M annual long-term water treatment expense that might well last forever-perpetuity.

As there are multiple links on this subject on the Internet that might lead to confusion, I suggest that you type: "One of Colorado's worst Superfund sites has..." in the search box at Google for the full newspaper story including pictures.

Now this is not speculation, it is a reality, it is actually taking place right now in real time. Could much the same thing happen at Stibnite? It is my contention that, of course, it could. There is too much similarity between the two sites to not give Stibnite the attention and scrutiny that should have been directed at Summitville during the planning stage well before actual mining.

If you were to ask the Midas PR team about Summitville you would probably get: "No Way!" But let me tell you a little about Midas's PR people as I have been down this road before. In general, the PR team will agree to most anything in order to gain approval of the project. Once the Record of Decision is signed, and the mining company has permission to mine, Good-by PR team! and the miners take over.

This group knows how to move dirt and dig huge holes in the ground but when it comes to things like the need for long-term water treatment, promises made some 10-15 years in the past, they are often hard to work with. For on-the- ground closure requirements and

enforcement, the regulators will be working with an entirely different group-the miners. Once the mine is in operation, it is extremely difficult to regulate the company's actions and to hold it to promises made during the permitting process. We need to take particular note of this as Midas's public relations people seem willing to agree to most anything to get their Stibnite project permitted.

The Financial Assurance Performance Bond needs to be set high enough to discourage Midas from abandoning the site and leaving cleanup and the need for long-term water treatment that may well last into perpetuity to the State of Idaho. This is what is happening at Summitville and we sure don't want to repeat this failure at Stibnite on the part of the permitting agencies. The Financial Assurance Performance Bond needs to be part of the permitting process and in place before there is any actual mining.

Conclusion, I have a fear that the Forest Service and Midas people who will be working with the rather large volume of Letters of Comment received from the public on the DEIS will want to discard this one as it opens a whole can of worms, and would create a lot of work for them. Their reasoning might be that this is a Colorado problem, not Idaho's; Midas has no intention of abandoning the site; and that this is all conjecture based on a set of circumstances that are not germane to Stibnite.

My response to this is that they would be placing themselves as being on the wrong side of a possible: "I Told You So! You Didn't Listen!" situation that everyone wants to avoid. Just imagine the public indignation if the State of Idaho got stuck paying for one of Midas's environmental mistakes, especially so when the Forest Service had a warning of this eventuality.

"Those who cannot remember the past are condemned to repeat it" George Santayana (1905)

Or: "If we must err, let's be sure that we err on the side of caution". (No Mine)

References: Internet, In the search box at Google, type: "One of Colorado's Worst Superfund Sites has...." The Denver Post, July 10, 2018.

Acid rock drainage prediction: A critical review, Journal of Geochemical Exploration volume 172, January 2017.

"Hardrock Mine Financial Assurance Principles and Practice" National Tribal Mining Workgroup, (Training Session, McCall, Idaho, October 12. 2017)

Earl Dodds

[redacted]

https://www.sciencedirect.com/science/article/abs/pii/S0375674216302333

Acid rock drainage prediction: A critical review

Acid rock drainage (ARD) prediction is a very important issue in order to predict and prevent environmental pollution associated with mining activities. Nowadays, simple tests are widely applied and established in the mining and consulting business for ARD prediction. These tests have many known errors and problems, as that they do not account for the complexity of the mineral assemblage of an ore deposit, and therefore are not able to predict the geochemical behavior accurately. This critical review has the aim of first, highlighting the geochemical processes associated to the problems of ARD prediction. Secondly, the errors and limitations of the standard static and kinetic tests are highlighted. The currently applied calculation factor of 31.25 for sulfide acid potential calculation overestimates the carbonate neutralization potential by 100% in its geochemical assumptions. Thus, the calculation factor 62.5, based on the effective carbonate speciation at neutral pH, is recommended. Additionally, standard ABA procedure ignore the acid potential of Fe(III) hydroxides and/or sulfates and do not distinguish between different carbonate minerals. This can be critical, as for example siderite can be a net acid producing carbonate. Therefore, it is crucial to count on accurate quantitative mineral data in order to be able to accurately predict ARD formation and potential liberation of hazardous trace elements to the environment.

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[redacted]

https://www.cpr.org/2018/07/10/epa-tells-colorado-to-take-over-the-summitville-mine-cleanup/

EPA Tells Colorado To Take Over The Summitville Mine Cleanup

Colorado is set to take on the $2 million-a-year financial burden of a cyanide gold mine that became an environmental disaster.

The Denver Post reports Colorado must pay the $2 million for Summitville Mine, a bill that the EPA has been handling for the last 27 years, starting in 2021 for cleaning a fluctuating flow of up to 2,100 gallons a minute of toxic water that drains down a once-pristine mountainside.

The Colorado Department of Public Health and Environment will run a $18 million industrial water treatment plant there.

More about Summitville from the EPA:

> *The 1,400-acre Summitville Mine site is a former gold mine in Rio Grande County, Colorado. Gold mining started in the late 1800s. By 1984, the Summitville Consolidated Mining Corporation Inc. began open pit mining for gold, copper and silver. Mining processes, waste disposal practices, and the discharge of large amounts of copper and other metals to Wightman Fork and the Alamosa River contaminated soil, surface water and groundwater with heavy metals. Following cleanup, operation and maintenance activities are ongoing.*

The plant houses huge stainless-steel vats of burbling brown sludge. Toxic metals are chemically coaxed and filtered out.

Colorado also must oversee the artificial covering and drainage ditches 1.7 square miles of tundra scarred by open-pit mining.

ACID MINE DRAINAGE (AMD)

THE MOST PROMINENT WAY IN WHICH WASTES HAVE POLLUTED SURFACE WATERS AND GROUND WATERS IS THROUGH ACID MINE DRAINAGE. THIS PROCESS BEGINS WHEN MINERALS COMMON IN MINING WASTE---USUALLY PYRITE OR OTHER METAL SULFIDE ORES— COMBINE WITH OXYGEN- RICH WATER TO FORM SULFURIC ACID. IN ADDITION TO BEING HIGHLY CORROSIVE, THE ACID CAN DISSOLVE HEAVY METALS SUCH AS LEAD, ZINC, CADMIUM, AND COPPER THAT ARE LEFT IN THE TALINGS PILES OR EXPOSED THROUGH EXCAVATION. THE SOLUTION FLUSHES DOWNSTREAM, FOLLOWING THE REGULAR FLOW OF THE WATERCOURSE.

WHEN ACID MINE DRAINAGE IS SUBSTANTIAL, AQUATIC LIFE VIRTUALLY DISAPPEARS AND THE RIVER BOTTOM BECOMES COVERED WITH A LAYER OF REDDISH SLIME THAT OFTEN CONTAINS HEAVY METALS. ACID MINE DRAINAGE WATER CAN BE 20 TO 300 TIMES MORE ACIDIC THAN ACID RAIN. THE COPPER, GOLD AND SILVER INDUSTRIES, ALL PROMINENT IN THE WEST, HAVE THE HIGHEST POTENTIAL FOR CREATING SUBSTANTIAL ACID MINE DRAINAGE.

irregularities with the Stibnite Gold NEPA process

Introduction. With a project as large and complex as the Stibnite Gold mine project the law requires the preparation of an Environmental Impact Statement (EIS) in keeping with the provisions of the National Environmental Policy Act (NEPA). For almost 50 years, NEPA has been the "Bill of Rights" for the environment. It is one of the nation's most important laws protecting public health and the environment. In the case of Stibnite we are currently reviewing and commenting on the Draft EIS prepared by the Forest Service and the mining company. This is the last opportunity that the public has to comment on a proposal that has the potential to change life styles for many of us for years into the future in not only Valley County, Idaho, but in a large part of the Pacific Northwest that is downstream from Stibnite.

People will have to live with the consequences of the Stibnite EIS for a long time so let's be sure that our voices are heard now on the adjacency of the DEIS. Let's make NEPA work like it is supposed to work -for the little people of Valley County, not just for a foreign mining company. Many of us are concerned that the DEIS comes across as justification for everything that the mining company-Midas Gold- would like to do on public land with little regard for input from the public. Not only that, but we see **irregularities**-things that are just not right- in the DEIS that causes us concern. I will use this opportunity to document a few of these **irregularities.**

The Midas Gold Team, To start this discussion I would like to call attention to one of the very first documents that Midas released for public review: The "Stibnite Gold Project Prefeasibility Study Technical Report" prepared by the M3 Engineering and Consulting Firm of Tucson, Arizona with an issue date of December 15, 2014. This is a very impressive document, a professional report, prepared by a professional outfit in a professional manner. The names of the seven Professional Engineers who did various parts of the Study are on the cover. There is a Date & Signature page. Each person has a full -page resume detailing their qualifications and experience for working on the specific chapters of the report that they are responsible for. I have nothing but praise for this report. A good solid A+.

In contrast (and here comes the **irregularity)** we have the all-important Plan of Operation and Restoration (PRO) to formally start the NEPA process that is produced by: "The Midas Gold Team"-signed in long hand at the end of the introduction. There is no further information as to the composition of the team and their qualifications for working on a project of this magnitude.

Midas is long on claiming that they are open and transparent in all their dealings but they sure missed the boat here. A grade for the PRO as in school? I say no higher than a D and a **irregularity.**

Biological Assessment, (BA). The biological assessment is an important part of the preparation process for an EIS. This is the document that looks into all possible impacts of the project to a long list of natural resources. In the case of the Stibnite Gold mine, we who have been involved with the project since its inception have identified the potential impacts to the anadromous fish

resource of salmon and steelhead as our most important concern. These fish are on the verge of extinction and don't need another obstacle to their survival. The record of gold mining and the fishery resource has been one of incompatibility-the two just don't mix.

The usual procedure is for the Forest Service Interdisciplinary team of scientists specializing in various fields to write the BA or, at least, closely monitor the BA while it is being prepared by an outside firm. Midas/Barrick has petitioned and been granted permission from the Forest Service to write the BA. This is not a completely uncommon way to produce a BA but it has us wondering if the product will truly be unbiased. To us it is a real risk that comes across as a classic case of hiring the fox to guard the hen-house and an **irregularity.**

Acid Rock Drainage/ Acid Mine Drainage (ARD/AMD) These two closely related conditions are probably the most common problems facing the mining industry in North America. AMD is likely to be a problem at Stibnite since the majority of the ore than they plan to mine is sulfide in nature and, therefore, has a probability of creating AMD.

It seems to many of us that Midas has gone completely around in a circle with their position on a possible AMD problem and are right now about where they were at the start in 2016 with their PRO. That is, at the start of NEPA they completely ignored AMD, and treated it as a nonissue that they didn't want to talk about. Then when a segment of the public brought up a possible AMD situation during scoping, they gave AMD some mention in their NEPA documents but tended to down play the AMD issue.

Now in the DEIS they give quite a lot of attention to AMD and even documented the results of a testing program to predict the likelihood of AMD. If they had done this testing in a proper scientific manner, those of us whom have been concerned with AMD would probably be ready to go along with the results, but the testing was so haphazard that we have serious doubts about the conclusion.

Now just what are we so concerned about? The use of Humidity Cell Testing (HCT) is well recognized to predict ARD, and we have no concern with the actual testing. But only 14 HCTs for the entire area scheduled for mining-three open pits- not nearly enough! Geology mapping has determined that there is a total of 20 lithologies (rock types) in the area that is to be disturbed by mining. In order to be reliable, there should be a representative number of samples in each rock type. Thus, there should be a minimum of 40 samples. Also needed is a site map showing the location where each sample was taken. Without such a map. the testing has little value.

We are not alone with questioning the value of this testing. Take a look at the enclosed newspaper clipping dated 9/10 20 in which Midas declares AMD at Stibnite to be a myth. Thus they have almost completed the circle and are back to the position on AMD in their PLO released in 2016 to start NEPA, and we have a **irregularity.**

One other thing with this clipping –"We have studied 50,000 samples of rock...."Come on, give me a Break! They don't really think that people will believe this."

Conclusion, One of my intentions in writing this piece about irregularities with the Stibnite Gold mine DEIS is that I want to document what I regard as undue influence by Midas in preparing the DEIS. It is hard to convince people that you have a truly unbiased conclusion when you pay someone for their input—'Hired Guns' The entire document comes across as a **irregularity.**

Earl Dodds

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