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Title:

Comments: I was born and raised in McCall by a father who claimed where you live is more important than how much money you make. He had two Masters degrees in the sciences and taught science in the local high school. Hunting and fishing were very high priorities for him. Through that introduction, I have been an avid outdoors person and have spent significant time in the back country. I was an RN in the local hospital for 20 years after moving back to the area.

Clean air and water are high priorities for me. Climate change and its effects are real. I am greatly concerned by our countries leaders lack of incentive to curb our contributions to it. Also, Our treaties with the Indian tribes need to be honored.

## Purpose and need:

Gold is not essential to our country in any way. It is a luxury item. To put at risk this particular, pristine environment for an at best limited reward is unacceptable. With our current knowledge of the effects to our environment this project will have or potentially have, why would we move forward. How is compliance to the Plan of Operation ensured, who will pay, for how long? How can the bond amount be determined? Historically it is the taxpayers who are held to account for mitigation, remediation and final reclamation. It should be insured that that will not happen this time. There are many unknown variables to consider such as climate change with increased temperature and decreased precipitation, leading to greater risk of wild fire on larger scales, seismic activity in the area, acid rain, contamination of air and water, and dam failure...

## Tribal rights:

To start with we have our word to the Indian tribes who we signed treaties with in 1855 and 1863. Both predating the Mining Act of 1872. Going back to 1831 the Secretary of the Interior was delegated specific trust holding responsibilities, including the protection of treaty rights. The Forest Service obligations include management of National Forest Service lands consistent with other Federal laws and the protection of off reservation rights. The Federal Government's consistent promise in the treaties it signed is to protect the safety and well being of the Indian tribes and tribal members including "ecosystem integrity".

## Clean air/water:

With improvements in technology more needs to be incorporated into this project. Stack scrubbers to mitigate Nitric Acid (HNO3), Oxides of Nitrogen(NOx), Nitrate species, Sulfur Dioxide (SO2), and Sulfate species emissions.

Clean alternate fuel or innovative technologies such as, catalytic reduction (SCR) lean NOx trap (LNT)and, diesel particulate filters (PPF) to decrease emissions should be required.

Acidic deposition from the mining activity clearly violates the treaties. Not only the air will have increased levels of particulate matter from road traffic, blasting, rock crushing, ect. but the increased emissions that increase CO2 by 0.8 tons for every ounce of gold will be produced. This increases greenhouse gases leading to further climate change. A more current climate change report than 2010 is indicated as knowledge about climate change is evolving and has changed in the last 10 years.

This project will effect the quality of the Wildernesses areas surrounding the project. Haze increase 4.73% as well as the other emissions degrading the wilderness areas. Wilderness as defined in the Wilderness Act of 1964 "(c) A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is

a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

Water quality will be impacted by the emissions, acidifying the environment, increasing temperatures, degrading aquatic life making fish unhealthy to eat due to mercury. The amounts of mercury in the environment has been on the rise from industrialization already.

In the DEIS it states that potential new or altered emission sources may arise. Inability to quantify emission related to antimony concentrate shipment. How is this acceptable?

The US National Library of Medicine and National Institute of Health have the following to say:

Antimony can lead to lung diseases, hearth problems, diarrhea, severe vomiting and stomach ulcers. 9 mg/m3 leads to irritation of eyes, skin and lungs. Long term inhalation can potentiate pneumoconiosis, altered electrocardiograms. Biological monitoring in the workplace is essential.

Mercury is one of the most toxic heavy metals in the environment. Elemental Hg tends to form colorless and odorless Hg vapors, which can remain in the atmosphere for long periods and can be transported over long distances.

Nitric acid can cause irritation to the eyes, skin, and mucous membranes. It can also cause delayed pulmonary edema, pneumonitis, bronchitis and dental erosion. It is highly corrosive.

Nitrogen oxide (from exhaust emissions) is a mixture of nitric oxide and nitrogen dioxide. It is colorless and oxidized in the atmosphere. It has an odor and is an acidic and highly corrosive gas that can affect our health and environment. It can cause damage to the respiratory tract and increase a person's vulnerability to, and the severity of, respiratory infections and asthma. It can cause chronic lung disease. It may also affect the senses, for example, by reducing a person's ability to smell an odor. High levels are harmful to vegetation, damaging foliage and decreasing growth. Recommended air quality standards: 0.12 ppm for a one hour exposure period and 0.03 ppm for an annual exposure period.

Sulfur Dioxide is a major pollutant in the atmosphere. It leads to respiratory tract inflammation, bronchitis, emphysema, conjunctivitis, and other health problems. It weakens the human immune system. Sulfurous acid is formed when sulfur dioxide reacts with water. If sulfur dioxide is further oxidized sulfuric acid (the main component of acid rain) is generally formed in the presence of a catalyst, such as nitrogen oxide. This occurrence is one reason sulfur dioxide exerts a major impact on the ecosystem. In addition to it's serious negative impacts of plants, animals, and buildings, it directly leads to economic losses from metal corrosion. Sulfur dioxide emissions have to be strictly regulated because of their adverse impact on the environment, ecology and economy. Accurate predictions of Sulfur dioxide emissions are essential for governments.

Arsenic is associated with cancer and with nonmalignant lung disease. It is suspected for cardiovascular disease and to those exposed in utero to glucocorticoid system (involved in learning and decreased memory) problems. It gets in our foods form vegetables grown in arsenic contaminated areas, and our drinking water.

These toxic emissions are not child's play. We have a responsibility, not just to the human race, but to the flora

and fauna of this earth. To accept this DEIS is to abdicate that responsibility. The gold and antimony are not going anywhere, why not wait until there are better ways to mitigate for these toxic emissions or to eliminate them all together. Technology is improving at a rapid pace and I believe that there will be a way to mine this area without all the associated costs involved.