From:	Kevin Whitworth
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Project DEIS Comments
Date:	Friday, May 27, 2016 5:00:13 PM
Attachments:	Donlin Gold Project DRAFT EIS Comments.pdf

To Whom It May Concern,

See attached comments, pages 1 through 6.

Thank you,

Kevin & Dara Whitworth
PO Box 251
McGrath, AK 99627
907-524-3344

Donlin Gold Project DRAFT Environmental Impact Statement Comments:

May 25, 2016

Prepared by: Kevin and Dara Whitworth PO Box 251 McGrath, AK 99627
email: okwhitworth@gmail.com

Introduction:

After careful analysis of the alternatives presented in the Draft Environmental Impact Statement (DEIS) document, I have determined that the best alternative is Alternative 1, the no action alternative. Alternative 1 would be, by far, the best action alternative for everyone and everything; especially for the people who use the Kuskokwim River watershed, and the wildlife and wild things that inhabit the same area. Alternative 1, protects the Kuskokwim River watershed with its; astonishing beauty, large biological diversity, clean water, clean air, and the overall enjoyment. Alternative 1, also protects the subsistence way of life, the wilderness characteristic, and the livelihood of the people that live in the Kuskokwim River watershed.

The following are my reasons for not supporting development of the mine and supporting Alternative 1, the no action alternative.

Contamination: Dust, chemical spills, harmful fumes, and heavy metals are several contaminant issues of the proposed mine. These contaminates can poison workers, and/or people that live and use the Kuskokwim River watershed, and can cause life-long health problems, allergic reactions, as well as many other problems. These contaminates are capable of negatively impacting the water, the wildlife, the fish, the environment and, ultimately, the entire Kuskokwim River watershed and the people who live on it.

The proposed mine will require a vast amount of water to operate and will leave that water contaminated. Surface water and groundwater will remain contaminated for many years, even after the mine has closed, and will contaminate the creatures and people who, live near, drink, or depend on the water.

The proposed mine will expose 3,000,000,000 tons of rock that will be stored at the waste rock facility, this facility would cover an area 2,240 acres in size. Other areas that would be exposed with rock will be the runways, roads, parking lots, camp area, etc. and all will produce hazardous dust that contains, arsenic, which is released into the air by weathering of minerals and ores that would be produced by the proposed mine. Arsenic is very toxic to humans and has been associated with many cancers, including but not limited to; skin, bladder, liver and lung cancers. Other chemicals found in the toxic dust would be, Calcium oxide and copper sulfate, which are also hazardous to human health.

The large waste rock facility and associated infrastructure, would not only produce toxic dust, but would also produce large amounts of acid in just a few years' time. The acid would leach out of the unlined- rock and pollute water sources. Furthermore, the surface of the exposed rock would produce acid dust and acid rain which in turn will pollute the surrounding area.

All associated construction areas, that use waste rock from the proposed mine, should be lined with an impermeable lining to prevent any seepage of untreated and toxic waste water into the environment. Furthermore, the toxic waste water from these facilities must be treated before being released into the environment. The waste rock also needs to be covered immediately to stop the formation of dust.

The proposed mine will require a very large amount of chemicals that are detrimental to both the environment and humans. These chemicals include but are not limited to: potassium amyl xanthate (8,378,000 pounds annually used), which is highly toxic to aquatic life and toxic to humans as well; nitric acid (1,322,000 pounds annually used), which is very hazardous to humans; sodium cyanide (5,070,000 pounds annually used), also very hazardous to humans; calcium oxide (42,054,000 pounds annually used), very toxic to humans; copper sulfate (4,850,000 pounds annually used), which is very toxic to aquatic organisms and could cause long-term adverse effects on the environment and also is harmful to humans; and sulfur (2,828,000 pounds annually used), which is toxic to animals and very toxic to humans.

The proposed mine, will increase the amount of mercury entering the Kuskokwim River watershed, which is a system that is already experiencing high levels of mercury. Right now, it is recommended by health corporations and the State of Alaska, to limit the amount of certain Kuskokwim River fish eaten by infants and pregnant women. I do not support a mine that will increase the amount of mercury in an area already experiencing mercury toxicity. Furthermore, the proposed mine will increase the potential of a harmful cyanide breach to the Kuskokwim River watershed. History demonstrates the unreliability of mine containment systems and it is only a matter of time, before a breach or spill will occur.

The DEIS does a very poor job of identifying contamination issues and how they will affect the people who would work around the proposed mine, the environment, and the people that live within the entire Kuskokwim River watershed. The highest concentration of contaminates will be in the Cooked Creek drainage, but will spill into the mainstream Kuskokwim River and contaminate the anadromous fish, aquatic invertebrates, animals, and people. Long term effects of chemicals on the environment and humans is difficult to study, but is well documented and the chemicals to be used by the proposed mine are some of the worst for both the environment and humans. Alternative 1, the no action alternative, is the only alternative to prevent these long and short term contamination issues.

Barge Traffic: Fish die offs, increased erosion, noise pollution, and oil spills are just a few issues that increased barge traffic could bring to the Kuskokwim River watershed. Although, the increased barge traffic will be in the lower river, the affects of increased barge traffic are

capable of harming the entire watershed in many ways. The fish, wildlife, and people of the entire watershed will be negatively impacted by the affects of increased barge traffic, and the only way to avoid it is to support Alternative 1, the no action alternative.

All fish species will face negative affects from the increase in barge traffic, but most importantly, the salmon species will be negatively affected. Population numbers of salmon species are already an area of concern, with users of salmon species experiencing restrictions because of low population numbers. The increased barge traffic will not help the issue. It is known during low water periods that the large wake from barges shoves juvenile salmon species up on river beaches and will leave many stranded, where they are venerable to predators or desiccate and die. The decrease in the survival of juvenile salmon species will not only affect the lower river users, where the traffic is found, but will affect all people who harvest salmon on the entire Kuskokwim River; both its commercial users and personal-use users.

Furthermore, during high water periods, barge wakes can significantly increase the amount of river bank erosion. Although the increased barge traffic is located in the lower river, the entire Kuskokwim River system could be impacted. Rivers have a tendency to correct for a change that may happen downstream or upstream. If increased erosion happens in the downstream portion of the river, due to the increased barge traffic, then the upstream areas will begin to erode quicker to correct for that downstream change.

Although, erosion accrues naturally on the Kuskokwim River, an increase in the speed of erosion will affect many villages, cabins, personal use areas, runways, infrastructure, and may threaten some by increasing pace of river bank erosion. Increased erosion will necessitate some communities having to plan for these changes; where some have to move facilities to save them, some will need to build dikes, and others will have to let the erosion take its course and let facilities go, because costs to move the buildings or cabins are too great. Bonding will not cover this issue.

The DEIS does not link these two issues (increase barge traffic and erosion) to the entire Kuskokwim River watershed, rather the DEIS considers these issues a lower river issue. I believe more time must be spent on these very important issues, and their impacts to the entire watershed.

Land Management: Animal poaching, trespass, government taxes, and land degradation; are just a few issues that will come with the proposed mine. The proposed mine will bring more people to the area, not only near the mine site, but to the entire Kuskokwim River watershed; and with an increase in numbers of people, land management issues also increase. Issues of trespass, competition for already limited resources, increase in ATV/snow-machine traffic leading to trail building, and increased user conflicts, are only a few of the potential land management issues the watershed faces.

If the proposed mine happens, a borough will likely be established in the lower and middle Kuskokwim River regions. With that, the potential for taxing of private lands could happen, increased regulations to land owners, and increased government oversite would occur. Land owners to the region are some of the poorest in the United States and any increase in taxes will have a negative impact to the people of the region.

The DEIS does a poor job addressing the adverse effects that the proposed mine will bring to the entire Kuskokwim River watershed and the people who use and inhabit it. Alternative 1, the no action alternative, is the only means of ensuring these negative affects do no occur.

Pipeline and Corridor: The proposed pipeline and associated corridor is arguably one of the greatest negative impacts to the upper Kuskokwim River region and the people who use it. Yet, the negative impacts are farther reaching than the upper Kuskokwim River region, and will negatively impact the entire Kuskokwim River watershed and those that inhabit it. The pipeline and corridor will not only leave a scar on the landscape, but negatively impact wildlife, fish species, scenic beauty of the region, and ultimately, the people that utilize the area, not just the people of the upper Kuskokwim River, but people from all over the world that travel to the area to hunt and recreate. The construction of the pipeline and corridor will increase the likelihood of a potential oil spill from fuel storage facilities; a threat to land, animals, and people. The only way to avoid the negative impacts from the construction and use of the pipeline and corridor is to support Alternative 1, the no action alternative.

The pipeline and corridor will negatively impact the Iditarod National Historic Trail, and will disturb the cultural and aesthetic values of the trail, resulting in; a decrease in the scenic beauty, decreases in the opportunity to seek solitude, an increase in noise pollution, and a decrease in the desirability by some user groups to use the trail. These effects ultimately, lead to less eco-tourism, fewer wilderness seekers wanting to use the trail and travel to the upper Kuskokwim River region, and a decreased amount of commerce associated with the trail. The pipeline corridor will increase access opportunities to the region, especially for non-wilderness seekers, resulting in more trespass issues, user group conflicts, and increased competition for wildlife and wild things.

The pipeline and corridor will cross hundreds of streams, rivers and tributaries. Disturbance to these tributaries will change them forever and will have a negative effect on wildlife and fish species. The Big River is one of the rivers the pipeline will cross. Just downstream of the proposed crossing, is a very important Sheefish spawning ground and if the pipeline is constructed it will have the largest negative impact to a single fish species on the whole Kuskokwim River system. Eighty percent of documented Sheefish spawning grounds are located on the Big River of the Kuskokwim River. The Sheefish spawning grounds make up an area 0.136 percent of the entire Kuskokwim River. An impact to this very small area of spawning habitat would have a disproportionately large impact to the entire Sheefish population of the watershed. Declines in Sheefish spawning success and survival caused by pipeline disturbance will negatively impact to both the species and the people who utilize it.

The DEIS does a poor job studying the impacts of the pipeline and corridor to the people, in particular. Negative impacts to way of life, fishing success, hunting success, and productivity of trapping grounds are of particular concern. The pipeline and corridor also has the potential to impact cultural and archaeological interests, such as graves and artifacts, but the long term effects harm both current and future generations within the watershed.

Endangered/Threatened Species or Species of Concern: The DEIS does a poor job identifying and addressing the topic of endangered/threatened species or species of concern. Many animal species will be negatively affected by the proposed mine and some of those species cannot take any more negative disturbance, some of those species are, but are not limited to:

The endangered plant species **Smelowskia pyriformis**, found to date only at three sites in the upper Kuskokwim river drainage on foot hills of the western Alaska Range, located where the pipeline and corridor will be constructed, any disturbance to this habitat could bring this species to extinction.

The **Rusty Blackbird**, a species of concern that recently has declined from 13 million birds to 2 million, breeds in the boreal forest of Interior Alaska. A possible cause of this species decline is due to acid rain and mercury accumulation on the breeding grounds. The proposed mine and pipeline will negatively impact breeding success for this bird species, necessitating a endangered or threatened listing.

The **Big River Caribou Herd**, with a population size of about 750 animals, is located where the pipeline and corridor is to be built. Disturbance to the herds habitat and increased pressure of hunting, and herd disturbance from heavy equipment and helicopter use will negatively impact this important herd. The pipeline and corridor will destroy the fragile lichen this species depends on, which cannot be remedied by "reseeding" the disturbed areas. Lichen take hundreds of years to form in the quantities required by large herbivores like the Big River Caribou Herd.

The Kuskokwim River **Chinook Salmon**, a current species of concern, will be negatively impacted by the proposed mine to the point it may be listed as endangered or threatened, necessitating even more stringent fishing regulations. Not only will barge traffic harm the species, but much of the Crooked Creek chinook salmon spawning grounds will be destroyed.

The only way to avoid negative disturbances to these species is to adopt Alternative 1, the no action alternative.

Comment Summary:

The proposed mines visual impacts are far reaching, and affect more than just the surface disturbance at the mine site, but include; the barge landings, access roads, pipeline, pipeline corridor, bethel barge landing, Dutch Harbor barge infrastructure, camps, pits, runways, tailings piles, barge traffic, waste rock facilities, dry stack tailings, dams, plant site, overburden stockpiles, mine site facilities, tank farms, and many other surface disturbances that a person

can see. Yet, it is the impacts that cannot be seen that really concern me, such as; toxic dust, mercury, sodium cyanide, polluted waters, polluted fish and wildlife, increased noise, chemical laden tailings ponds and many other issues associated with a large scale mining operation. Socio-economic issues associated with the proposed mine also scare me because it will change the people who work on the mine, they will have more money for the not so desirable things, like drugs and alcohol. Workers will also be on a work schedule that removes parents, grandparents, children from their communities, and their families. Many things concern me about the proposed mine, and I am not convinced that current mining practices are capable of addressing any of these concerns. Too many mining companies have proven that profit margin is the real driving force behind mine decisions, and not the health and well-being of the people or place where a mine is constructed. That is why I support Alternative 1, the no action alternative, because overall, it is the best decision for the Kuskokwim River watershed and its people.