Georgetown Tribal Council
Native Village of Georgetown
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RE: Scoping Comments - Donlin Gold Proposed Project
Lead Agency: USACE

These scoping comments are being submitted on behalf of the Native Village of Georgetown. The Native Village of Georgetown is situated in southwest Alaska in the valley of the middle Kuskokwim River amid the Kilbuck-Kuskokwim Mountains, just up river from the village of Crooked Creek. The village is approximately 15 miles southeast of the proposed Donlin Gold mine project location. The proposed route of the Natural Gas pipeline runs north of Georgetown, and it is our understanding that it would intersect with the George River in three locations. While Georgetown Tribal Council (GTC) supports economic progress and development, we only do so as long as it is environmentally responsible.

It is our understanding from the Donlin Gold project plan that the implementation of this project would include infrastructure and activities including the following:

- two new ports on the Kuskokwim River, the Jungjuk barge landing location being approximately 25 miles downriver from Georgetown
- a 313 mile natural gas pipeline from Cook Inlet to the mine location, crossing the George River in three locations
- an increase in barge traffic on the river (up to 3 tows per day, each tug pushing 4 barges) at times carrying potentially hazardous materials (examples include cyanide and diesel)

Our comments are made with the consideration that upon implementation of such a large scale gold mine and its associated activities and infrastructure, it is imperative that the objectives of NEPA are being met, to ensure the protection and long term sustainability of our environment and its natural resources. There are four objectives of NEPA we would like to ensure are being met upon response to our comments (Section 101 of the National Environmental Policy Act of 1969, 42 U.S.C. §4331):

> (b) 2 "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings"

(b) 3 “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences”

(b) 4 “preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice”

(b) 6 “enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources”

It is our intention to state clearly the comments we have in relationship to several areas of the proposed Donlin Gold project separately. Several comments are in question format, to merely suggest that additional thought and planning should be given to address these matters. I have numbered in parentheses each specific comment we would like addressed.

Proposed Ports at Bethel and Jungjuk locations on Kuskokwim River

(1)Construction of the two port locations on the Kuskokwim River will ultimately disturb fish and wildlife species, as well as their habitat in the immediate area of the project locations. There are many species of fish that are important to the subsistence way of life including but not limited to humpback and broad whitefish, salmon, sheefish, burbot, and pike. All of these species utilize the tributaries and mainstem Kuskokwim River throughout the year. Salmon are most notable utilizing the mainstem during the summer months as migrating adults; however the other species are resident in the Kuskokwim River drainage throughout the year and utilize the mainstem as a migration route to feeding and spawning areas. As it is impractical to avoid this time for construction, it is our recommendation that information be gathered for when peak times of migration occur at the proposed port locations for these species of fish, and avoid those time frames for construction. This would reduce the impacts such construction would have on a resource of significant importance to the subsistence way of life and the quality of the environment in general.

(2)Broad and humpback whitefish are important to subsistence users in the Kuskokwim area, where they constitute more than half of non salmon fish harvests. Subsistence fishermen have raised concerns over declining body size and abundance of these fish (Harper et al, 2012). Additional information regarding subsistence collection will be necessary to understand how and when this resource is harvested. For this reason, Traditional Ecological Knowledge (TEK) collection all along the Kuskokwim should be collected from each Native Village willing to participate. It is not enough to simply collect this information. After collection, it should be well documented how the information collected is impacting decision making (in this example, times of salmon or whitefish migration could be avoided for construction of ports).

(3)The possible change in hydrology due to such construction should also be taken into consideration. It is unclear if a significant change will take place as a result of this portion of the proposed project. It is also unknown how any changes will be monitored. GTC would like

assurance that water quality monitoring will be conducted at each port location as well as up and downriver from each port location on a continual basis, throughout the entire life of the mine and its reclamation process.

The 313 mile natural gas pipeline from Cook Inlet to the mine location

(4)The proposed route of the pipeline crosses the George River in 3 locations (the main stem, north fork and east fork) and is to be done with the use of horizontal directional drilling. After conducting some research, GTC has found that although popular, this technique lacks control of risks coming from underground. Some of the risks identified by Dr. Kruse in his paper given at the 4th Pipeline Technology Conference in 2009 include "1. High pulling forces or incomplete pull back caused by local bore hole instability, 2. High pulling forces or incomplete pull back caused by frictional forces in the borehole and 3. seepage through the borehole to the surface" (Kruse, 2009). Given these risks, we suggest Donlin Gold be required to perform a soil related risks analysis for the prevention of unwanted events during the drilling stages or after the installation prior to the issuance of any permits for this project.

(5)GTC would also like to see water quality sampling being conducted at each of the proposed points of where the pipeline will cross the George River, as well as a location downriver from these points, and at the mouth of the George, where it meets the Kuskokwim.

(6)The right of way for the pipeline is to be 200 ft during construction and 50 ft following construction, and to be brushed every 10 years. It is our concern that this area will be fenced, thus creating a barrier in areas where subsistence hunting takes place, and would be an impediment to animal migration. (7) It is also eliminating habitat for birds and other wildlife in that area - could brushing take place less often so as to eliminate the need for disturbance to these species?

(8)The proposed plan states that the pipeline is designed to last 30 years. What happens after those 30 years? Will the pipeline be removed or remain onsite? It should be clearly stated in the project plan and taken into consideration during the EIS process so that the impacts of this portion of the project are fully understood and considered prior to permit issuance.

(9)Who will be responsible for maintenance of the pipeline including monitoring for leaks? Will it be the Natural Gas Company or Donlin Gold? (10) If others are allowed to buy into the pipeline for personal use, will they be responsible for that portion alone or will Donlin or the Natural Gas company still cover maintenance and monitoring? It is important to be clear about this up front, to ensure proper monitoring and accountability.

(11)It is our understanding that recent court rulings classify greenhouse gas emissions as pollutants under the Clean Air Act, and thus could mean that a full analysis of the cumulative impacts of a natural gas pipeline should be required. Are the cumulative impacts of a natural gas pipeline being considered with the completion of this EIS?

Increased Barge Traffic on the Kuskokwim River

The increased barge traffic on the River causes several significant concerns, on which we would like to comment.

(12)With an increase of barge traffic on the river, disruptions to fish and wildlife species will occur. Increased erosion on the banks of the river could have negative effects on riparian areas that these species depend upon. (13) Juvenile salmon can often be found living in near shore habitats along the banks of the river, and the wakes from barges could push these fish up onto gravel bars, leaving them stranded. These impacts should be well understood and documented prior to construction.

(14)Again, the effect of an increase in barge traffic should be considered in relationship to the migration of salmon, sheefish, humpback whitefish, broad whitefish, bering cisco, least cisco and round whitefish. Adult salmon migration occurs in the main stem of the Kuskokwim River from late May through November, corresponding with the length of time the river is free flowing. Whitefish species migrate upriver from early May through September, and then down again following spawning periods (Harper et al, 2009). Sheefish will spend most of the summer at the mouth of main tributaries such as the George River and then migrate upriver to spawning grounds, occurring in late September and early October. They will then move back downriver fairly abruptly over a span of a week or two in late fall (Stuby, 2012). Because these migration times correspond with times when barges would be travelling up and down the river, it is necessary for the impacts of this increased traffic on these species of fish to be understood.

(15)The movement of the barges through the river could have significant impacts on hydrology. It could cause changes in dissolved oxygen, temperature, total suspended solids, total dissolved solids, and pH levels. These parameters are all of vital importance to aquatic life, and should be monitored all along the Kuskokwim and its tributaries for the life of the mine and reclamation process. GTC has been monitoring water quality for the past 6 years and has developed baseline data for the Georgetown area. It will be important to continue monitoring to ensure and verify the long term sustainability of our ecosystem health.

(16)Another concern with barge traffic lies in what the barges are transporting: cyanide, fuel, and other hazardous chemicals. If and when an incident should occur that would cause a spill, the outcome could be disastrous for those living on the River, and even for far reaching communities that would be affected downstream. This bears a significant "risk to health and safety" for the fish and wildlife populations and village communities along the Kuskokwim River. The project plan states that there will be spill response equipment at Bethel and Jungjuk ports, but what about in between? A spill response plan should be developed for each village along the barge route to ensure the fastest and most effective response time possible.

(17)Barges have been getting stuck increasingly over the past few years, and this also poses a significant risk for potential leaks or spills into the river. There are several stretches of the Kuskokwim of notoriously shallow water, such as the stretch just downriver of the proposed Jungjuk port location, near the convergence with the Oskawalik River. These areas should be studied to be sure that barges of this size could pass through without delay or incident.

(18)Should an area of the river be too low for barges to pass through, would dredging be required? How often and where? With break up each year, gravel gets moved around and channels change so much, that there is concern there would be dredging required each year, and if this is the case, the impacts of this should be properly addressed in the EIS process.

(19)Birch Tree Crossing, just downriver from Aniak (GPS coordinates N 61 35' 15.03 W 159 50' 20.27), in the mainstem of the Kuskokwim River has been identified as a probable location for spawning of humpback whitefish. They were tracked migrating to this location during September and October and then began migration downriver shortly thereafter, an indication of spawning. The habitat is also similar to other known spawning grounds, again indicating a spawning area. However, additional studies during the spawning period are needed to confirm the presence of mature fish in spawning condition at this location (Harper et al, 2012).

(20)Broad whitefish primarily migrate in September to late October and humpback whitefish are already on the spawning grounds at this point. Both of these fish feed little during spawning migration, and thus depend on their stored energy to get them to reach their spawning grounds (Harper et al, 2012). Increased barge traffic could increase energy expenditure during migration of these fish, according to fisheries biologists in the area.

(21) For these reasons, it is GTC's suggestion that studies should be conducted regarding the effect of increased barge traffic on salmon, sheefish, humpback whitefish, broad whitefish, bering cisco, least cisco and round whitefish, . (22)In addition, spawning areas should be confirmed prior to allowing increased barge traffic along the migration routes of these fish and/or dredging in the area of Birch Tree Crossing.

(22)When fishermen use set nets, the waves from the barge wake could disrupt this method of fishing, causing problems for subsistence harvest. (23)Likewise, if commercial fishing were to take place on the Kuskokwim River, the amount of barge traffic on the river could cause significant disruptions for the fishermen. What plans are in place to mitigate these disruptions? (24)The many communities along the proposed route of barge traffic depend on the river for not only fishing, but transportation as well. Will the increase of barge traffic disrupt schedules, or cause harm to boaters?

General Comments

During our research of the proposed Donlin Gold mine, a few general questions were generated that we feel should be answered during the EIS process.

- (25)What plans are in place for dealing with earthquakes and other natural disasters?
    - How would the mine and tailings impound withstand such an occurrence?
- (26)What are the exact GPS coordinates for river crossings along the proposed pipeline route?
- (27)What are the plans for infrastructure once mine life is completed?
- (28)How long and wide is each of the four barges of each tow?
    - Will an additional tug be needed for each or any of the tows?

(29)Finally, it is our understanding that permitting decisions are made after the review of the final EIS and a record of decision is made. It is trusted that Donlin Gold will disclose all planned aspects of the project and associated activities and the EIS would consider all possible impacts of this proposed project. This way, when permits are issued, it is with an understanding of the least amount of risks possible and activities are being allowed in the most environmentally responsible way.

For some of these activities, a specific permit is required from a federal or state agency. After the EIS process is complete and the permit is issued, should there be any changes to the project or permitted activity, a modification to the permit would need to be requested by Donlin Gold, since it is not what the agency would have signed off on and permitted. However, there are some activities associated with the project that are not specifically permitted, but have impacts on the environment nonetheless. These secondary activities and impacts are analyzed and considered in the EIS process, which is used by the federal and state agencies to help make a permitting decision. But since they are not specifically issued a permit to take place, what happens if significant changes are made to these activities following the EIS process? There would be no process such as permit modification to address these changes.

For example, should unforeseen events take place following the NEPA process and permit issuance, and Donlin Gold decided they need to have 5 tows per day rather than the intended 3 tows per day, what would happen? The number of tows per day is not specifically permitted, but a specific number was allowable under the record of decision made on this project. To change the number would cause great implications to fish and wildlife populations, bank erosion, quality of habitat, and communities all along the river – and the premise for which permits were issued will have changed. Would this make all associated permits invalid and thus require a new EIS or would it be allowable since it is not specifically permitted?

If the latter is the case, this causes great concern for the environment and communities all along the Kuskokwim. It should be clear what we are allowing to happen, and if changes are made that will alter the impacts made, whether they are specifically permitted for or not, Donlin Gold should be held accountable for these changes, and re-evaluation required for all activities associated with the mine. Each permit should cover all secondary issues, thus requiring a modification upon any changes, whether it is the primary activity or not.

Please see attached resolution of support for these comments.

Thank you for considering our comments, and we would appreciate a full analysis of each of these comments along with a copy of both the Draft and Final EIS.

References

Harper, K.C., Frank Harris, Steve J. Miller, John M. Thalhauser, Scott D. Ayers (*2012*) Life History Traits of Adult Broad Whitefish and Humpback Whitefish. Journal of Fish and Wildlife Management: June 2012, Vol. 3, No. 1, pp. 56-75.

Harper, K.C., F. Harris, S.J. Miller, and D. Orabutt. September 2009. Migration Timing and Seasonal Distribution of Broad Whitefish, Humpback Whitefish, and Least Cisco from Whitefish Lake and the Kuskokwim River, Alaska, 2004 and 2005. Alaska Fisheries Technical Report Number 105, Kenai, Alaska (pdf)

Dr. H.M.G. Kruse (2009). The trenchless technique horizontal directional drilling Soil related risks and risk mitigation. 4th Pipeline Technology Conference: http://www.pipeline-conference.com/abstracts/trenchless-technique-horizontal-directional-drilling-soil-related-risks-and-risk.

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Stuby, L. 2012. Spawning locations, seasonal distribution, and migratory timing of Kuskokwim River sheefish using radiotelemetry, 2007-2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-65, Anchorage.