

October 21, 2019

Dear Panel Manager:

We have the following questions and concerns regarding the Ninth and Tenth Addendum.

Addendum 10, Package 5, Pg. 24 says:

*“Further, this approach has been implemented and is providing excellent results at the Teck Elk Valley facility where an SBZ has been in operation since 2017.*

*Notwithstanding Benga’s confidence in the selenium removal concept using an SBZ, Benga also recognizes that the concept needs to be implemented well, in consideration of the specific parameters of the Project in order to achieve the excellent results that are possible. That being the case, Benga has and will continue to implement testing and other R & D initiatives to progressively develop the detailed engineering parameters for the first phase of the SBZ which will need to be implemented by ‘Mine Year 4’ after Project construction begins (which in calendar years includes two years of construction and five years of operations). Based on modelling of the development of the first ex-pit rock disposal zones and the time required for water percolation and selenium uptake, elevated levels of selenium in the contact water would not be encountered until that time.”...*

James Snell's online article "Teck Resources Streamlining Water Treatment" dated October 3, 2019, reports that Teck's SRF site at the Elkview Mines moves 10,000 cubic metres of water a day and could increase that amount to 20,000 cubic metres a day. Where is Benga going to be getting this amount of water to use for this treatment plant? After treatment, where is Benga going to send this water? Inconsistent water levels will be environmentally damaging to receiving creeks, disrupting creek beds and aquatic life.

The article also points out that this SRF treatment is a pilot project, new technology that has only been in operation for 20 months. Where is the guarantee that it will prove itself effective over years of operation? Why does Benga believe elevated selenium levels won't occur until after 2 years of construction and 5 years of operation?

Addendum 10, Package 5, Pg. 7 says:

*“The function of the saturated backfill zone (SBZ) will be to convert the selenate in the impacted water to selenite and elemental selenium. If working properly, the elemental selenium will precipitate in the SBZ and the selenite will be removed by adhesion, leading to low concentrations of residual selenium leaving the SBZ. Regardless of selenium species present, the presence of concentrations of residual selenium leaving the SBZ above the proposed threshold would be a signal of improper function of the SBZ, which would require remedial engineering action.”...*

We have concerns over phrasing such as “if working properly” and “requiring remedial action”.

Addendum 10, Package 5, Pg. 29 says:

*“In the event that short term results from the SBZ do not meet the required regulatory standards for selenium or nitrate removal, provision will be made for redirecting any off-spec water to the raw water pond and from there to recirculate through the SBZ. This will allow some time for Benga to make the necessary adjustments to the SBZ operation to achieve acceptable results.”...*

We interpret this to mean, if it doesn't work the first time, it will the second time. What guarantee do we have of that or that the raw water pond will be big enough to hold the off-spec water until “adjustments” are made, and the water treated and tested?

Addendum 10, Package 5, Pg. 43 says:

*“Benga has allocated space in the plant area for a metals treatment plant if required to treat water after the SBZ. Infrastructure for selenium removal is not planned to be incorporated into the metals treatment plant. If required, a selenium treatment facility will be added to the metals treatment facility as an expansion.”...*

We interpret the sentence, *“If required, a selenium treatment facility will be added to the metals treatment facility as an expansion.”* — to mean “if we have a problem, if we discover it, we’ll fix it later... to us, that will be too late for the water quality and the aquatic life.

Addendum 10, Package 5, Pg. 147 says:

*“Lake Koocanusa is the receiving water for the Elk River, which drains the Elk Valley Watershed. There are five active coal mines in Elk Valley. Selenium loadings to Lake Koocanusa from the Elk River are estimated to average about 25 kg/d, which accounts for about 95% of the loading (Lotic Environmental 2018), while selenium concentrations at the mouth of the Elk River vary between 3 and 8 µg/L (Minnow Environmental 2018; Lotic Environmental 2018). At the Order Station within the reservoir, a sampling station mandated by BCMOE for which site performance objectives have been established, selenium concentrations typically range between 0.5 and 1.5 µg/L, with a mean of about 1 µg/L (Minnow Environmental 2018), which is lower than the BC water quality guideline of 2 µg/L (BCMOE 2014). The Order Station is about 5 km “downstream” from the mouth of the Elk”...*

In a Fernie Free Press article dated October 11, 2018, “Lake Koocanusa Under Microscope” by Kimberley Vlasic, - we quote: “Teck’s efforts to address water quality, which include \$900 million allocated over five years to building water treatment facilities”...

There is no assurance that Benga will allocate **any** funds to building a water treatment facility for this proposed project.

From Addendum 10, Package 5, Pg. 146

*“The Oldman Reservoir is outside the Project defined spatial boundaries.”...*

However, it is downstream from the proposed project. Benga, uses Lake Koocanusa as an example for selenium sampling (drains the Elk Valley Watershed) yet still dismisses any threat to the Oldman River and downstream users as being “outside defined boundaries”. Please note that this downstream water is going to be pumped up into the Castle Provincial Park and the Castle Wildland Park.

From Addendum 10, Package 3, Pg. 32

*“Benga is currently in discussions with Alberta Transportation regarding necessary upgrades to intersections as a result of the Project. Benga anticipates providing some financial support for these upgrades.”...*

To us, the phrase “anticipates providing some financial support for these upgrades” means Benga (and Benga’s out of country CEO’s) reap the benefits of provincial and federal taxpayers funds to improve their infrastructure.

From Addendum 10, Package 3, Pg. 30

*“Estimates of provincial and federal income tax for metallurgical coal prices of \$100 USD/tonne and \$200 USD/tonne...”*

In the Fernie Free Press, October 10, 2019, article “Unprecedented downturn results in uncertainties for Teck” by Phil McLachlan, - we quote: “The company said that not only is the magnitude of the decline substantial, but the rate of decline is “unprecedented””...

And “A positive market for the past three years ‘never lasts forever’ explained Sheremeta... This, he said is the nature of the business.”

And “Sheremeta explained that they have lost 80 percent of their margins in just four months, with no end in sight.” ...

And “Cost reduction program...immediate hiring freeze...salaries are frozen...project declined or halted...job losses”...

A similar downturn in coal prices affected this area in 2015. Four years ago. We are questioning the “financial benefits” and any true economic long term benefit for this community with such a volatile market using a non renewable resource.

From Addendum 10, Package 1, Pg. 5

*“The train loadout (TLO) system will be a fully enclosed (including roof), automated system designed to efficiently and reliably load the clean coal product into train cars for transport”...*

In Figure 1.2-1 — Photograph of Right Side — The TLO shows that even if a roof and sides are added, it will **not** be fully enclosed, it will be open where rail cars enter and exit causing a wind tunnel effect. Wind will get in and out and blow the coal dust around before any “envirobind” can be used. Also, the structure is shown to be 30 metres high, but the drawings show no barrier around it in the form of trees or fencing for noise or dust reduction or for aesthetic reasons. Is anything going to be put up around it to effectively screen it from the community/highway?

To conclude this letter, we would like to submit two photographs taken on October 11, 2019, of the Elkview Operations Mine (a Teck operation) at Sparwood, B.C., 34 kms. away from the proposed Grassy Mountain Project. We have copied the photos to this letter and for ease of viewing, also attached them to our cover email. This clearly illustrates why we have concerns about air quality, water quality and quality of life in our community if this project is approved.

Victor and Barbara Koch



