

Consultation Report

To: , LSCFN Mining Coordinator

CC: , Acting Executive Director

From: , Socio-economic Lead

Date: April 17, 2023

RE: Dan Yedek'i Consultation Report April 6, 2023 LSCFN community meeting

Attachment: Presentation

1. INTRODUCTION

LSCFN developed the Dan Yedek'i (Consultation and Accommodation) Plan for the Mount Nansen Remediation Project on April 13, 2022. The Dan Yedek'i sets out the requirements for consultation and accommodation with LSCFN on projects, and for the Mount Nansen Remediation Project. This includes meeting structures, supports, and how consultation reports should be structured. The Dan Yedek'i states that:

The proponent should provide accounts of what they heard from LSCFN and Citizens, how it was received, processed and incorporated, highlighting what are LSCFN priorities and key concerns. The report should incorporate all questions, concerns, recommendations, and relevant discussions on the project brought up by LSCFN citizens. There should also be a record or report that includes how LSCFN's feedback, questions, concerns, recommendations were addressed and incorporated into the project. A rationale for why or why not LSCFN's comments/concerns were included should also be included in the report. After each consultation event with LSCFN (house visits, meetings, etc.) a consultation report should be created and shared with LSCFN and its citizens. This report should be reviewed by LSCFN prior to any public release of it.

The following is the Consultation Report for the community meeting held in Carmacks on April 6, 2023. 39 community members were present for the meeting, two members of CIRNAC were present, and four members of MNRLP presented about the project (Appendix A). The meeting was held from 5 pm to approximately 7:30 to 8 pm. The sign in sheet is attached as Appendix B.

2. WHAT MNRLP HEARD/HOW WE ANSWERED

Table 2-1 includes accounts of what MNRLP heard from LSCFN, how it was received, processed and incorporated. Section 4 summarizes the LSCFN priorities and key concerns. Table 2-1 incorporates all questions, concerns, recommendations, and



relevant discussions on the project brought up by LSCFN citizens. It also includes how LSCFN's feedback, questions, concerns, recommendations were addressed and incorporated into the project, and a rationale for why or why not LSCFN's comments/concerns were included.

Table 2-1: What MNRLP Heard and Answered

| What MNRLP Heard | What MNRLP Answered | How It was Incorporated | Rationale |
|---|--|--|--|
| What other minerals are in the water? Are there other parameters that are not treated for? | We treat water by precipitating metals with higher pH and are treating water to meet and exceed the Water Licence standards. There are a few metals that are not treated such as selenium. Sulfate is an example of a parameter that is not treated for. | No change needed. | This is a clarification question |
| Is the tailings pond affecting wildlife? Is the tailings pond fenced off? | We don't see larger wildlife and ungulates at the tailings pond. There are a few birds but for the most part larger animals stay away. It is not currently fenced off. | No change needed. If LSCFN wants the tailings to be fenced off, we can approach CIRNAC with a potential change order. | This is a clarification question |
| Are there biohazards in the tailings pond that could be passed to animals, such as mercury? | No, the tailings pond is mine waste and chemicals that are in the water, not biohazards that could be transferred to animals. There is no mercury but there is manganese, cadmium, zinc, and arsenic. Arsenic is a common mineral in areas where there is gold and occurs naturally in this area as a heavy metal. | No change needed. | This is a clarification question |
| What is the lifespan of the cover? | This depends on the material, but 50 to 100 years. We are at the 60% stage of design and are aiming for a 100-year design life for the cover. There is maintenance done as we install it and monitoring that we will do in the first few years to ensure that the cover is functioning properly. After that we will continually try to confirm that there is 5 or less percent of water infiltration into the cover. A 100-year design life doesn't mean that the cover will be completely useless after exactly 100 years, but we are trying to guarantee performance for 100 years and then it may need to be replaced after. Maybe in 100 to 200 years some cover will need to be replaced, but 100 years is what is set in plan. | No change needed. | This is a clarification question |
| Is the water safe to drink? | It is not advised to drink the water in Dome Creek, and it has been like that for a while. We are working towards implementing a remediation plan to address that issue. There is the Victoria creek well in the project area which is where we get water to drink for the crews at site, as well as at Victoria creek. Any site that has mining or exploration has a mineralized content in it with natural metals. The project doesn't have a strong baseline of the water quality pre-mine, but we do know the water quality now and will see the water improve through construction of the remediation plan. We want to work with LSCFN to better define the remediation plan so that the remediation objectives for water meets the needs of the community. | Ongoing engagement | MNRLP planning to work with LSCFN to better define the remediation plan so that the water plan meets the needs of the community. |
| How long will it take until the water in dome and Victoria creek is safe to drink? | We are looking to establish a new monitoring station downstream of the confluence of Dome creek and Victoria creek to monitor this. We will review data and get back to you. The answer and further incorporation from the above question is also relevant to this question. | Response required | MNRLP to review data and respond |



| Does the water quality affect fish? | We compare the water quality samples in Dome Creek and Victoria Creek to aquatic life guidelines and there are some parameters above the guidelines. We will look at the results and get back to you with more information on what parameters are exceeding the guidelines for aquatic life. | Response required | MNRLP to review data and respond |
|---|--|----------------------|---|
| What downstream rivers does Dome Creek affect? Does it affect the Nisling river? | We don't currently monitor the Nisling River, but we will look into this and get back to you. | Response required | MNRLP to review data and respond |
| What chemicals are used in the remediation project? | We use ferric sulfate which is an iron product. We also use a flocculant which means we use it in water to bring the suspended solids together into larger grains so we can bring them out of the water. | No change needed. | This is a clarification question |
| How long will it take for this water to be safe? | Every other month we send water to a lab and they do an LC50 rainbow trout test, they put ten fish in water that is 100% from the water treatment plant, for 96 hours. To pass the test you need 50 percent of the fish to survive. To date we have had zero fish die, so based on this test, there is no acute toxicity to the fish from the water treatment water. | No change needed. | This is a clarification question |
| How many years until its safe to drink the water? | Based on the current schedule, we are 4 years out before we see start the remediation work and start to see improvement of the water quality from where it is today. | No change needed. | This is a clarification question |
| Has this [remediation plan] been done at other sites before? What was the success rate? | The concepts for this site have been done at different sites, but as closure plans are specific to site, this combination of plans has not been done before. Each site is unique and requires site-specific activities and considerations, some process tailings, some treat water. The design of backfilling an open pit with mining waste is a very common practice at many sites. There are many case studies and we have put together a collection of these case studies, which has previously been shared with LSCFN. The selection of case studies was specific to demolition waste, but there are also many case studies for tailings. We can update it and reshare to make sure it is passed around. There have been various success rates in previous studies. Part of the process is taking the best of these case studies and using that as well as learning from, and changing, what hasn't worked. We will follow up and share specifics on each case relevant case study that's available. | Response required | Update case study and redistribute it to LSCFN |
| Will the YESAA report be public? | Everything on YESAB is public; however, we can provide a printed copy to the government building. Comments on the draft proposal guidelines established by YESAB are due April 17. There is time right now to provide feedback on the project. Ashley can help collect comments from people to get feedback and send it back to the YESAA process. Oral submissions are also an option with YESAA; they will meet with you and take notes to get your feedback. | Copies required | Provide printed copies of YESAA submissions to LSCFN government building. |
| Will YESAA reports deal with permafrost melts or anything of that nature? Will the project take into account a timeline of 100 years, including permafrost? | We have incorporated certain climate change predictions into it, and used these to influence elements of the design (i.e., rain and snow in the future). When predicting water quality we model what the forward looking water chemistry is, about 25 years into the future. In the YESAA report, we can provide more context on what were looking to achieve in more years. Part of the goal of remediation design is that site will preform better in future years when there is permafrost melt, than it is preforming in its current state. We don't want to see what happens when permafrost melts out of tailings, so we are working to make the pit into more stable land that will last longer. | No change needed. | This is a clarification question |



| Can you add more chemical to reduce the amount of minerals in the water? | Its not just the amount of chemicals, its different processes that would need to change in the water treatment plant. For example, treating for sulfate requires a different process than the processes treating the current chemicals. The water treatment plant has been designed to treat to a certain set of criteria and it would need to change in order to accommodate some different minerals. | No change needed. | This is a clarification question |
|---|--|--|--|
| What is the goal for the reduction of future liability at site? | The goal is to get as close as possible to zero liability. There will always be a liability associated with monitoring, but the remediation project should dramatically reduce the liability to well below the current amount. | No change needed. | This is a clarification question |
| Will they do drug testing on site? | We have a drug and alcohol policy. We have a responsibility by law to ensure the workplace is safe, and drugs and alcohol make it harder to keep people safe in site. We recognize that some people recreationally use drugs, so the industry as a while is working to find a balance between what is safe on the job site and what is legal. We don't want to have to explain to a family should someone be injured or killed as a result of someone being under the influence of drugs or alcohol. All care and maintenance staff are screened for drug use at the time of hire, this is a part of the hiring process. | No change needed. | This is a clarification question |
| Who is doing the training and is that stuff listed in training happening right now? | We have both the classroom side of training and on the job training. If staff ask for additional training, those are things that we are happy to support to ensure that the individual has the ability to be successful are our site and on future sites. We have capacity for on site training as well as outside training such as at the Yukon University. If there are enough people we will bring someone in to train and add experience. | No change needed. | This is a clarification question |
| After the training, will some of the workers be certified to work in future mines in these same positions? | Right now, for an individual that gets training on water treatment, we would be happy to support and send them to future training. We want to support individual initiatives on that and encourage people to bring forward ideas, we prioritize training dollars for those initiatives. Right now, there is a major shortage for local Yukoners who want to work at mines and in the industry. We want to use Nansen as an opportunity for local people to get certified. There is a combo of classroom and on the job training that needs to happen. Nansen is a seasonal project and provides an opportunity for someone to work towards a 4 year journeyman by doing classroom work in the off season and gaining the required on-the-job experience on site. We will need surveyors, and heavy equipment operators, amongst other positions in the future. Nansen won't need trades like electricians and mechanical but we want to give people the opportunity to work their way up. We want to identify opportunities and make it happen. If someone has training or wants to get experience at a mine site we want to make it happen. There is currently a shortage of equipment operators, truck drivers is one of the best entry level jobs into mining as we can hire people with no mining/equipment job experience. After a project people who have worked in these positions are usually able to work all over the industry. This is the kind of model we want to take. | No change needed. | This is a clarification question |
| Is there acid generating rock at site? | There is potentially acid generating (PAG) rock at site | No change needed. | This is a clarification question |
| Concerning is the tailings pond, will animals get in there? You can clearly see tracks around the area. The chemicals in the tailing | We weren't the ones who made the mess, but we are contracted by Canada to improve it. I don't blame you for being upset with mines. One thing that is different at Nansen compared to Faro or Clinton Creek is consulting with LSCFN and YG. Canada made the Nansen contract such that we don't just get paid by Canada to remediate the site, they made MNRLP responsible by ensuring that MNRLP are on title. No one buys an | Incorporate this into SE assessment as TK | TK of pond runoff, salmon habitat damage, watershed connectivity |



| pond are not good especially with the runoff, last year it ran off and it was high and froze in the ground. Once small stream goes into larger rivers and that reaches caribou calving grounds, moose calving, and salmon spawning habitat. People in Freegold area are from BC and Alaska and coming to our sacred territory that goes into the Yukon river and kills the salmon, and the stock is getting lower and lower. Mines require water, can this be done in a responsible way? Are there any studies that are done on the impact of the fish and the caribou that go over the area? We go do our counts in the helicopter and all the caribou are out of the area. We commend you on making an effort which is really good, most other companies can just take their money and declare bankruptcy and leave. | abandoned mine site with known environmental issues. But the contract makes us the current Owners so that we became responsible for remediating this site properly, including engineering and permitting of the plan. We are paid to do it, but we are also here because we want to fix the land, and we can't walk away. We are on the hook for the remediation and highly motivated to make sure it gets done properly. We need to talk to you, the community, to know what it looks like to be closed properly. | | |
|--|--|--|--|
| My people want to be involved but education is a limitation, when we start training people with water, other things are barriers. My obligation is to moose and salmon, they don't have a voice, we are their voice. Moose count is down in areas where we don't hunt, it is where mines are. | We have some concerns due to timing. We are unable to start removing the waste rock and cleaning up the tailings without the securing the required permits; however, the concern is if we keep delaying the remediation, it is just going to get worse. Water sitting on the tailings can be a recipe for disaster. So we have a sense of urgency to move the tailings away from the water. | Incorporate this into SE assessment as TK | TK of obligation to moose and salmon, and reduced moose count in area. |
| When will you be up there next? | We have people up there all the time. | No change needed. | This is a clarification question |



3. KEY CONCERNS

- Water quality and drinking water;
- Water quality in the larger watershed and fish;
- Tailings and water metals levels, acid rock drainage;
- Wildlife and transfer of metals to animals;
- Permafrost;
- Chemicals used in remediation;
- Remediation plan design; and
- Training.