

Minutes of Meeting		
Location: Zoom	Date: August 4, 2021	Time:
Purpose: Partner's Meeting	Version: DRAFT	
Attendees: See attached	Issue Date:	

Rory O'Connor, Teck, Update

Teck recently reached the milestone of submitting the detailed project description to the BC Environmental Assessment Office for the FRX project. The FRX project is being assessed by provincial and federal agencies and both of these agencies will make a determination, hopefully in next few months, regarding whether a federal as well as provincial assessment will be needed. This isn't a full application, but we did submit that detailed plan and that was a great milestone.

At the beginning of last week, we participated in a public hearing in Elkford for the temporary use permit of Elk Valley Lodge. Teck had made an application in April to have that renewed for another 3 years. Council unanimously passed that permit, so we look forward to our operations continuing there and continuing to use those workforce accommodations. It is a great asset, especially with housing challenges in the valley. Another benefit is the jobs associated with the lodge. Some individuals have chosen to relocate to Elkford more permanently as a result of getting acquainted with the community.

Questions, Answers, and Comments:

None

Introductions

Bev Bellina – A trustee for SD#5 for Sparwood and a concerned citizen who has been here since 1972.

Rosa Rocca – Been in the area since 1974 and here to represent the seniors.

Anita, COIAI steering committee review

It is exciting to know that we can have steering and partners meetings in person moving forward. The networking is invaluable. Since the last partners meeting in February there have been 2 steering committee meetings. One item that has been discussed is the Elkford Housing Society's Senior Housing project. The committee has made great strides for this 25-unit facility but with rising costs of building materials they are trying to fill the budget shortfall. This month's add in the Fernie fix is about the Healthy Child Alliance. We are looking forward to upcoming meetings and are in our tenth year.

Scott Robinson, Emergency Preparedness

There are four stages of emergencies: Mitigation (preparing, taking practice steps), preparedness (make plans in case emergency happens), response (what we do in an emergency), and recovery (what we do after the emergency). It is a cycle; at the point of recovery you often then think about mitigation. Those are the four pillars of emergency management.

Evacuation Terminology

Tactical evacuation – There is no time to plan anything. Ex. A fire is reported, there is no time to declare an order so fire and RCMP go door to door and tell people to leave. You have minutes to get out.

Evacuation alerts – You are in an area where you may be evacuated so you have time to prepare. This is the time to get yourself ready so that it can go smoothly.

Evacuation order – You have to get out. Sometimes there is an alert first, and then an order, but that is not always the case. You can't go back until the order has been downgraded.

Downgrade – The danger has somewhat subsided but is not gone. You can return but may still have to leave at a moments notice.

Evacuation rescind – The hazards have passed and you are able to return home. Returning is not always simple. For example, fridges and freezers can be a biohazard risk and may have to be taken out.

When preparing for an evacuation (when put on alert or any time) create a grab and go bag. Food and water, clothing, toiletries, phone charger, battery bank if possible, cash, glasses and contact lenses, prescription medications, infant formula, pet food, and important documents. Determine a meeting place (locally, and outside your community) and have fuel in your vehicle. While the province will look after you, your insurance company will do more, so it is worthwhile to contact them to see what they will do for you when there is an evacuation order. Check with your workplace for their evacuation process, as well as school and daycare facilities. Look into evacuation routes. If you have livestock, make arrangements for them during the alert stage.

Common Misconceptions

You can't go back to get your grab and go bag so bring it with you if you are in an alert.

Travel trailers – when an order comes down you don't have that time to hook it up so move your trailer during the alert stage.

Accommodation will be provided is a grey area. The issue is that hotels are not reliable. It is easier to arrange with friends and families outside the area. If hotels are not available, they will use group lodging (typically a gymnasium with camp style beds).

If someone wants to stay. You are mandated to leave, though RCMP will not forcibly remove you. They will ask for a DNA sample to be able to identify you. Children under 16 will be removed. It is not a good idea to stay at your home to protect your property.

If you are evacuated, you may need support services. Our role as volunteers is to help evacuees.

Emergency Support Services include things like food, accommodation, and clothing for 72 hours. ESS will provide for something like a house fire as well. In large scale we provide repatriation services so that families who have been separated can get back together.

The Reception Centre is where all evacuees should go and register. There is an online tool. The system is very secure and confidential. The reception centre will also provide paperwork. Take everyone with you who will need services to the reception centre, they must be seen in person. You can also receive official updates at the reception Centre.

Questions, Answers, and Comments:

Randal (Q) In an evacuation do the emergency services like fire and police remain in the community?

Scott (A) Most are residents with families so their first priority is getting their family out. But no, they won't leave, there will be roadblocks so people cannot get back in. The fire department will try to stay behind and call for additional units to protect properties. Infrastructure would be first, like a pump station. Second to that would be property. So yes, we stay behind unless the risk is too great. It doesn't turn into a ghost town though.

Fire smart program

Fire smart is not a guarantee that your house will be protected from fire. It is about doing everything you can to prevent a house from catching fire. It is not their intent to remove all trees around a home, we want to keep as much as we can but thin it out to reduce fuel for wildfires. To be involved you can become a fire smart neighborhood. First contact the fire department and then a fire smart representative will visit the site with that individual and do a site visit and wildfire hazard assessment form and plan. Next they come up with 3 or 4 action steps to become fire smarter over the next five years. Some steps are a fire smart event, usually a morning of a weekend, doing things like removing dead brush. Depending on grant funding different work can be done, like felling dangerous trees. After that a two-page form is completed and sent to province and your neighborhood gets a sign saying you are fire smart approved.

Search and Rescue

There is no charge for rescue and the reason for that is safety. People would delay calling in which would make it more difficult. If you need search and rescue, call them early. Ideally leave a trip plan so that someone knows where you are going. If you are injured, sit down, take a moment to evaluate, sit for 30-60 seconds, think about where you are and what you are doing, and then make a plan. Don't delay in calling for help, especially in winter as helicopters can't fly after sunset. Ideally know where you are



(Trailforks is good for that). Emergency Info BC is a helpful link. Firesmart BC website is also a good one to go to, as well as the federal one. One useful item is the manual that they provide. The manuals are also available at the fire hall in Fernie.

Questions, Answers, and Comments:

Beverly (C) Thinking back to the fires surrounding us here in Sparwood, that's where people were panicking, thinking, where do I go? There could be panic about which way to go. That can be scary. This preparedness kit is great. Thanks for your presentation.

Rory (C) Thanks for sharing that info. Sometimes we get approached as a company by organizations looking to find out if we could help coordinate services in the event of an evacuation. Should we refer them to your organization?

Scott (A) - Each municipality has an Emergency Program Coordinator and that would be the first person to speak to. Behind the scenes there is a whole host of people planning the evacuation. EPC for municipality would be the best person for organizations to reach out to.

Sharon, Teck, Q1 and Q2 Feedback Update

Teck has had 9 complaints about traffic safety or dirt on vehicles, some debris runoff from one Teck property to another, and another about potholes and that has now been cleaned up. There were a couple complaints about blasts and several at Grave Lake. It was determined to be algae but had entrapped some coal dust. There were concerns about dust on Grave Lake cabins and so Teck brought in a service to clean 14 cabins there. The rest were requests for cleaning (94) in Sparwood and we are focusing on those who weren't done last year. We are at 46 for this year and are mostly focusing on requests from Elkford. There have been 146 requests and 64 have been cleaned so far. We had a wind event on July 11 that lifted a lot of dust and so had some complaints about that. There will be an add in the paper this week asking people who feel they were affected to reach out to Teck and we will address that.

On the second page of the agenda is the steering committee matrix right now. A couple have changed. Joanne Drain has stepped back but will see if there is someone to fill it. Everyone has more than one hat, so to get equal representation, sometimes we have to seek a specific person from a specific community. Johanne is replacing Vicki Thomas. Everyone else has said they would stay on. At this point, are there any nominations from the floor.

Anita (C) Nic Milligan could replace Marie.
No others.

Sharon (C) - It's been a very successful ten years.
Anita (C) - Thank you to everyone who has worked on this initiative.

Peter, Teck, Electrification

Teck has a program underway for electrifying their mobile equipment fleet. The presentation is forward looking, so not everything in this slide deck will come to fruition. It is also relevant not just to operations in BC, but around the world. There are different pathways for electric vehicles, which have a limited range and hydrogen fuel cells. The hydrogen can be produced through solar or wind. In Red dog, they don't see the sun for months of the year, vs. Chile is very different so the route will be different for different areas. We already have low GHG emissions here in BC because of our grid is largely renewable through hydro-power. There are different scopes when talking about emissions. Scope 1 emissions are those on the mine site itself. Scope 2 are in regards to electrical generation for the site, and scope 3 refers to the value chain - everything bringing materials to site, and then also the trains that leave the property. Our focus on this team is scope 1 and 2. A net zero emissions fleet is important because of sustainability and also is an economic decision as well. For example, the two electric crew busses in Elkford by year 4 of operation will have a lower cost. Therefore, it makes sense from an economic standpoint. The electrification strategy is geared around replacing vehicles with vehicles. There are low carbon fuels that can reduce emissions, that is one step already being taken, but it's a transition step because it won't get Teck to their net zero goals.



A key learning from this project has been the importance of learning by doing. Until you have an EV in operation it is hard to see all the ways it affects the business – the supplier, the power, the supply chain, the infrastructure, the maintenance. It will change the way they are maintained including the tools and workshops. Getting them into the fleet as soon as possible helps us learn and prepare for the future. As the fleet expands, new infrastructure will have to be brought in. We are working with BC hydro on what the electrical demand will be for the grid. On a macro level, heavy mining equipment is a niche industry and so all mining companies and manufactures are coming together on this for example through The International Council for Mining and Metals.

We know that EVs cost more but that as the volume scales up, those costs will come down. Early adopters pay 2-3x the cost of a diesel equivalent, but as more are built it gets down to 1.5x. As batteries improve in the next 5-8 years we will likely see price parity. Therefore, our early strategy is to seek out mature sectors. There are 400,000 electric busses running in China alone. It was mature and proven so we just needed to see, can it work in the Elk Valley environment (snow, ice, cold). And yes, they have been successful. As busses that exist get retired they will be replaced with electric busses. We will also have selective early adoption. We will need to accelerate some markets and pay a little bit of a premium to make that available quicker.

Busses were an attractive place to start because they are a mature product, but also a lot of the staff travel on them so it provides exposure to people. When we purchased the busses the plan was they would run to site twice a day, giving ample time to charge, before committing to an aggressive usage model. January last year we started the busses, but then with covid in March they were at 50% capacity so they ended up doing three to four trips a day instead of two and had no issues with that. The project was very successful and future busses will be electric. We also have some 12 passenger vehicles in the pit that will be running in much more rugged conditions.

In terms of large fleet vehicles, we have been using one at Highland Valley Copper. The copper concentrate is trucked 42 km, the truck is loaded with 40 tonnes and goes down a hill, about 900m elevation drop. That weight helps regenerate the battery more on the way down than what is used on the way up when it is empty. There are other types of vehicles we are considering for pilot projects. For example there is a Volvo EV running in a quarry in Sweden that every time it takes a load it takes a two minute charge break and then is good to go. Recharging will be one of the biggest barriers, but Teck is working with other companies on this. For example the Charge On Innovation Challenge closed last week and they are now evaluating the submissions. It has gone to mining, rail, and others and asked them, "How would you deliver a system where you can bring energy to the truck without it having to stop?" They received over 80 submissions.

Questions, Answers, and Comments:

Don Crawford (C) I'm interested in your development of hydrogen and will be in contact with you on that.

Peter (C) Yes it has been used. We have to consider where it comes from as a lot still comes from natural gas, and so as we move ahead we will be looking at carbon free solutions.

Don (Q) What are the outputs of a hydrogen engine?

Peter (A) A bit of heat and mostly just water, though the amount of energy that goes in only has about 50% of the output as battery engines.

Robin (Q) Regarding the business case, is that info shared anywhere with other businesses to look at?

Peter (A) We haven't been asked for it, though a company could put in a request for that. We do work with other mining companies for sure. We also have reached out to school districts on the bigger picture.

Beverly (C) SD#5 has also purchased two electric busses with good results!

Peter (C) Also the Community Energy Association in Fernie is a great resource and we have been in communication with them to share information and ideas.

Scott Dressler – Teck, Lagoan D Decommission



Teck is looking to close a tailings storage facility at Elkview. The goal is to remove it from use and transition it to a closure condition. Elkview is virtually adjacent to Sparwood. There are several lagoons in the area – they are tailings storage facilities but that was the name previously given to them. Lagoon D is currently used to manage overflow storage from the process plant. It takes very little tailings these days. There are various lagoons that used to be active and only D is active now, but only takes about 2% of tailings from the processing plant. The west fork tailings facility is the one that takes the most. It is pumped through pipeline from the processing plant and travels about 8km through mining areas to get to that west fork tailing facility. (Scott shared various visuals at this point.)

We need an alternative strategy for the small portion of tailings that go there and that is a separate but related project and the feasibility of the options will be evaluated and then brought forward. In terms of permitting, that one will have to go through first to be sure that lagoon D is not needed anymore. In 2019 it was identified for closure. It is geotechnically sound and could be used for another ten years, but the ambition here is to be a leader in the successful closure of a tailings facility. We will be doing it in a staged fashion. In the early stages right now it is a great time to solicit feedback. Once we get all those ideas gathered we will do another round of evaluations of our options and then choose ones to move to further engineering.

Around that time we will submit regulatory submissions for the changes we are submitting at Elkview and then eventually proceed toward reclamation. At this point we are doing framing and shaping, really trying to bring in feedback and perspectives. In terms of closure, we must meet some aspects – ensure that the project is geotechnically stable and accommodates appropriate water management and dust mitigation. We are also looking at some impacts of the closure. For example, water quality targets can't be compromised. We also want to take a collaborative approach. The word *forever* comes to mind. We built a landform there that wasn't there before we arrived and so in closure we want a configuration that people are satisfied with over the long term. Closure will outlast all of us. There are several models we are looking at that help project long term impacts. What will it be like with climate change, in wet years, dry years, etc.? Projections help us visualize what will happen in the long-term.

We are soliciting feedback, hoping to get the gears working and provide an avenue for people to reach out to provide input (either through Scott or Sharon). We will look to try to address it as best we can. Several pieces of legislation will apply to this project but we don't believe we will need environmental assessment certificate for this project. We will be engaging with all regulatory authorities that are in charge of that legislation to help define the path forward. In doing so we may be setting a template for other facilities to close their tailings facilities. We want to work with COIs and Indigenous people - hearing their thoughts, concerns, and ideas. That will be the most productive and positive.

Questions, Answers, and Comments:

(Q) Can you clarify the location?

Scott (A) Shows images on slides.

(Q) What feedback from the community have you had so far?

Scott (A) It is still early days so haven't had much negative feedback at this time.

Roundtable and Closing

David Wilks introduced himself. He is the Mayor for the District of Sparwood and director of the Regional District of East Kootenay

Doug (C) Thanks everyone for the presentations and invite. The BC Association of Community Response Networks has free learning events every month, usually in the middle of the month around lunch-time.

The new and enhanced seniors guide has been released, it's the third year. BC 211 will get you connected for that.

Sharon (C) Rory had to drop off but wanted me to thank everyone for sharing and presenting.



Anita (C) The next steering committee meeting will be in September and the next partners meeting is scheduled for December. Those will hopefully be in person meetings. Thanks to Sharon for her organizational skills, we are grateful. Thank you to everyone for joining us today.

Next Meetings: Steering Committee in September, Partners Meeting in December.
Present

Name	Representing
Peter	Teck
Bellina, Bev	SD #5
Dressler, Scott	Teck
O'Connor, Rory	Teck, Manager Social Responsibility
Palmer, Anita	Education/COTR/RDEKA/Chair
Robinson, Scott	Community Safety/RDEKA
Rocca, Rosa	Sparwood
Strom, Sharon	Teck

Commented [MB1]: Others to be added