

Uranium City – January 29, 2018

Attendees

- Saskatchewan Research Council (SRC): Mark Calette, Skye Ketilson, Ian Wilson, Chris Reid, Erin Adrien, Robyn Morris, John Sprague, Jennifer Brown
- Fond du Lac Nuna Joint Venture (FDLNV): Don Deranger, Gary Sodhi, Haslan Escalante
- Saskatchewan Ministry of Environment: George Bihun
- Translator: Emily Jones

Agenda

1. Opening Remarks – Mark C
2. Lorado Remediation Project Overview – Erin A
3. Satellite Sites Overview – Ian W
4. Gunnar Overview – Chris R
5. Gunnar Other Site Aspects Update – Skye K
6. Gunnar Tailings Update – Chris R
7. FDLNV – Gary S, Haslan E

Lorado

Q: The blueprints said the road (by the tailings) would be 3 feet higher than the tailings so snow would drift. There are 12-14 ft mounds of snow right now. Folks cannot currently get through the road by Weismans, it seems you took the soil out and the road gets washed out all the time. There is no culvert system underneath for water to go so it sits there and people get stuck.

A: (Response from Ministry of Environment) SRK thought the best way to leave the road was to have it be level with the tailings so the snow would blow over it. The Ministry of Highways is responsible for this road and they were happy with the condition the road was left in after the project was completed. We will continue to monitor. Specific road maintenance is the responsibility of the Ministry of Highways.

Satellite Sites

Q: Is Goldfields road closing?

A: (Ministry of the Economy) This is a temporary closure during the spring thaw and breakup. SRC has put money into this road to access the site and we want to reduce the risk of it being rutted up.

Q: Did the Ministry of Environment want fencing surrounding some of the sites or is that what SRC is proposing for safety and money?

A: This is what SRC is proposing for some of these sites as there is no way to safely or technically remediate some of these site (i.e. crown pillar instabilities).

Q: Is signage not enough? What about animals getting trapped inside?

A: We are looking at a few types of fencing that will allow animals to escape, as well as signage. We are only fencing off more dangerous areas where there is no way to safely or technically remediate.

(Response from Ministry of Environment): The areas we are looking to fence are fairly isolated, but there is a chance that the ground may collapse in and we don't want people around should that happen. We are going to keep these fenced areas as small as possible.

Gunnar

Overview

No questions

Gunnar Other Site Aspects

Q: What about the asbestos by the water?

A: Everything will be taken down and buried in the landfill, the asbestos affected material will be the deepest part of the landfill.

Q: Will camp be able to support both projects?

A: Yes, the camp currently has a capacity for about 80 people, so it can support both projects. SRC is looking at possibly augmenting the camp to provide for better comfort of those staying there.

Gunnar Tailings

Q: Are you working this winter at all?

A: We are working to wrap up a few things.

Q: Has the site been checked out for diamond drill holes?

A: None were found at Gunnar. There were two found and filled at some Satellite Sites and four at Lorado.

Q: Do Golder and O'Kane have contracts for the entire length of the project?

A: They do have contracts until the end of the Tailings project. We will try and keep the same people coming in based on our procurement policies and to maintain project consistency.

FDLNJV (responses provided by FDLNJV)

Q: Once you do a job with FDLNJV, do you get the opportunity to work elsewhere?

A: We try our best to hire local first, then look at other applicants, but you must apply for the job. Applications from previous jobs are not moved forward to the next project.

FDLNJV recommended following their Facebook page for employment updates.

Q: When do you anticipate start up?

A: May 2018.

Discussion:

- Snow is being put on the original road so people are driving on the tailings. SRC will look into what to do to keep people from driving on the tailings. Mostly, this will be a conversation with Ministry of Highways as they do the road maintenance.

Fond du Lac and Black Lake – January 30-31, 2018

Community Meetings in these communities were postponed and will be rescheduled.

Stony Rapids – January 31, 2018

Attendees

- Saskatchewan Research Council (SRC): Mark Calette, Skye Ketilson, Ian Wilson, Chris Reid, Erin Adrien, Robyn Morris, John Sprague, Jennifer Brown
- Fond du Lac Nuna Joint Venture (FDLNJV): Don Deranger, Gary Sodhi, Haslan Escalante
- Saskatchewan Ministry of the Economy: George Bihun
- Translator: Emily Jones

Agenda

1. Opening Remarks – Mark C
2. Lorado Remediation Project Overview – Erin A
3. Satellite Sites Overview – Ian W
4. Gunnar Overview – Chris R
5. Gunnar Other Site Aspects Update – Skye K
6. Gunnar Tailings Update – Chris R
7. FDLNJV – Gary S, Haslan E

Lorado

Q: How many years will it take to neutralize Nero Lake with lime?

A: We only did it for one field season, in October 2014.

Q: Is the lake still acidic?

A: No, it is neutral and this is the third year it has been neutral. It originally had a pH level of 4, and after treatment it is now has a pH of 7/7.5.

Q: Are there any fish?

A: No, not yet.

Q: Will you be replenishing the aquatic life?

A: Doing so is not part of our plan. We are hoping for that to happen naturally.

Q: The cover on top of the waste, has there been any leaking from erosion?

A: No. The cover was built with that in mind so it was built thick. Our maintenance program will be determined as we monitor. We will patch small spots on it but as seeds grow, this will be less and less.

Q: Was there a tree chipper on site?

A: Yes, that was used for the trees growing on contaminated areas. Those trees have been placed under the cover.

Satellite Sites

Q: Where does the material go when you remove it?

A: Hazardous material goes to applicable facilities down south and the inert (non-hazardous) materials are managed at the sites, similar to regular waste.

Q: Putting in a fence, isn't that just like putting a band aid on it? Is the fence going to be there for 200 years?

A: Unfortunately, there isn't much more we can do to mitigate the risk of a cave in at some of the sites. We are looking to protect the area instead.

Q: Are the (affected) sites remote?

A: Most of them are very remote, some are closer to Uranium City. We have done surveys in the surrounding communities to find out if these sites are being travelled to and used.

Q: Would the more proper way to remediate be to remove the cap and backfill?

A: At a lot of the sites, yes. In some cases, though, you don't know the depth of some of these mines. Site assessments give us an idea of where the crown pillar instability is, but it's not safe to send people and equipment into an area of uncertainty.

Q: What is your regulation on the personnel exposed for radiation? Federal or provincial?

A: For the most part federal and provincial regulation overlaps. Workers working on Project CLEANs are covered under the Radiation Protection Plan. The limit is 5mSv per year.

Q: So, if a contractor went in with a crew for two weeks, and there are 30 of them, they wouldn't be covered or monitored?

A: We provide personal radiation monitors to the crew, one for each area they are in so we can have general readings for everyone. Then we can calculate the exposure based on those and adjust/adapt as necessary.

Q: How often are the Personal Radiation Detectors checked?

A: Daily or weekly, depending on areas worked in.

Q: What are the areas with the highest radiation now?

A: At Gunnar – the tailings and waste rock area is 12mSv/hour. Once it's covered it will be around 1.14mSv. Our radiation expert monitors the levels. Our safety program goes through the Canadian Nuclear Safety Commission (CNSC).

Q: Have you ever encountered drill rods?

A: A number of the Satellite Sites have had drill rods and holes that needed to be filled. Some of those sites were exploratory only so there was a few things left over from drills. These are tough because some have flowing water, so we seal them as best we can.

Gunnar

Q: Is there any exploration happening at the sites nearby?

A: There's been prospecting near Gunnar. We are continually working with the Ministry of the Economy to minimize site access during active remediation. Their leases state that although you have mineral rights, you may not have access and we will not grant access due to hazards.

Gunnar Other Site Aspects

No questions

Gunnar Tailings

Q: Throughout the project, has there been any exposure that needed to be reported to CNSC?

A: Throughout the project, we haven't had anyone above the reportable range. Based on the work that some were doing, we anticipated there may be some, and we monitored their detectors and adjusted accordingly.

FDLNJV (responses from FDLNJV)

Q: How long have you had interviews available?

A: These were done in February 2017.

Q: How many interviews have you done with Elders?

A: We did about 25 interviews in total.

Q: When you say "Joint Venture," is it just for this project?

A: Yes. FDLNJV is a collaboration of efforts between FDL Dev Corp and Nuna. As of now, this is the only project we have.

Q: Do you still do site tours?

A: We do and we will be doing more this year.

General Comments

- Some people didn't hear about the FDLNJV interviews. FDLNJV will work to improve communications.
- SRC thanked the community for all the safety questions. It was the most they've ever had in a meeting.
- This was one of the first times they had seen such high participation of Athabasca Basin residents in a project.

Hatchet Lake – February 1, 2018

Attendees

- Saskatchewan Research Council (SRC): Mark Calette, Skye Ketilson, Ian Wilson, Chris Reid, Erin Adrien, Robyn Morris, John Sprague, Jennifer Brown
- Fond du Lac Nuna Joint Venture (FDLNV): Don Deranger, Gary Sodhi, Haslan Escalante
- Saskatchewan Ministry of the Economy: George Bihun
- Translator: Emily Jones

Agenda

1. Opening Remarks – Mark C
2. Lorado Remediation Project Overview – Erin A
3. Satellite Sites Overview – Ian W
4. Gunnar Overview – Chris R
5. Gunnar Other Site Aspects Update – Skye K
6. Gunnar Tailings Update – Chris R
7. FDLNV – Gary S, Haslan E

Lorado

Q: Could you explain to the students what are the effects of uranium exposure?

A: There are 3 main types of radiation:

- Alpha – has high energy, but due to its large mass, it's stopped by just a few inches of air, so it would hit you and bounce off.
- Beta – also fast moving, and much lighter than alpha. So if it reaches you, it can penetrate and have some effects.
- Gamma – this is the worst one. It's lighter and faster than the others, so it will penetrate more easily and has effects such as skin damage and deep burns that are hard to treat. There are also long-term effects including cancer and cell mutation.

We have radiation detectors on our workers to monitor these levels in the areas they are working.

Satellite Sites

Q: Are there handouts available with this information?

A: We can provide information to you. This information will also be available on our website later.

Gunnar

No questions

Gunnar Other Site Aspects

No questions

Gunnar Tailings

Q: How did the water get into the open pit?

A: There was a channel blasted between Lake Athabasca and the open pit to allow the water to get in there and keep the mine stable.