

# Mackenzie Valley Review Board



## **EA0809-002: Canadian Zinc Corporation – Prairie Creek Mine**

### **Meeting Report from the Fort Simpson Daytime Scoping Session**

**Compiled by: Mackenzie Valley Review Board (“Review Board”) staff**

**Location: Fort Simpson Recreation Centre**

**Date: October 3, 2008**

### **INTRODUCTION**

Review Board staff hosted scoping sessions in several Dehcho communities between September 30 and October 3, 2008, to gather issues and concerns from all parties about the proposed Prairie Creek Mine, approximately 90 kilometres northwest of Nahanni Butte. The Review Board will be using this meeting report, reports from other scoping sessions (including a Technical Scoping Session in Yellowknife on April 9, 2008), all of the information on the Public Record (available at [www.mveirb.nt.ca](http://www.mveirb.nt.ca)), and any follow-up scoping submissions from any interested parties to determine how to proceed with this Environmental Assessment.

While this meeting report is as comprehensive as Review Board staff could make it, this is not a verbatim document. It is based on notes by Review Board staff. Unlike the official statements made at Review Board hearings toward the end of the Environmental Assessment process, scoping sessions are less formal dialogues.

People’s names (other than developer’s responses) have not been associated with the individual statements they made at the session in this document.

Interested parties are reminded they can submit comments to be placed on the public record of the Environmental Assessment at any time. A digital recording of the session is stored in the Public Record at the Review Board’s Yellowknife offices.

Contact Alistair MacDonald at the Review Board with any questions or comments:

Ph: (867) 766-7052

Fx: (867) 766-7074

[amacdonald@mveirb.nt.ca](mailto:amacdonald@mveirb.nt.ca)

## **ATTENDEES**

*In attendance (only those people who signed in or made their names known):*

Alistair MacDonald – MVEIRB  
Nicole Spencer – MVEIRB  
Jessica Simpson – MVEIRB  
David Harpley – Canadian Zinc Corporation  
Wilbert Antoine – Canadian Zinc Corporation  
Chris Reeves – Canadian Zinc Corporation  
Joel Holder – GNWT Environment and Natural Resources  
Julie Jackson – Indian and Northern Affairs Canada  
Krystal Thompson – Indian and Northern Affairs Canada  
Lorraine Seale – Indian and Northern Affairs Canada  
Dana Haggarty – Parks Canada  
Marie Lafferty – Metis Nation, FSNWT  
Rita Cli – Canadian Zinc Corporation  
Don Hardisty – Nahanni Butte  
Leon Konisenta – Nahanni Butte  
Herb Norwegian  
Kirby Groat – Dehcho Suites  
Duncan Canvin – Village of Fort Simpson  
Mary Jane Cazan – Interpreter  
George Betsaka – Nahanni Butte  
Peter Redvers – Crosscurrent Associates  
Wilson Dimsdale – GNWT – ITI  
Chuck Blyth – Parks Canada

## **SUMMARY OF ISSUES RAISED**

*Review Board staff note: the developer is encouraged to provide submissions addressing these issues or perceived information gaps at any time.*

### **The following potential issues were identified by participants:**

- Water quality and protection is the most important issue.
- Road has to be properly assessed; will cross a number of rivers and creeks
- The use of the winter road; speed of trucks, accidents, emergency response, accessibility, spillage of concentrate.
- The probability of seismic activity in the mountains near the Mine and the need for research; the area has a history of landslides in watershed; Earthquakes.
- The need for jobs in the area and who would get them.
- Ability of First Nations to take advantage of development
- The length of the process and how it will negatively affect the business opportunities in Fort Simpson and area if it is too long.
- Water quality testing should occur all the way down to the confluence of Prairie Creek and the South Nahanni River

- Location of water quality testing in Prairie Creek and surrounding water bodies; results need to be given to communities on a regular basis in plain language.
- Increased use of the Fort Liard Highway; dangerous with current lack of maintenance, high speed, safety for people and wildlife.
- Effectiveness of polishing Pond and the seasonal variation.
- Impact on tourism of mine plus increased truck traffic
- Dire need of employment in region- need jobs right now
- Community benefits: focus on future-scholarships
- Spin off effects to smaller communities
- Cumulative effects on harvesters and the traditional way of life
- Potential for flash flooding events affecting the mine
- The long-term ability of the pasted backfill technology to seal off the mine and not leach metals into the environment
- Availability of, and plans for, medical services in case of emergency

## **MEETING REPORT**

The meeting commenced at 9:00am. This was largely an informal session because of the small crowd. Several people stopped in for short periods to make comments and learn more about the proposed development. Review Board staff and individuals wrote down comments and questions on cards and placed them on a wall for public viewing.

At 11:00 am all participants sat down for a more formal dialogue. Alistair MacDonald of the Review Board staff stated the reasons for the scoping session and then opened the floor to comments about the proposed development, the EA process, or questions for the developer.

### **A participant expressed the following:**

- We need the best possible scope for the protection of the entire Nahanni watershed.
- How the mine will affect the expansion of the park
- Concerns about whether expansion in the number of outfitting permits in the general area should be considered a cumulative effect on wildlife and wildlife harvesting
- The focus should be on the water and the mine, because the mine is the number one potential contributor to cumulative effects
- All concerned parties need to be accommodated - ie, the outfitters, Dehcho First Nations, the developer, and the Nahanni National Park Reserve.
- It is dangerous where the mine is located as landslides happen in the mountains, especially in the South Nahanni River up to the canyon. In particular a large landslide such as that which occurred at Cathedral Creek could also occur, because Prairie Creek is similar type area with an open valley above the headwaters of these creeks. A number of creeks have had landslides impacting on the water. It is just a matter of time before this could happen at Prairie Creek. If something did happen, we would be at the brunt of a major disaster. This is big discussion with many of us.
- There is the road and the land claims issue, which remains up in the air between the Dehcho First Nations and Canada

- Will there be royalties from the Mine? That is where the real cream is for First Nations but we don't see that; an issue hanging over our people
- At what cost to First Nations will the mine be developed? Is it worth it to trade a few jobs and small contracts for damage to the environment?
- Will the road into the mine benefit the Dehcho First Nations? Does it make economic or environmental sense?
- Water crossings on the winter road need to be assessed by the Department of Fisheries and Oceans. The whole road should be assessed
- We need to be satisfied with a thorough environmental assessment and all the safeguards be put in place to protect the water, before the First Nations will support the development.
- We could have a time bomb on our hands. We need to be more sensitive to the lands. Agencies like the Review Board are being told by First Nations that they have to do it right to minimize concerns about development.

David Harpley of Canadian Zinc Corporation responded to these comments with the following:

- Water is the number one concern for the developer because people have told them it is their number one concern
- Cadillac was planning to put tailings in the pond on site, but CZN will be only placing water in this area
- The mine already exists and water flows out of it, and has done so prior to CZN buying the site. So someone had to take responsibility, and CZN has been treating it for the first time over the last couple of years
- Zinc coming out of the mine in the water is about 15 parts per million; not good for discharge. Was never treated before, but CZN is now treating it.
- Dikes around the site exceed maximum flood likelihood
- In case of flooding, which is extremely unlikely, even if there was 15 ppm of zinc, it would be massively diluted by the huge amounts of floodwater
- The developer already has a land use permit for the road. The developer is looking to improve the road for winter use only, not all season road
- There are sensitive areas, which have been identified by communities, so there a number of smaller creeks the developer is looking at putting bridge spans across
- Canadian Zinc is looking to control the use of the road for public safety first, so CZN knows who is on the road, so there are not accidents between haul trucks and other users. Don't want to limit local First Nations access.
- CZN doesn't feel it is appropriate to reopen evaluation of the road because of the permit
- He indicated on the picture of the Mine Site where and with what system and chemicals the developer is treating the outflow of water
- He indicated the water diversion system onsite
- He talked about the capacity for water outflow control at the Harrison Creek release site in case of exceedences of water license parameters.
- He indicated that an assessment of area seismic activity will be included in a future report after research has been completed.

Review Board staff identified for the audience that there was a Technical Issues Scoping Session coming up in Yellowknife on October 9, and that government regulators should feel free to identify any issues they felt the developer should be prepared to talk about in further detail at that session.

Review Board staff noted that at the Thursday session in Wrigley, questions of the potential for flash flooding in Harrison Creek during the spring runoff were raised. What sort of spring runoff expectations are there on site, and can the small diameter culvert between Harrison Creek and Prairie Creek handle that flow?

The developer noted that the mine has been there 25 years and spring flooding has never been an issue. It was also noted that some people in Wrigley seemed concerned that runoff from the hills would fill up the water ponds, but the developer has built upstream diversion away from ponds into their updated management plan. The developer also noted that with the large capacity of the pond, an extreme rain event would likely only raise the pond level about 1 centimetre.

Review Board staff asked what work CZN has done on seismic potential in the area. The developer noted they have limited information on seismicity, and will bring more information forward on that in a submission related to the configuration of the ponds and their stability.

A participant noted that she had previously been concerned about the cyanide, but now that was gone. The same participant asked whether there were any cases of mines using paste backfill of tailings or other waste, so that people could determine whether the developer's estimate that minimal water will either access the cemented tailings (leaching metals) or come out of the mine (will the tailings act as an effective plug?)?

The developer noted that paste backfill technology in a modern sense has been used for about 10 years now. Back in the old days, water and tailings were pumped in together. The more modern way filters out the water first. More info on the pasted backfill effectiveness in keeping seepage down and leaching potential will come in a later submission. The developer will also be putting in rebar-reinforced, high concentration cement plug bulkheads. The developer feels that when the mine is filled up, groundwater will follow the path of least resistance and will flow along or on top of the backfill through natural fractures. More work is ongoing with groundwater wells being drilled "as we speak" to test this theory, and more information will come forward in a later submission.

A participant asked whether the concreted backfill will start to break down over time. The developer felt it is possible there will be some erosion on the outside edges of the mass, but that its high alkalinity (limestone rocks) will help limit deterioration. And bulkheads should help.

A participant asked the developer to be ready to answer questions about where the cement is coming from or whether it is being made on site, where the water for the cement will come from, and how much will be needed. The developer responded that bulk bags of cement were coming from Edmonton. Cement content will be 1.5% for some backfill, 3% for areas where vehicles will drive over. Only a small amount of water is required for mixing the paste backfill.

A participant had questions and comments concerning The Liard Highway maintenance, upgrade requirements and safety. This was especially important given problems of late in keeping the Liard Highway open, and there are questions about how increased truck traffic may impact on maintenance and what would happen to concentrate if the road was not open. The developer responded that use of the Highway is necessary for the

Mine; that if the highway is not open the concentrate will have to stay at the mine until it is; it can't be flown out. The developer will be talking to DoT about these issues.

A participant had concerns about the long term effects of the waste inside the Mine after Closure- possible breakdown, including effects of seismic events. The individual felt the area has a history of massive earthquakes. The developer responded with the information of the Bulkheads strategically placed as plugs so it does not leak. Current research is being conducted on flow in and on the Mountain. Putting the tailings into a mass of cement is meant to keep water away from the metals enriched rock. Contamination can only occur when the metals bearing rock is exposed to the outside environment. The developer noted that the history of seismicity in the area will be reported on, most likely in the DAR.

Review Board staff noted that wherever possible case studies where certain technologies have been used effectively, the developer should provide those examples. The case in point was the proposed "valley fill" Waste Rock Pile.

The developer was asked what medical services they would have on site. The developer noted that they will need to have more medical services available on site, but their understanding is that medical services will be available via medivac helicopter from Fort Simpson, as well as any number of charter airplanes available. Significant injuries would require a Medivac.

One participant noted that the developer should keep good records of consultation with communities. The developer asked whether they should forward copies of consultations both to INAC (which it typically does already) as well as to the Review Board? Review Board staff followed up on this by noting that the Developer's Assessment Report will require a consultation history in relation to the development. The Review Board encourages the developer to keep detailed meeting minutes and submit them to the Board during an EA, so that the discussions and conclusions between parties become part of the public record.

The developer further asked how it could respond to the questions brought up in the Meeting Minutes for this and other Scoping Sessions, given the tight timelines for scoping. Review Board staff suggested the developer could provide proactive submissions to try and clear up issues at any time. During all stages of the EA, the onus is on the developer to show the development will not cause significant adverse impacts, so the developer is always encouraged to independently respond to concerns.

Review Board staff also reminded interested parties that good EIA requires the narrowing down of the scope of assessment to things that might actually be impacted by the proposed development. They also asked that people think about prioritizing issues, noting that the Review Board has taken to a "three-tier" system of late when talking about issue priority:

1. Key Lines of Inquiry
2. Issues of Note
3. Other Issues

A participant from Nahanni Butte noted desire of that community for monitoring of water quality upstream and downstream of the mine, at the confluence of the Prairie Creek and

the South Nahanni River, and at Nahanni Butte. The developer noted they have undertaken to take Nahanni Butte elders up to see the proposed sampling locations and suggested that Parks Canada might also want to show elders what they are doing in the area. A representative of Parks Canada noted they are doing sampling three times a year, upstream of the mine, downstream of the mine, at the Park Boundary, at the confluence of the Nahanni and Prairie Creek, and near Nahanni Butte. Parks Canada stated that more information from water quality testing will be available early in 2009, and gave some more details on funding applications for other water quality focused projects in the area. The community of Nahanni Butte needs plain language reports, both from the developer and the Review Board. Parks Canada committed to an Executive Summary being made available of any studies. The developer and the resident of Nahanni Butte thought Parks Canada should also do a boat trip to sampling locations. Nahanni Butte is taking people up and making sure people know that traditional activities occur for much of the year – “harvesting is not only September and October for us, it is year round. Because country food is the food we are most comfortable with, and it comes back to water quality”.

The Nahanni Butte resident felt that more information needs to be shared by all the responsible authorities with residents of traditional communities. Need to satisfy them that the water is going to be protected forever. Land and waters need to be protected forever. What happens when the mine closes is the key question. Community needs all of the water sampling information from all parties.

The developer noted that they were planning to take a translator when they bring community folks up to see their sampling points, so that “we are speaking their language”, and suggested Parks Canada do the same.

Review Board staff asked whether the Memorandum of Understanding between Parks Canada and CZN includes delineation of sampling responsibilities and the like. The developer noted that it hasn't got down to that level of detail yet, but the developer hopes that what will happen in the future is that the mine, local communities and Parks can have a Public Advisory Committee that sits down on a regular basis to talk about these issues.

A resident of Nahanni Butte noted that what went a long way with him was a commitment by Canadian Zinc to have one of their local employees from Nahanni Butte take a water sample at the community and have it tested by the Mine. This was seen as an example of due diligence by the developer. The frequency of testing at the community is an issue; should it only be every three weeks?

A representative of Parks Canada thanked Canadian Zinc Corporation for providing assistance with ongoing research on water quality in and around the mine.

#### **LUNCH BREAK: 12PM – 1:15PM**

After lunch, comments were made by Rita Cli, who identified herself as both a sub-chief, the representative for Chief Kenya Norwegian of the Liidli Kue First Nation, and an employee of Canadian Zinc Corporation:

- LKFN chief and council support the CZN Mine
- Everyone in the Dehcho is affected by the proposed mine
- Be mindful of the Dehcho Process

- The principle of the DCFN is “Land Management not Land Sale” and controlled development
- Important for First Nations to be a part of the process of EA, because of local and traditional knowledge
- The most important issue for Elders is water.
- There is a dire need for employment in the region

Rita talked about the improvements on site of the Mine she saw when she visited. It has been on a regional level that false facts about the Mine are being spread regarding such things as Cyanide (there is no cyanide left there). The DCFN want First Nations people to be the eyes and the ears along the winter road.

A resident of Nahanni Butte expressed concerns about outsiders coming in and making decisions about whether a project should go ahead or not. The people of Nahanni Butte need jobs and money, and the Dene Nation needs development to move ahead with self-government. He felt that Nahanni Butte has been left out of most other developments. The same participant also noted frustration that when the mine and winter road first went in (1980-2) nobody consulted Nahanni Butte about it. Review Board staff reminded all participants that the Review Board is doing an environmental assessment because it was referred by the people of Nahanni Butte, among others.

*Alistair MacDonald concluded with a note of thanks to all participants and a re-iteration that this is only the start of the EA process and that there are many more avenues for dialogue and public input along the way.*

Scoping session adjourned at approximately 3:00 pm

---

#### NOTES FROM INDEX CARDS SUBMITTED DURING THE SCOPING SESSION

- Prairie Creek drains into Naha Deh
- Want land and water to be protected forever
- If mine goes ahead it needs to be thoroughly assessed: until then its too scary
- Road should be scoped in
- We all have to work together so that we all benefit. Our children will live with this and it's outcome
- Be mindful of the Dehcho Process
- Include First Nations; their footprint is out there
- Interpreters going to site with Elders would be good
- We want the mine to open. Dehcho not against development-want controlled development.
- Aboriginal People need to advise on alternatives-development components, winter road routes.
- First Nation need to be driving force so they know what is going on and are comfortable
- Water is the key because it is fuel for life
- Boat trip to take people to show site to see how and where water flows. Take Elders as well.

- Cyanide always brought up at community meetings – some people still think it is on site.
- Please protect environment.
- Still hunters on the land for spring and fall hunts. Camps near river. Traditional activities still a big part of economy, social and culture.
- It takes more than the Board to know what is best for First Nations.
- The Mine is wanted but with the best possible protection possible for the safety of the people, plants and animals that depend on it.

# MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD

## PUBLIC SCOPING MEETING SIGN-IN SHEET

Canadian Zinc Corporation – Prairie Creek Mine

<b>Location:</b>	Fort Simpson	<b>Meeting Date:</b>	October 3, 2008
<b>Facilitator:</b>	Mackenzie Valley Environmental Impact Review Board	<b>Place/Room:</b>	Rec Centre – Lower Hall
Name		Organization	
1.	Niwi Spencer	MVEIRB	
2.	Krystal Thompson	INAC	
3.	Lorraine Seale	INAC	
4.	Julie Jackson	INAC	
5.	Rita Chi	CZN	
6.	MARIE LAFFERTY	METIS NATION, FSNWT.	
7.	Joel Border	SNWT-ENR.	
8.	Don Hurlbut	NB Tlanaago (Nahanni Butte)	
9.	Leon Koisanta	Nahanni Butte	
10.	at MacDonald	MVEIRB	
11.	Jessica Simpson	MVEIRB	
12.	Herb Norwegian		
13.	Kirby Groab	Dehcho Artists	
14.	Duncan Caplin	Village of Fort Simpson	
15.	Mary Jane Canyon	Interpreter	
16.	George Betsaka	Nahanni Butte	
17.	Peter Redvers	Crossarm Artor's	
18.	Dana Haggarty	Parks Canada	

# MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD

## PUBLIC SCOPING MEETING SIGN-IN SHEET

Canadian Zinc Corporation – Prairie Creek Mine

<b>Location:</b>	Fort Simpson	<b>Meeting Date:</b>	October 3, 2008
<b>Facilitator:</b>	Mackenzie Valley Environmental Impact Review Board	<b>Place/Room:</b>	Rec Centre – Lower Hall
Name	Organization		
19. <i>Wilson Amisdale</i>	<i>GNWT-ITI</i>		
20. <i>Chuck Blyth</i>	<i>Parks Canada</i>		
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			
31.			
32.			
33.			
34.			
35.			
36.			