

Community Scoping Session Report for Canadian Zinc Corporation's Phase 3 Surface Drilling Exploration Program Environmental Assessment

This document summarizes the discussions that occurred during meetings in the communities of Wrigley, Fort Simpson and Fort Liard on April 5th and 6th, 2005. The meetings were organized by the Mackenzie Valley Environmental Impact Review Board (MVEIRB or Review Board) for the purpose of offering community members an opportunity to identify issues that should be considered in MVEIRB's Terms of Reference for the environmental assessment (EA) of Canadian Zinc Corporation's (CZN) *Phase 3 Surface Drilling Exploration Program* (the "Drilling Program").

The report is sectioned by the communities visited. Each community section is further divided into those issues which the MVEIRB believes to be directly related to the current EA, as well as those issues discussed which appear to fall outside the scope of the current EA, but which were recorded nonetheless for future reference. This report is not intended to be an exact transcript of the discussions held, it is simply a tool to assist MVEIRB to finalized its Terms of Reference.

Morning Session - April 5th, 2005 - Community of Wrigley

In attendance:

Troy Searson – Indian and Northern Affairs Canada (INAC)
Shane Hayes – INAC
Kim Schlosser – Parks Canada
Chuck Blyth – Parks Canada
Laura Pitkanen – Dehcho First Nations
Kelly Pennycook – Pehdzeh Ki First Nation (PKFN)
Wally Antoine - Wrigley
Dan O'Rourke – Canadian Zinc Corporation (CZN)
Renita Schuh – MVEIRB
Martin Haefele – MVEIRB
Patrick Duxbury - MVEIRB

The meeting commenced at approximately 9:45 am. The meeting was opened by Martin Haefele who discussed the reasons for coming to the community. He provided a brief history of the file. Renita Schuh presented an overview of the MVEIRB EA process. Dan O'Rourke of CZN then offered a description of the Drilling Program, which also included an overview of the history of the Prairie Creek Mine Site, permitting history and associated difficulties with obtaining permits. He mentioned the possibility of CZN entering an operational mining stage in the near future. Following Dan O'Rourke's presentation, Martin Haefele opened the meeting to comments and questions.

Items discussed related to the current EA:

- A participant asked about impacts from drilling, particularly the use of chemicals in drilling. Dan O'Rourke responded by saying that any lubricants to be used in drilling are non-toxic. A MVEIRB representative referred to concerns noted in the Yellowknife scoping meeting about the provision of Material Safety Data Sheets (MSDS), or similar information, to alleviate community concerns about the compounds that will be used.

- Dan O'Rourke stressed that diamond drilling is the best understood and most easily managed aspect of the mining life-cycle; it is very well known within the NWT.
- Dan O'Rourke noted that the purpose of the Drilling Program was to increase the known mineral reserves at the Prairie Creek site.
- A participant stressed that the Prairie Creek area was among the most sensitive areas in the Dehcho.
- A participant indicated that project splitting is a concern with permitting for Prairie Creek activities. Martin Haefele responded by saying that in the Review Board's opinion, the proposed Drilling Program can occur independently of other mine components, including the winter road access.
- Some participants raised concerns about the assessment of cumulative effects and they wanted to know what specific components and thresholds would be used to assess the project. Martin Haefele responded by saying that that is what the Review Board would like to know themselves; it is a primary reason for visiting the communities. He acknowledged that internally the Review Board is concerned with erosion, sedimentation, effects to water in particular.
- A participant noted the possibility of grizzly bear disturbance due to drilling activities and mentioned that the Dehcho Land Use Planning Committee (DCLUPC) had tabled useful information regarding land disturbance thresholds that are applicable to wildlife.
- Helicopter impacts to wildlife, particularly grizzly bears, were mentioned by a participant.
- It was suggested by a participant that RWED be involved in the EA from a wildlife perspective; they have apparently identified times when Dall sheep are particularly vulnerable to disturbance and have developed measures that can reduce impacts.
- A discussion was held about the possibility of limiting the altitude of helicopters and fixed-wing aircraft directly above the site to reduce impacts to wildlife. Aircraft, chartered by both government and private individuals have been known to fly low over the area. A Parks Canada representative described the agreements that the park has with local charter companies to respect altitude restrictions.
- A participant discussed possible cumulative impacts from stream crossings.
- The method by which site managers will be able to identify grayling and bull trout migration was questioned by a participant.
- Dan O'Rourke mentioned that representatives from the Department of Fisheries and Oceans (DFO) will be visiting the Prairie Creek site to inspect the road system to identify areas of concern, and to impose conditions where necessary.
- A participant stated that, in the absence of data regarding streams at the site that may or may not contain fish, crossing of streams should observe the precautionary principle, and as such, all such streams that lack data should be considered potentially fish bearing.
- A concern was voiced by a participant about the need to enforce measures and monitor the site.
- The representative from PKFN said that he had met with council to discuss the Drilling Program and listed areas of concern, including:
 - potential effects to the watershed;
 - water crossings;
 - cumulative effects;
 - ecological integrity of the landscape; and
 - PKFN support for the expansion of Nahanni Nation Park Reserve's borders.
- The PKFN representative stated that those listed reasons were presented as evidence for non-support for the project at this time.

- The PKFN representative also mentioned concerns from the community about a reduction in fish harvesting experienced (between 1970s and last time they fished there in 1994/95) by local harvesters. He also stated concerns about the presence of chemicals on site.
- A participant asked where drilling water will go as drainage in karst landscape means that water flow can be unpredictable. Dan O'Rourke responded by saying that the water use will be small and that the drill additives to be used are non-toxic.
- A participant asked about aluminium nitrate and its effects.
- A participant asked if waste management for the Drilling Program would be examined in the EA. Dan O'Rourke noted that CZN routinely burns its waste at the mine site; waste oil will soon be destroyed in a special furnace the company is acquiring. Dan O'Rourke stressed that there needs to be a common sense approach to scoping in activities.
- Martin Haefele noted that interested parties have until April 12 to submit comments in writing regarding the draft Terms of Reference.
- An INAC representative described the inspections that occur at the site, including water sampling; Prairie Creek is a frequently tested creek. It was also mentioned that Parks Canada has a testing system.

Items discussed outside the scope of current EA:

- Dan O'Rourke discussed the potential of the Prairie Creek Mine's known existing resources to provide an operational lifespan of 18 to 20 years.
- Dan O'Rourke mentioned that an application for mining operation may be submitted in the very near future, possibly within the year.
- Dan O'Rourke noted the need for use of the winter road access for re-supply and backhauling of unwanted materials.
- A discussion concerning cumulative effects regarding mine site activities ensued. Dan O'Rourke mentioned that the Government (Natural Resources Canada) used the mine site for accommodation of persons involved in the Mineral and Energy Resource Assessment (MERA) process. Dan O'Rourke wanted to know if that use of the land needed to be assessed or permitted. An INAC representative said that their activities do not require land or water use permits because they fail to trigger regulatory thresholds.
- Dan O'Rourke said that Environment Canada's Metal Mining Effluent Regulation (MMER) will dictate water quality during mine operation.
- In a response to concerns stated by the PKFN representative, Dan O'Rourke discussed CZN's plans for the removal of the cyanide. CZN prefers to repackage the material and ship it out on the winter road for destruction in a southern location. CZN believes that destruction of the material on-site is not a preferable option as chlorine and bleach would be required; the process can be dangerous and produces unwanted by-products such as ammonia.
- A participant stated that they would like to see an independent scientific assessment about the best method for dealing with the cyanide stored at Prairie Creek.
- A discussion about CZN's letter to the DCLUPC occurred; the representative from PKFN stated that band members are more concerned with the environment than employment.
- Dan O'Rourke stated that he understood from the land use plan that most Dehcho communities do not support mining. However, he felt that their concept of mining

comes from bad experiences such as Giant Mine or Pine Point. He stressed that mining today is more environmentally sustainable; technologies are better.

The meeting ended at approximately 11:30 am.

Afternoon Session - April 5th, 2005 - Community of Fort Simpson

In attendance:

Troy Searson – Indian and Northern Affairs Canada (INAC)
Shane Hayes – INAC
Kim Schlosser – Parks Canada
Chuck Blyth – Parks Canada
Laura Pitkanen – Dehcho First Nations
Dan O'Rourke – Canadian Zinc Corporation (CZN)
Renita Schuh – MVEIRB
Martin Haefele – MVEIRB
Patrick Duxbury – MVEIRB
Carl Brew (sp) – Kaadule
Steve Gooderham – GNWT - Environment and Natural Resources
Loyal Letcher - GNWT - Environment and Natural Resources
John Renaud – Liidlii Kue First Nation
Jermaie Gargan - Liidlii Kue First Nation
Andrew Gavle – Village of Fort Simpson
Ray Michaud – Village of Fort Simpson (Mayor)
Elizabeth Hardisty – Translator, Fort Simpson
Kirsten Murphy – CBC North
Jonas Antoine – Dehcho

The meeting commenced at approximately 2:20 pm with an opening prayer from Elizabeth Hardisty. Martin Haefele welcomed the group and explained the purpose of the meeting and the nature of scoping in the EA process. He stressed the experimental nature of the scoping session as this has been a process that has normally occurred on paper and not with direct feedback from the communities. Renita Schuh presented a summary of the MVEIRB process. Martin Haefele then went on to describe the role of the Board, how it is appointed and how the Board functions as a quasi-judicial body.

Dan O'Rourke of CZN gave a presentation and overview of the recent history of permitting. The presentation included items such as diamond drilling, the proposed drilling techniques, use of helicopters and the construction of spur roads. He acknowledged concerns regarding soil erosion around the road network and stated that CZN expects visits by DFO and possibly INAC inspectors around this issue. An environmental sensitivity analysis may be conducted with DFO regarding areas where drilling and drilling support activities should and should not occur.

Items related to the current EA:

- A participant asked if CZN wishes to drill more than one hole on a site; will they go at an angle and would this require moving the rig? Dan O'Rourke indicated they could drill at an angle and shouldn't have to move off platform.
- A participant raised a question about the scope of the project and wanted to know what the exact reasons for the EA referral occurred were. Martin Haefele stated that the project was referred by the Mackenzie Valley Land and Water Board (MVLWB) over public concerns on the cumulative effects on the South Nahanni watershed. He asked the persons at the meeting if there were further concerns other than those cited by the MVLWB.
- Dan O'Rourke mentioned the difficulty that CZN has had in being able to find evidence of public concern over cumulative effects.
- Raymond Michaud commented that he felt the EA for the Drilling Project was a waste of time and wanted to go on record with that opinion.
- Dan O'Rourke stated that he understood that the MVEIRB was constrained in term of having to proceed with an EA. However, he suggested that there needs to be more of a two-tiered approach for larger and smaller projects.
- Martin Haefele stated that once MVEIRB has received a referral to conduct an EA, it has to follow certain steps as per its mandated legislation.
- Raymond Michaud stated that he didn't understand the intent of the meeting, doubted its usefulness and felt it wasn't well advertised; he found out about it at a late date.
- A participant wanted to know how much erosion had taken place and if there was a record of the erosion. An INAC representative said that records of water monitoring were available.
- A participant wanted to know if the Board could speed up the process, particularly if no one from the public showed up. Martin Haefele stated that the Board has to adhere to its process in order to be fair. He felt that good terms of reference were useful for a streamlined approach to EA. Dan O'Rourke also mentioned that CZN is a small company and needs time to write its reports.
- Martin Haefele asked the Mayor if he had any concerns about the project being assessed. The Mayor said he had no concerns over the Drilling Project.
- A participant wanted to know if there had been any other negative aspects that arose in other meetings. Dan O'Rourke mentioned the discussion in Wrigley about establishing minimum altitudes for aircraft not involved in company work. He also mentioned that different parties come looking around the mine site by aircraft, sometimes at low altitude.
- A discussion was held concerning different groups present at the mine site for various projects and threshold of the area for receiving visits, particularly as it applies to the number and nature of aircraft travel to, from and around the mine site.
- A participant mentioned he saw sheep on hillside while on a visit and noted that they didn't appear disturbed by activity around them.
- A participant noted that the Board not only looks at environmental, but also social impacts, such as effects to social structure. He stated that the community of Nahanni Butte is feeling the squeeze of development pressure and that this is an important social issue which is causing stress there. He stated that Nahanni Butte has a very strong position concerning the Prairie Creek mine. Martin Haefele confirmed that social impacts are considered by MVEIRB. Dan O'Rourke stressed that CZN doesn't want to pressure Nahanni Butte.
- A participant wanted to know if Nahanni Butte was going to be visited as part of the scoping sessions. Martin Haefele responded that MVEIRB received a letter from the

Chief of Nahanni Butte, which requested MVEIRB not to come because of court cases in which CZN has been named in the proceedings.

- A participant wanted to know if archaeology was considered in the draft terms of reference. Martin Haefele said it had been considered. Dan O'Rourke said that if artefacts are discovered then work will be stopped and the Prince of Wales Museum will be contacted.
- Martin Haefele asked if the area around the mine site has been traditionally used in the area by Nahanni Butte people or others. A participant stated that the Consensus Team (a team created out of an agreement between the Federal Government and the DCFN) is working on the history of the Naha people; this includes discussion about the land and the passage of various aboriginal groups who moved around the area.
- A participant mentioned the historical practice of Dene bands that would, after travelling in a circular route in the Mackenzie Valley and in the mountain ranges, come to the area of Fort Simpson to meet other bands. As the Dene bands were normally nomadic, it was likely that they would have come into the area of Prairie Creek.

Items outside the scope of current EA:

- Dan O'Rourke discussed the judicial review of the winter road and stated that CZN expects to hear about the decision soon.
- A participant expressed his frustration with repeated EAs required of CZN. Dan O'Rourke added that it has requested 6 permits and gone through 6 EAs. He noted that a mining production application could be coming up soon. Dan O'Rourke stated that CZN is a small company and dependent upon using through-flow shares for financing drilling activities. Permitting problems have led to a difficulty in using the money raised through shares, and as such, they have been penalized by Revenue Canada.
- Raymond Michaud stated that he felt that the local communities get penalized as well. He was frustrated that this small project is being delayed. He felt that the Prairie Creek mine could have a big economic impact on Fort Simpson.
- Martin Haefele stated that in EA sometimes location, not size, cause concerns.
- Raymond Michaud said that the Land and Water Board made a terrible decision on this issue, in passing the project on to EA. He felt that this particular project didn't cause him concern.
- Martin Haefele stressed the importance of being fair to all potential parties and communities; MVEIRB doesn't want make the EA bigger than it has to be.
- A participant wanted to know if government could be referred to EA for their activities around the Prairie Creek site.
- A participant spoke about a survey she had participated in. People harvesting loche (known also as burbot/mariah) by the Natla River noticed that those fish had white livers and were concerned by it. Children were also harvesting chubbs in this area. She wanted to know if the mine could have any impact on that. She wanted to know the range the fish migrated. Another participant stated that the Natla River is away from the South Nahanni and is not related to the Prairie Creek Mine. Dan O'Rourke stated that the mine has never been in operation and water has been tested regularly, the company has not done any thing that could have affected fish in that way.
- A participant expressed concerns about barrels on the site and chemicals that might be held in them and if the chemicals could somehow enter the water. Dan O'Rourke gave a copy of the company's DVD to her. He discussed the former fuel storage tanks which have been converted to storage sheds. The participant stressed that often Native

people don't tell you to your face what the feel. Dan O'Rourke suggested that she speak directly to people on the DVD who have been to the site.

- Another participant stated that he had been at the site for a visit and during the visit he left the group to scout around for himself; he said that he did not notice anything that concerned him.
- A participant stated the Dehcho First Nations has conducted extensive consultation (door to door) in Nahanni Butte around the issue of the park's expansion. The community is largely in favour of the park expansion. A consultation record has been compiled regarding this issue.
- A participant stressed the need to see beyond the scientific aspects of the project and begin to understand the deep spiritual attachment to the land that Dene people have. He stated that Thomas Berger was someone who understood how Dene felt about the land.

The meeting was finished at approximately 4:00pm

Morning Session - April 6th, 2005 - Community of Fort Liard

In attendance:

Troy Searson – Indian and Northern Affairs Canada (INAC)

Shane Hayes – INAC

Kim Schlosser – Parks Canada

Dan O'Rourke – Canadian Zinc Corporation (CZN)

Renita Schuh – MVEIRB

Martin Haefele – MVEIRB

Patrick Duxbury - MVEIRB

Rose B. Reid – Fort Liard

Dolphus Codillle – Fort Liard

Michael Pealow – Hamlet of Fort Liard

Dolphus Hardisty – Fort Liard

John Hogelaar – Beaver Enterprises

Frank Kotchea – Nahendeh Land and Environmental

Alan Haines – Beaver Enterprises

Gordon Timbre – Acho Dene Koe First Nation, Sub-chief

The meeting started at approximately 9:45 am and was opened by a prayer by Rose Reid.

Martin Haefele welcomed the group and explained the purpose of the meeting. He discussed the role of the Review Board and how it acts like a court. Renita Schuh talked about the EA process for this project. Dan O'Rourke of CZN described the Drilling Program and emphasized the differences between mineral drilling and oil and gas drilling. He noted the concerns about the road network, acknowledging that most of the roads were constructed in the 1970s and 1980s and sometimes followed the creek bed. He stated that CZN will cross creeks instead of run along side them. He also mentioned that Golder Associates is looking into tailings management options; paste backfill and dry stacking. He also mentioned CZN's intentions to resupply the mine via the winter road next winter, pending the CZN legal challenge of the Mackenzie Valley Land and Water Board's decision regarding the winter road.

Items related to the current EA:

- A participant wanted to know how deep the drilling would be. Dan O'Rourke responded that it would be as deep as 600 m.
- A participant wanted to know what metals are being explored for. Dan O'Rourke stated that CZN wants to look for silver, lead, zinc and copper.
- A participant wanted to know how much land would be disturbed for the drilling pads. Dan O'Rourke stated that the space would be about 14m by 14m. Martin Haefele asked if multiple drilling from one site would require a larger area. Dan O'Rourke responded by saying the drill rigs will only have to be moved very slightly.
- A participant expressed her concerns about the impacts of helicopter noise on people around the mine site; she cited examples from Fort Liard where extensive helicopter operations in support of oil and gas exploration have disturbed the sleep of elders and others in the community. Dan O'Rourke noted that they have experienced similar problems at the mine site from aircraft (chartered by government and others), who have buzzed the site, disturbing wildlife and resting workers. Dan O'Rourke suggested that the Board could impose measures to limit the altitude of aircraft around the site that have no specific business being there.
- A participant wanted to know how the proposed work is that work going to affect the local plant life. He said that there are very rare plants (grasses) in the region which have medicinal value for the Dene. Dan O'Rourke said the some spurs may be constructed which will involved clearing land, however DFO is concerned with potential erosion from the disturbed areas and will look extensively at the road network to ensure erosion isn't occurring. Dan O'Rourke also said that re-vegetation, when it occurs, will happen with native plant species.
- A participant asked if drilling fluids will be used and how they would affect the water being used. Dan O'Rourke said they should not affect the water as they will use only non-toxic lubricants.
- A participant asked about sumps at the site. Dan O'Rourke noted that sumps will be dug, however they are usually much smaller that those used by oil and gas drilling.
- A participant wanted to know how many people will work on the drilling rigs. Dan O'Rourke said that 4 persons per rig will be working. He also mentioned that CZN has had discussions with representatives from Fort Liard and Fort Simpson about the possible involvement of local communities in operating their own drilling rig with support from CZN.
- A participant observed that stream crossings will require dragging a drill rig; he wanted to know how many crossings will occur. Dan O'Rourke noted that wet crossings would at Prairie Creek and likely Galena Creek. The rigs will be steam cleaned before crossings one way, and wiped down on their return to prevent oils from getting in the water.
- A participant wanted to know how much work would there be for people from Fort Liard. Dan O'Rourke said that he didn't know right now as there isn't much work going on. Has talked to the chiefs of Fort Liard and Fort Simpson about arrangements.
- A participant asked how reclamation of spurs would occur. Dan O'Rourke said that at this time, spur reclamation is not contemplated because they may want to use the land in the future.
- A participant noted that fuel will be used for the drilling programs; he wanted to know how it would be stored. Dan O'Rourke stated that fuel will be transported around the site in tidy tanks in the back of pick-up trucks.
- A participant was concerned that trucks carrying fuel could tip over on the roads and spill their contents. An INAC representative said that the road system around the mine

- site is less steep and dangerous than around the M25 site gas well site. The INAC representative also noted that CZN is required to maintain spill kits and record logs.
- Martin Haefele asked if persons from Fort Liard hunt in the mine area. A participant said they do not, but Nahanni Butte people do, and there is a sharing of meat around communities.
 - A participant wanted to know about animal movements in the area and was also concerned with waterfowl in the “tailings pond”. Dan O’Rourke said that there are grizzly bears moving around the area, including one known commonly as “Barney the Bear”. CZN staff is instructed to avoid wildlife. Dan O’Rourke noted that the pond has never been used to hold tailings as mining has not occurred so there should be no effects to the birds.
 - A participant suggested that an environmental monitor could be hired through the band (to ensure more impartiality), and then reimbursed by the company, to help choose what sites are or aren’t appropriate to disturb and to help provide ways to deal with the surrounding plants and animals in a respectful manner. Dan O’Rourke responded by saying that it was an interesting suggestion and agreed to look in to it.

Items outside the scope of current EA:

- A participant wanted to know how large the mine camp is. Dan O’Rourke responded saying that it can hold up to 250 persons. He noted that Beaver Enterprises is involved in doing an assessment for upgrading the camp facilities.
- A participant wanted to know about the feasibility for this project at present. Dan O’Rourke said that CZN has a 20 million tonne resource identified presently. However, CZN wants to see if there are other reserves present. A mining feasibility study is being conducted and will be likely available at the end of the year.
- A participant expressed concerns about wildlife, particularly sheep, at the site. He thought that animals could ingest chemical. He was also concerned about small animals such as gophers, as they are part of the food chain. Dan O’Rourke responded by saying that local people, such as Leon Konisenta, are keeping the site clean. Dan O’Rourke also noted that animals inhabit the area, such as sheep who seek protection from grizzly bears on a series of ridges behind the mine site.
- A participant expressed concern about chemicals stored at the site. Dan O’Rourke acknowledged that cyanide stored at the site has cause concern in Dehcho communities. He noted that outside forces want them to fly it out, but doubted that Transport Canada would permit such an activity. Neutralizing the cyanide, in CZN’s opinion, is too dangerous and requires more chemicals, such as chlorine and bleach to be brought in. CZN prefers to remove it by way of the winter road; however, CZN disagrees with the notion that it is using the removal of cyanide as a bargaining chip in trying to get the winter road opened. Dan O’Rourke provided more information regarding the details of the court case. He was confident that the company would win its challenge.
- A participant asked what Leon Konisenta does at the mine. Dan O’Rourke said that he was an assistant site supervisor and helped, with Alan Taylor, to re-open the site.
- A participant stated that an inspection in 2002 noted stains on the ground from copper sulfate. Pallets storing Xanthate were also apparently in a state of deterioration. Dan O’Rourke noted that those issues have been identified, and that the material will be used later on in mining processes.
- A participant requested to know who will look at air quality at the site. An INAC representative stated that air quality is the responsibility of Environment Canada. Dan O’Rourke noted that there are large generators on site, but they haven’t been used.

The present electricity for the site is generated by a small engine generator. Air quality, in his opinion, was not an important issue at this time.

- A participant wanted to know what is being done with waste oil. Dan O'Rourke said, that based on the recommendations of people from Fort Liard, waste oil will be burned in a special furnace.
- Dan O'Rourke spoke about the work that is proposed to examine water levels on Prairie Creek, particularly in respect to any potential problems from land slumping.
- A participant wanted to know how rotten buildings would be disposed of. Dan O'Rourke responded saying that he didn't know but could get back on that question.
- A participant wanted to know how old paints and other things would be removed. Dan O'Rourke said that CZN wants to move those things out on the winter road.
- A discussion about waste management and burning of materials occurred.
- A question was raised about the use and storage of dynamite. Dan O'Rourke said that the dynamite is stored away from the site.
- A participant wanted to know when the leases will run out for the site. Dan O'Rourke said that they are renewed as needed.
- In a discussion about work opportunities at the mine, Dan O'Rourke stated that there are persons from other local communities employed there during the work season. Winter road development would probably require the clearing of brush, which could provide employment. Mine training programs, originally directed to the diamond industry could be used for persons in the region.

The meeting was completed around 11:45 am