

# Mackenzie Valley Land and Water Board 7th Floor - 4910 50th Avenue P.O. Box 2130 YELLOWKNIFE NT X1A 2P6 Phone (867) 669-0506 FAX (867) 873-6610

EA 0405-02 CZN Exponer

	FILE NUM	MBER:		2001C0022 2004C0030	
Date:	June 1, 2004		-	···	
То:	Mr. Alan Taylor			A. (1999)	
Company	Canadian Zinc Corporation				
Copied To:	Vern Christensen, Executive Director, MVEIRB (50)			)	
Fax Number:	(604) 688-2043				
From:	Marilyn For Melody McLeod				<del></del>
Number of pages inclu	ding cover		11		
Remarks:					
Board Decision – Amen Mineral Exploration at P		1		Enclosures	
Letter     Preliminary Screening Report				As requested	
			$\boxtimes$	For your info	mation
			$\boxtimes$	For your com	ment
	and the state of t			For your app	roval
and the second second	RECEIVED	]	<u>Deli</u>	vered by	<u>Date</u>
HISSPM JUN 0 1 2004				Mail	
	MACKENZIE VALLEY			Courier	
ENVIRORMENTAL IMPACT REVIEW BOARD				Hand Delivered	
~			$\boxtimes$	Fax	June 1, 2004

Note: The document accompanying this transmission contains confidential information intended for a specific individual and purpose. The information is private, and is legally protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reference to the contents of this telecopied information is strictly prohibited. If you have received this communication in error, please notify the above person immediately by telephone and return the original to by regular mail to address above.

From-MVLWB

### Mackenzie Valley Land and Water Board

7th Floor - 4910 50th Avenue • P.O. Box 2130 YELLOWKNIFE, NT X1A 2P6 Phone (867) 669-0506 • FAX (867) 873-6610

June 1, 2004

File: MV2001C0022

Fax: (604) 688-2043

MV2004C0030

Mr. Alan Taylor Canadian Zinc Corporation Suite 1202 - 700 West Pender Street VANCOUVER, BC V6C 1G8

Dear Mr. Taylor:

# **Board Decision – Amendment Request** Mineral Exploration at Prairie Creek Mine

The Mackenzie Valley Land and Water Board (MVLWB) met on June 1, 2004 to deal with the aforementioned application. The decision was to refer the application to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) for an environmental assessment pursuant to Subsection 125(1) of the Mackenzie Valley Resource Management Act. Please note that the application is being referred to the MVEIRB as a new Land Use Permit and has been assigned file number MV2004C0030.

The application is being referred to the MVEIRB specifically due to public concern about the cumulative effects of this project on the South Nahanni Watershed. For further clarification, please see the attached reasons for decision and the preliminary screening report.

If you have any questions, contact Bob Wooley, Executive Director at (867) 669-0506 or email mvlwbpermit@mvlwb.com.

Yours sincerely,

Melody J. McLeod

Chair

Attachment

Copies to: Vern Christensen, MVEIRB

Charlene Coe for Ed Hornby, South Mackenzie District, DIAND,

Yellowknife

Herb Norwegian, Deh Cho First Nation

Chief Keyna Norwegian, Liidlii Kue First Nation

### PRELIMINARY SCREENING REPORT FORM

PRELIMINARY SCREENER: MVLWB REFERENCE / FILE NUMBER: MV2001C0022 TITLE: Mineral Exploration, Prairie Creek M ORGANIZATION: Canadian Zinc Corporatio MEETING DATE: June 1, 2004	Ine Site	IRB REFERENCE IUMBER:
Турв of Development:	Requires	EIRB Ref.# permit, license or authorization require permit, license or authorization
Project Summary		
<ul> <li>Access to drill sites will be mainly</li> <li>Drilling will be conducted on exist</li> <li>The existing camps facilities at the</li> </ul>	by existing tote roads but ing drill pads or from new e Prairie Creek Mine will	alineate the mineral resources on the Prairie Creek Property it short 20-30 metre access spurs may have to be constructed v drill pads located adjacent to existing tote roads be used il November 29, 2006 when the LUP expires
Fuel will be transferred to equipm	ent in small batches on a	ting, fully bermed fuel tank farm facility at the Prairie Creek Mine site. an as needed basis by helicopter or pick up truck. spur site except within the fuel tanks in the equipment.
<ul> <li>(3) Equipment</li> <li>2 Longyear Super 38 drills or equ</li> <li>1 Cat front end loader</li> <li>1 Cat buildozer</li> <li>1 Cat grader</li> <li>2 rock trucks</li> <li>3 pickup trucks</li> </ul>	ivalent	
Scope  Conduct mineral exploration activity consis	iting of 50 to 60 diamond	drill holes located throughout the Prairie Creek Mine property.
Coordinates: 61°33'N & 124°48'W.		
Principal Activities (related to scoping)		
☐ Construction ☐ Installation ☐ Maintenance ☐ Expansion ☐ Operation ☐ Repair ☐ Research ☐ Water Intake ☐ Other:	⊠ Exploration     ☐ Industrial     ☐ Recreation     ☐ Municipal     ☐ Quarry     ☐ Linear / Corrido	Decommissioning Abandonment Aerial Harvesting Camp Scientific/ Solid Waste
Principal Development Components (relate	d to scoping)	
□ Access Road     □ construction     □ abandonment/removal     □ modification e.g., widening, straightening     □ Automobile, Aircraft or Vessel Movement     □ Blasting     □ Building     □ Burying     □ Channeling     □ Cut and Fill     □ Cutting of Trees or Removal of Vegetation     □ Dams and Impoundments     □ construction     □ abandonment/removal		

From-MVLWB

☐ modification ☐ Ditch Construction ☐ Drainage Alteration ☐ Drilling other than Geoscient ☐ Ecological Surveys* ☐ Excavation ☐ Explosive Storage ☑ Fuel Storage ☐ Topsoil, Overburden or Soll ☐ fill ☐ disposal	∏ removal ☐ storage		□s □s □ t	☐ planting/seed ☐ reforestation ☐ scarify ☐ spraying ☐ recontouring slashing and removal doll Testing Stream Crossing/Bridgitunneling/Underground Coad repair and access	of vegetation ing
NTS Topographic Map Sheet 95F10	Numbers				
Latitude / Longitude: 61°33' N; 124°48' W					
Nearest Community and Wate Community: Nahanni Butte Water Body: Prairie Creek	er Body:				
Land Status (consultation info	ormation)				
☐ Free Hold / Private	□ Сопп	nissioners Land	□ Federal Crown     □ Federal Crown	wn Land	Municipal Land
Transboundary Implications					
☐ British Columbia ☐ Nunavut	☐ Alberta ☐ Wood But	ffalo National Park	☐ Saskatchewa ☐ Inuvialuit Seti		☐ Yukon
Type of Transboundary Implic	eation:	☐ Impact / Effect	☐ Deve	lopment	
Public Concern(DESCRIBE)	<u> </u>				
PHYSICAL - CHEMICAL EFFE	CTS				
IMPACT 1. Ground Water	М	ITIGATION			
★ Water table alteration	pc		Requiring the pro	ponent to plug and p	an flow and a lowered permanently seal all drill fects.
☑ water quality changes	gr lin	ound water through rec	harge areas. Re substances tha	equiring the proponent at come into contact	n toxic leachate reaching t to use techniques that with soil or water, and hese effects.
	eo tra	mbustible garbage in a	a forced-air fuel f ving readily availa	ired incinerator, the inble spill plans and kil	drill; the burning of all use of drip pans at fuel s, and personnel trained ill Line.
☐ infiltration changes					
□ other □ N/A					
IMPACT 2. Surface Water		MITIGATION	•		
☑ flow or level changes		The use of a recirculat drilling. Since exact drill			of water required during ses are not yet known.
X water quality changes	6	entering surface waters.	Drill waste conta culating drill and t	mination should be m to deposit all cuttings	ult in these substances inimized by requiring the in a land based sump at e.

Sewage and greywater is to be deposited in the existing exfiltration sump on site which is currently permitted under MV2001C0022.

Hydrocarbon contamination should be minimized by locating fuel caches at least 100 m above the high water mark of a water body/course; by ensuring that all equipment crossing creeks is free of visible hydrocarbon residue; by checking the fuel containers every week for leaks; by having spill kits readily available at all drill and spur construction sites; and by using drip pans when refuelling equipment. The main fuel storage facility already permitted for use is fully bermed.

Using sumps will limit the aerial extent of possible contaminant source areas.

Sediments may enter water bodies/ courses through erosion of banks and hill slopes. To reduce erosion potential stream banks should not be cut; stream beds should not be used as access routes, erosion control structures should be installed where needed; and all disturbed areas should be recontoured/restabilized to conform to local topography.

☐ water	quantity changes	
☐ Drain	nage pattern changes	
☐ tempe	erature	
☐ wetlar	nd changes / loss	
Other:	:	
□ N/A		
IMPACT 3.	Noise	MITIGATION
🛚 noise	in/near water	All equipment to be used will generate noise. No mitigation but impact should be for short, intermittent periods of time.
other:	noise Increase	
□ N/A		
IMPACT 4.	Land	MITIGATION
☐ geolo	gic structure changes	
🖾 soil co	ontamination	Fuel and chemical spills could contaminate soils. Having spill kits and spill contingencies in place, as well as training personnel to respond to such events, will speed up response times. This should help reduce the impacts of any spills.
☐ buffer	zone loss	
⊠ soil co	ompaction & settling	Constructing new access spure and drill pads may cause soil compaction in currently undisturbed areas. These effects will be minimized by using, wherever possible, the existing tote roads, drill pads, campsite and main fuel tank farm facility.
□ Desta	tbilization / erosion	Drilling and operating equipment near or in streams may cause bank erosion and destabilization. To reduce erosion potential, stream banks should not be cut; stream beds should not be used as access routes; drilling and trail construction should be well above the high water mark of any water body/course; erosion control structures should be installed where needed; and all disturbed areas should be recontoured/restabilized to conform to local topography.
☐ perma	afrost regime alteration	
other:	explosives/scaming	
□ N/A		
IMPACT 5.	Non Renewable Natural Resources	MITIGATION
🗵 resou	rce depletion	No resources will be depleted during this operation but reviewers have stated concerns that this exploration may lead to mining of the mineral resources.

other:	
□ N/A .	
IMPACT 6. Air/Climate/ Atmosphere	MITIGATION
☑ Other	Standard filters on the equipment will reduce emissions but overall no mitigation.
□ N/A .	
BIOLOGICAL ENVIRONMENT	
IMPACT 1. Vegetation	MITIGATION
species composition	
Species introduction	The equipment has been only used at the Prairie Creek Mine site for a number of years; therefore, the probability of introducing new plant species to the site is low.
toxin / heavy accumulation	
☑ other: foliage damage	Fuel and chemical spills could damage plant foliage. Having spill kits and spill contingencies in place, as well as training personnel to respond to such events, will speed up response times and minimize any impacts.
	All vegetation will be removed at the new access spur sites and possibly at the drill sites. No mitigation unless the disturbed areas are revegetated (naturally or by human effort). An A&R plan for LUP MV2001C0023 is currently being reviewed that will address these issues because the A&R Plan has to take into account the entire mine site.
□ N/A IMPACT 2. Wildlife & Fish	MITIGATION
☑ effects on rare, threatened or endangered species	Reviewers have identified that the Prairie Creek watershed is important habitat for Grizzlies (listed as Special Concern under the Species at Risk Act) and Bull Trout (on COWSEWIC's Highest Priority Candidate List).
	Disturbance to these species can only be minimized, not fully prevented but it should only be for a short period of time.
☑ fish population changes	Spawning grounds can be protected by prohibiting the use of steam beds as access routes and by requiring that access routes be constructed at least 30 metres from any stream, and by prohibiting drilling within 100 metres of the high water mark of any stream.
	Covering all water in-takes with mesh will prevent the entrainment of fish.
☐ waterfowl population changes	
☐ breeding disturbance	
population reduction	
☐ species diversity change	
health changes (Identify)	
☑ behavioural changes	Wildlife may avoid the area during times of operation because of the noise and/or smells (exhaust, chemicals). No mitigation.
	Parks Canada is concerned that this development will fragment continuous habitat areas. No mitigation but for the most part currently existing infrastructure will be used; therefore, further fragmentation of the landscape should be minimal.
	The number and total area of new access spurs and drill pads that have to be constructed are unknown.

game species effetts	
☐ toxins / heavy metals	
☐ forestry changes	
agricultural changes	
other:	
☐ N/A INTERACTING ENVIRONMENT	
IMPACT 1. Habitat and Communities	MITIGATION
☑ predator-prey	Improper garbage handling may attract numerous predators to the area which will increase the pressure on prey species. Storing garbage in bear proof containers and burning garbage regularly will help mitigate this effect.
☐ wildlife habitat / ecosystem	
Composition changes	
☐ reduction / removal of keystone or endangered species	
removal of wildlife corridor or buffer zone	
other:	
□ N/A	
IMPACT 2. Social and Economic	MITIGATION
☐ planning / zoning changes or conflicts	
conflicts ☐ increase in urban facilities or	
conflicts ☐ increase in urban facilities or services use	
conflicts  increase in urban facilities or services use  rental house  airport operations / capacity	
conflicts  increase in urban facilities or services use  rental house  airport operations / capacity changes	Reviewers and the public have raised concerns that development in the Prairie Creek watershed destroys the pristine nature of the whole South Nahanni Watershed, the location of the Nahanni National Park Reserve.
conflicts  ☐ increase in urban facilities or services use  ☐ rental house  ☐ airport operations / capacity changes  ☐ human health hazard	watershed destroys the pristine nature of the whole South Nahanni Watershed, the
conflicts  ☐ increase in urban facilities or services use  ☐ rental house  ☐ airport operations / capacity changes  ☐ human health hazard	watershed destroys the pristine nature of the whole South Nahanni Watershed, the location of the Nahanni National Park Reserve.  Canadian Zinc Comporation is in good standing with the Recorder's Office and has the
conflicts  ☐ increase in urban facilities or services use  ☐ rental house  ☐ airport operations / capacity changes  ☐ human health hazard  ☑ impair the recreational use of water or aesthetic quality  ☐ affect water use for other	watershed destroys the pristine nature of the whole South Nahanni Watershed, the location of the Nahanni National Park Reserve.  Canadian Zinc Comporation is in good standing with the Recorder's Office and has the

From-MVLWB

quality of life changes	
⊠ public concern	There is much concern regarding the cumulative effects of this operation on the downstream environment, including the Nahanni National Park Reserve, and the Prairie Creek watershed as a whole. More in-depth studies may be needed to determine these cumulative effects.
other:	Cumuladve enacts.
□ N/A	
IMPACT <sup>-</sup> 3. Cultural and Heritage	MITIGATION
effects to historic property	
increased economic pressure on historic properties	
change to or loss of historic resources	
change to or loss of archaeological resources	
☐ Increased pressure on archaeological sites	
change to or loss of aesthetically important site	
effects to aboriginal lifestyle	
⊠ other:	The area covered by two of Canadian Zinc's Mining Leases (2931 and 2854) was withdrawn under the Deh Cho Interim Measures Agreement, and as reported by Parks Canada, these lands are being considered for the expansion of the Nahanni National Park Reserve. These Leases were recorded prior to the withdrawal; therefore,
□ N/A	Canadian Zinc has the legal right to work these leases.
NOTES:	

#### Consultation

Pursuant to Section 27 Subsections (a) and (b) of the Deh Cho First Nations (DCFN) Interim Measures Agreement, the MVLWB determined that written notice was given to the DCFN and that a reasonable period of time was allowed for DCFN to make representations with respect to the application.

### PRELIMINARY SCREENER / REFERRING BODY INFORMATION

	RA or DRA	ADVICE	PERMIT REQUIRED
<u>Federal/Territorial</u>			
Environment Canada Fisheries and Oceans Indian and Northern Affairs Canada Canadian Heritage ( Parks Canada) National Energy Board Natural Resources Canada Public Works and Gov't Services Transport Canada Northern Oll and Gas Directorate Canadian Nuclear Safety Industry Canada Canadian Transportation Agency National Defence GNWT - RWED GNWT - MACA GNWT - Transportation GNWT - Health Prince of Wales Heritage Center MVEJRB			
<u>Other</u> Canadian Parks and Wildemess Society Тепа Firma Consultants			
Aborlginal / First Nations - Deh Cho Deh Cho First Nations Liidlii Kue First Nation (Ft Simpson) Deh Gah Got'ie Dene Council (Ft Prov.) Acho Dene Koe First Nation (Fort Liard) Nahanni Butte First Nation (Fort Liard) Nahanni Butte First Nation (Wrigley) TthedzehK'edeli First Nation (UMR) Ka'a'gee Tu First Nation (Kakisa) Sambaa K'e Dene Band (Trout Lake) K'atlodeeche First Nation (Hay River) West Point First Nations (Hay River) Hamlet of Fort Providence Hamlet of Fort Simpson Town of Hay River Enterprise Settlement Corporation Dene Nation Hay River Metis Nation Hay River Metis Council Fort Liard Metis Local #67 Fort Providence Metis Council Fort Liard Metis Local #52 Northwest Territory Metis Nation Nahendeh Land and Environmental Services Development Corporation Manger, Sambaa K'e Research Cons., Sambaa K'e Mandell Pinder. Barristers & Solicitors, Ka'a'gee Tu First Nation	annonananananananananan		
North Slave Dogrib Treaty 11 Council Dogrib Rae Band Wha TI First Nation Dechi Laot'l Council (Wekweti) Gameti First Nation (Rae Lakes) Lutselk'e Dene First Nation Yellowknives Dene First Nation (Ndilo) Yellowknives Dene First Nation (Dettah) Rea-Edzo Metis Local #64 North Slave Metis Alliance Hamlet of Rae Edzo Charter Community of Wha Ti City of Yellowknife			

Jun-2004 15:52 From-Mytho	TOUIGE	20010	[-00] F.010701	1-001
South Slave Fort Smith Metis Council Salt River First Nations Smith Landing First Nation Katlodeeche First Nation West Point First Nation Northwest Territory Metis Nation Hay River Metis Council Deninu Ku'e First Nations Fort Resolution Metis Council Deninu Ku'e Env. Working Committee Akaltcho Territory Government Town of Hay River Deninoo Community Council Town of Fort Smith Enterprise Settlement Corporation	a accoccaca a			

### REASONS FOR DECISION

### **DECISION:**

01-Jun-2004 15:52

The Mackenzie Valley Land and Water Board (The Board) is satisfied that the preliminary screening of application MV2001C0022, Canadian Zinc Corporation, Amendment request has been completed in accordance with Section 125 of the Mackenzie Valley Resource Management Act

The Board is satisfied that a reasonable period of notice was given to Communities and First Nations affected by the application as required by Subsection 63(2) of the MVRMA so that they could provide comments to the Board.

Having reviewed all relevant evidence on the Public Registry, Including the submissions of the Applicant, the written comments received by the Board and any staff reports prepared for the Board, the Board has decided that in its opinion that there is significant public concern regarding the proposed development.

As a result, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope and intent of the *Mackenzie Valley Resource Management Act* and the Mackenzie Valley Land Use Regulations has decided that this Land Use Permit be referred to the MVEIRB for Environmental Assessment.

	PRELIMINARY SCREENING DECISION
Ø	Outside Local Government Boundaries
	The development proposal might have a significant adverse Impact on the environment, refer it to the EIRB.
Ø	Proceed with regulatory process and/or implementation.
Ø	The development proposal might have public concern, refer it to the EIRB.
	Proceed with regulatory process and/or implementation.
	Wholly within Local Government Boundaries
	The development proposal is likely to have a significant adverse impact on air, water or renewable resources,
	refer it to the EIRB. Proceed with regulatory process and/or implementation.
	The development proposal might have public concern, refer it to the EIRB.
	Proceed with regulatory process and/or implementation.

Preliminary Screening Organization	Signartires O
Mackenzie Valley Land and Water Board	Com the time
June 1, 2004	