10

Accurred My Hourd S/2001 RET#19

44



Mackenzic 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 (N)

Application for:	L	1 MUZOOICO23
New Land Use Permit X	Amendment	or Renewal
T	YPE A	
Applicant's name and mailing address: Complian Zing Companying	Fax number: 604-68	X-204. 1
Canadian Zine Corporation 1202 - 700 W. Pender St. Vancouver, BC, V6C 1G8	Telephone number: (504-688-2001
2 Head office address: As above	Fax number: As above	re
Field supervisor: Mr. Alan Taylor Satellite telephone: 1-600-700-2454 Satellite fax: 1-600-700-9209	Telephone number: A	As above
3 Other personnel (subcontractor, contractors, c	Company staff etc.)	
"TOTAL: To be determined, Est. 15 - 25 (N	umber of persons on site)	
4. Eligibility. (Refin to section 18 of the Markanzia Valley).	Land Use Regulations)	
a)(ii) X a)(iii) a)(iii)	b)(i) b)(ii)	
5. a) Summary of operation (Describe purpose,	nature and location of all activities.)	*See Attached Project Description**

As part of the ongoing process of establishing, confirming and enhancing the known numeral resource at the Prairie Creek property, Canadian Zinc proposes to develop an exploration decline to permit access for underground exploration drilling of the stratabound deposit underlying the Zone 3 quartz vom mineralization. Further delineation of the vem-type mineralization will be undertaken at the same time

The proposed decline will be accessed by a portal to be developed at the 905 m elevation approximately 600 m north of the existing mill facility. The proposed portal location is accessible by existing roads. This will be the fourth portal established on the property to access the underground workings, the others being in the same general area at the 870m, 930m and 970m elevations. The decline itself will be approximately 3m in width, 2,3m high and 600 m long at a 15% downward grade.

The main objective of the proposed decline development and underground drilling exploration program is to further delineate additional stratabound and vein mineralization that will add to the existing defined mineral resource. The stratabound deposits are very underexplored, thus having the potential to significantly increase the known mineral resource and, due to their thickness, hold the key to supporting the desired increased mill throughput of 1500 tonnes per day.

The proposed decline will allow drilling to be conducted from underground about 200 m above the stratabound, as compared to drilling from surface which would require approximately 450 m long boles, resulting in a substantial saving in drilling costs.

h) Pleuse indicate if a camp is to be set up. (Please provide details on a separate page, if necessary.)

The land use operation will based in and serviced from the existing facilities at the Prairie Creek Mine. No new camp will be set up.



March 05, 2001

Mr. Ken Weagle
Executive Director
Mackenzie Valley Land and Water Board
PO 80x 2130, 7th Floor 4910 50th Ave.
Yellowknife, NT
X1A 2P6

Mac be	mzie ¥	alley	Land
4	Water	Boar	d

File

MAR 0 7 2001

Application #MV200100023 Copied To KL1G51800

Dear Mr. Weagle:

Re: Prairie Creck Mine – Application for Type "A" Land Use Permit Underground Decline Development and Exploration

Please find enclosed our application for a Type A Land Use Permit authorizing development of an underground decline and subsequent underground exploration core drilling program planned for the Prairie Creek Mine this coming summer over the period from May through September, 2001. We have enclosed five (5) hard copies of our application package, plus an electronic version on CD.

The application package includes:

- A completed Schedule II application under the Mackenzie Valley Land Use Regulations.
- Our cheque in the amount of \$150.00 payable to the Receiver General for Canada to cover the
 Application Fee (\$150.00) and Land Use Fees (\$0.00) for the proposed use of under 2 ha of land.
 (Note: the proposed area of land use is also covered under land use permit applications for surface
 exploration for which land use fees have been submitted)
- A Project Description Report providing detailed information on all facets of the proposed
 operation, including a summary of consultation efforts.
- Drawings and plans showing the location and details of the proposed development

We look forward to working with you and your staff on the preliminary screening of our application.

Should you have any questions or require any additional information please feel free to contact me at your convenience.

Yours very truly,

CANADIAN ZINC CORPORATION

1. Peter Campbell

Vice President, Project Affairs

cc;

Chief Leon Koniscuta - NBDB

Chief Rita Cli - LKFN

Chief Judy Kotchea -- ADKFN

Grand Chief Michael Nadli - DCFN

6. Summary of potential environmental and resour water, flora & fauna and related socio-economic imp	ree impacts (describe the effects of the proposed fand-use operation on land pacts). (Use separate page if necessary)
Monimal environmental disturbance is expected to o and within 100 m of the existing mill and associated portal, an area of about 500 m 2 .	neour as all activity will take place within the area of traditional mining activity. I facilities New surface disturbance will be restricted to the immediate area of the
dolostone formation and will produce approximate	in carbonate rocks. The decline will be driven entirely within the sedimentary ely 5200 m ³ of rock, which will be trucked and stockpiled within the existing expile or in the storage yard along the toe of the failings impoundment dam.
The Upper Spar and Chert/Dolostone rock units fr levels of mineralization, low sulphide values and environment through sulphide oxidation processes.	from which the rock will originate have been tested and determined to have low high excess neutralization potential, and will therefore pose no hazard to the The results of this testwork are attached.
mine water prior to release to Harrison Creek, Eisher fisheries habitat potential in Harrison Creek, with stappears restricted to the mouth where 7 Slimy Sculp sculpin were encountered in 1981. No fish were observed largely to the headwaters and the mouth. I	ground workings is expected to be typical of the local groundwater regime which a sump will be developed near the mouth of the portal to act as a settling pand for mes studies by Beak consultants in 1980-81 and Rescan in 1994 identified limited teep gradients restricting fish movement upstream of the mouth. Fish utilization in were captured in 1980 and 2 Dolly Varden, 10 mountain whitelish and 8 slimy served in Harrison Creek in 1994. Fish utilization of Prairie Creek appears to be The headwaters appear to be utilized by Dolly Varden (or Bull Trout) and Rocky a move upstream in Prairie Creek beyond the lowest reaches near the mouth.
Proposed restoration plan (please use a separate p	page if necessary).
Following completion of the exploration program, al- be discontinued and the workings will flood to the na development is a decline, no discharge of water is ex-	If equipment will be removed from the underground workings. Deseatering will attitud groundwater level. The portal entrance will be scaled as required. As the spected from the portal.
Rock removed from underground will be stockpiled v	within the existing plantsite area.
8. Other rights, licences or permits related to this per	rmit application (mineral rights, timber permits, water licences, etc.)
Mining Lease 2932 and Surface Lease 95F10/10-5-3.	
No new roads required	
<u>.</u>	
Roads: Is this to be a pioneered road?	Has the route been laid out or ground truthed?
9. Proposed disposal methods.	
a) Garbage: Prairie Creek refuse site	ny farindry to account the
the spanning of the control of the same	c) Brush & trees: NA
b) Sewage (Sanitary & Grey Water); Extiltration sump	 d) Overburden (Organic soils, waste material, etc.). Waste rock to be stockpiled in plantsite area
0. Equipment (includes drills, pumps, etc.) (Please)	
Type & number	,
* See Attacked Sheet**	Size Proposed use
l l	l l

· Warran

1

hub.v.m

-

Marriage

habenous.

Parkitate H

Contraction of

No ordered and

Bearing

11. Facts	1)	Number of containers	Capacity of containers	Location
Drøsel		4 11	f.7 million litres va 400 - 1200 litres	Existing Tank Farm Mobile equipment
Gasoline		2	20,000 litres ea 150 litres ea	Existing Tank Farm Pick up trucks
Aviation fuel	į			None
₽ горале				
Other				
Estimated duration Period of operation	pump, gravity. tincludes time of operation. May t = Sept.	to cover all phases of project months tember 30, 2001		timl
5 years: Addition	nal exploration	with maximum of two years o drilling will be conducted fror rdinates (attached maps and sk	n the decline in subsequent years.	
Minimum latitude (degi			Maximum Jarijude (dugree, r	ninate) 61*33°N
Minimum longitude (de	gree, minute) l	24" 48" W	Maximum longitude (degree	minute) 124° × W
Map Sheet no. 95FT0		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
17. Applicant Print marie in full 18. Fees X T		nature factor (Date De B - \$150 00	March (05, 2001
Land 4*	use fee:fess Area covered a	than 2 ba • hectar nder separate applications as v		_0.00
		Assignm	ent fee \$50.00 \$	<u>10 130)</u>
		Total application and k	und use fees	\$ 150.00

. .

to the man

Persona year

.

and the state of

; ;

Appropriate series

phonovals.

Mary and the

.....

\$11100 January

Financia

designation in

Canadian Zine Corporation Land Use Permit Application Decline Development and Underground Exploration Drilling

Section 10 (Continued from Application)

Туре & питьет	Size	Proposed use
Two-boom air jumbo drill	MJM20B	Decline development
Boyles or ADL diamond drill	B-10 or 150 Mini Myte	Exploration drilling
3 scoop trams	Wagner 2-yard	Rock hauling
front end loader	Cat 966	Rock loading
Prock trucks	Valvo 5350	Rock Hauling
U/G service vehicle		U/G support
Electric Fan	60 75 hp	Ventilation
Wilden face pumps		Dewatering
Flygt sump pump	13 hp	Dewatering
Cat bulldozer	D8	Road Maintenance
Cat grader	[4G	Road Maintenance
Pick up trucks		Personnel transport



Project Description
Type "A" Land Use Permit Application

Prairie Creck Mine Underground Decline Development and Exploration Drilling

Introduction

Mineralization was first discovered at Prairie Creek in 1928. Exploration activity over the years has resulted in some 232 holes having been drilled on the property for an approximate total of 50,000 metres of drilling conducted to date. As well, between 1970 and 1980, extensive underground development of Zone 3 took place, resulting in some 5 km of underground workings on three levels. Access to the underground workings is available through the existing 870, 930 and 970 m portals.

Historically, the Prairie Creek deposit has been evaluated on the basis of its being composed primarily of quartz vein-type mineralization. The mine and mill were originally designed and constructed in 1982 based on a 1.81 million tonne ore reserve of vein-type material grading 10.8% lead, 11.75% zinc, 0.4% copper and 182 g/tonne silver.

Since acquiring the Prairie Creek Mine in 1991, Canadian Zine has conducted numerous diamond drill programs on the property. To date, the Company has drilled some 128 holes, recovering more than 40,000 metres of drill core in the process. The Company's drilling focus to date has been primarily on Zone 3 in the immediate mine site area, where 80% of the total exploratory work has been carried out.

In 1992, a stratabound form of mineralization was discovered underlying the vein-type deposits of Zone 3 while drilling to extend these vein resources at depth. Up to six mineralized stratabound lenses have been intersected varying in thickness from between less than one metre to several metres in thickness. Total thickness of the stratabound zone reaches up to 28 m. The stratabound deposits are located at around the 600 - 650m elevation, 200 - 350 m below the existing underground workings and 400 m below the surface of the ground.

As a result of the exploration drilling undertaken by Canadian Zinc, the mineral resource now stands at 11.8 million tonnes grading 10.1% lead, 12.5% zinc, 0.4% copper and 161 g/tonne silver. Of this resource, approximately 80% is comprised of vein-type mineralization and only 12% is stratabound mineralization.

As part of the ongoing process of establishing, confirming and enhancing the known mineral resource at the Prairie Creek property, Canadian Zinc proposes to develop an exploration decline to permit access for underground exploration drilling of the stratabound deposit underlying the Zone 3 quartz vein mineralization.



; ;

poster or more

The main objective of the proposed decline development and underground drilling exploration program is to further delineate additional stratabound and vein mineralization that will add to the existing defined mineral resource. The stratabound deposits are very underexplored, thus having the potential to significantly increase the known mineral resource and, due to their thickness, hold the key to supporting the desired increased mill throughput of 1500 tonnes per day.

The proposed decline will allow drilling to be conducted from underground about 200 m above the stratabound, as compared to drilling from surface which would require approximately 450 m long holes, resulting in a substantial saving in drilling costs.

The decline development is proposed to take place within 1000m of the existing minesite facilities and within the area of traditional mining activity at Prairie Creek and the boundaries of Mining Lease 2932 and Surface Lease 95F10/10-5-3.

The general area for the proposed decline is shown on the accompanying 1:5000 scale map.

Description of Decline Development

The proposed decline will be accessed by a portal to be developed at the 905 m elevation approximately 600 m north of the existing mill facility. The proposed portal location is accessible by existing roads. This will be the fourth portal established on the property to access the underground workings, the others being in the same general area at the 870m, 930m and 970m elevations. The decline itself will be approximately 3m in width, 2.3m high and 600 m long at a 15% downward grade.

The majority of the equipment utilized in support of this program currently exists on-site. The main drive would be drilled by a two-boom air jumbo drill, which would be airlifted into the site. Rock from the underground development would be removed by existing 2-yard scoop trams and transported to stockpile locations by existing loader and truck. All this equipment is currently on-site, along with necessary compressors and fuel.

A minimum of 9 drill cutouts will be prepared along the decline to support the planned underground exploration drilling program. This work will be carried out using Boyles electric or hydraulic diamond drills. It is estimated that further delineation of the deposits will require drilling of 50 to 250 m long holes totaling approximately 5000m.

The mineral resources at Prairie Creek are hosted in carbonate rocks. The decline will be driven entirely within the sedimentary dolostone formation and will produce approximately 5200 m³ of rock, which will be trucked and stockpiled within the existing plantsite area, either adjacent to the existing ore stockpile or in the storage yard along the toe of the tailings impoundment dam.



The Upper Spar and Chert/Dolostone rock units from which the rock will originate have been tested and determined to have low sulphide values and high excess neutralization potential, and will therefore pose no hazard to the environment through sulphide oxidation processes. The results of this testwork are attached.

Dewatering of the workings will be accomplished through the use of sumps and pumps underground. A sump will be developed near the mouth of the portal to act as a settling pond for mine water prior to release to Harrison Creek. Quality of the water to be pumped from the underground workings is expected to be typical of the local groundwater regime which is hydraulically connected with the Prairie Creek Aquifer. A sump will be developed near the mouth of the portal to act as a settling pond for mine water prior to release to Harrison Creek.

Fisheries studies by Beak consultants in 1980-81 and Resean in 1994 have identified limited fisheries habitat potential in Harrison Creek, with steep gradients restricting fish movement upstream of the mouth. Fish utilization appears restricted to the mouth where 7 Slimy Sculpin were captured in 1980, and 2 Dolly Varden, 10 mountain whitefish and 8 slimy sculpin were encountered in 1981. No fish were observed in Harrison Creek in 1994. Fish utilization of Prairie Creek appears to be confined largely to the headwaters and the mouth. The headwaters appear to be utilized by Dolly Varden (or Bull Trout) and Rocky Mountain Whitefish. Artic Grayling do not appear to move upstream in Prairie Creek beyond the lowest reaches near the mouth.

No impacts on fisheries or other aquatic resources are expected as a result of the release of mine water during the operation.

Personnel

Name of the last

The underground development and exploration diamond drilling will be conducted by a qualified underground mining contractor and diamond drilling contractor, respectively. The contracts will be awarded following a competitive bidding process taking into account cost, quality of work, reliability, ability to undertake work and meet shehedule, etc.

It is anticipated that initial preparation and driving of the decline will take in the order of 3.5 months to complete. The diamond drilling, depending on the final budgets which will determine the amount of drilling which will be undertaken, and on whether drilling can commence while the decline is still be advanced, will take in the order of 3 months to complete.



It is expected that development of the decline will require the following personnel:

- 1 Project Superintendent
- | Shift Boss
- 1 Surveyor
- Lead Mechanic
- 3 Shift Mechanics
- | Electrician
- 1 Surface Operator/Labourer
- 6 Miners
- 15 Total

It is expected that the decline development will be conducted while other activity is ongoing at the site, including operation of a mill pilot plant and exploration drilling. This will likely result in sharing of personnel between programs. All personnel involved in the decline development will be accommodated within the existing camp facility. Domestic water is supplied from an existing well, sewage—is discharge to a sump and garbage is incinerated. Site operations will be supported by a camp cook and a project manager.

Consultation

Following is a summary of consultations undertaken, including those with government regulatory agencies, the Nahanni Butte Dene Band, the Liidlii Kue First Nation, Acho Dene Koe First Nation and the Deh Cho First Nations.

August 14-16, 2000 Yellowknife

 Meetings with INAC, GNWT/RWED, EC, DFO, MVLWB, MVEIRB, Parks Canada, DCFN (Petr Cizek)

October 6, 2000

Letter request to NBDB, LKFN, ADKFN, DCFN for meeting

November 21, 2000 Yellowknife

- Meeting with Mineral Development Advisory Group (MDAG)
- INAC, EC, DFO, GNWT/RWED, WCB, SRHB.

November 22, 2000 Nahanni Butte

- Meeting with First Nation community and association representatives
- NBDB, LKFN, DCFN, CPAWS, Parks Canada

January 5,2001

- Letter request to NBDB, LKFN, ADKI'N for traditional knowledge January 11, 2001
 - Letter enclosing Draft Application package to NBDB, LKFN, ADKFN & DCFN requesting comments



February 26, 2001

 Telephone conversation with Chief Leon Konisenta (NBDB) advising of intention to submit permit applications

February 27, 2001

 Letter to NBDB, LKFN, ADKFN & DCFN advising of intention to submit permit applications

Plans for development of the decline at Prairie Creek in 2001 were among the issues discussed by Canadian Zine at these meeting. At each of these meetings, an information package was distributed to attendees which contained among other things a memo describing the plans for decline development.

No specific concerns were raised at any of these meetings or in response to any correspondence with respect to the proposed mineral exploration program.

Archaeology

An archaeological database search was conducted on August 18, 2000 through the Canadian Museum of Civilization in support of previous Land Use Application MV2000C0030 submitted by Canadian Zine.

The database search area encompassed the entire minesite area, as well as the entire access road corridor from the Prairie Creek mine to the Liard River. To accomplish this, the search parameters were defined by geographical coordinates to cover a block extending from 61° 00° to 61°45° N. latitude and from 122°45° to 125°00° W. longitude.

No archaeological sites were identified within the minesite area proposed for use under this Land Use application. The closest identified sites are south of the South Nahanni River near the mouth of the Meilleur River, 35-40 km south of the minesite.

All areas proposed for use in this application have been previously developed. No new development is planned in conjunction with this application.

UNDERGROUND DECLINE DEVELOPMENT - 2001 WASTE ROCK CHARACTERIZATION

See and

2000 Miles

Batta salah

MAI Promp

hardman

.

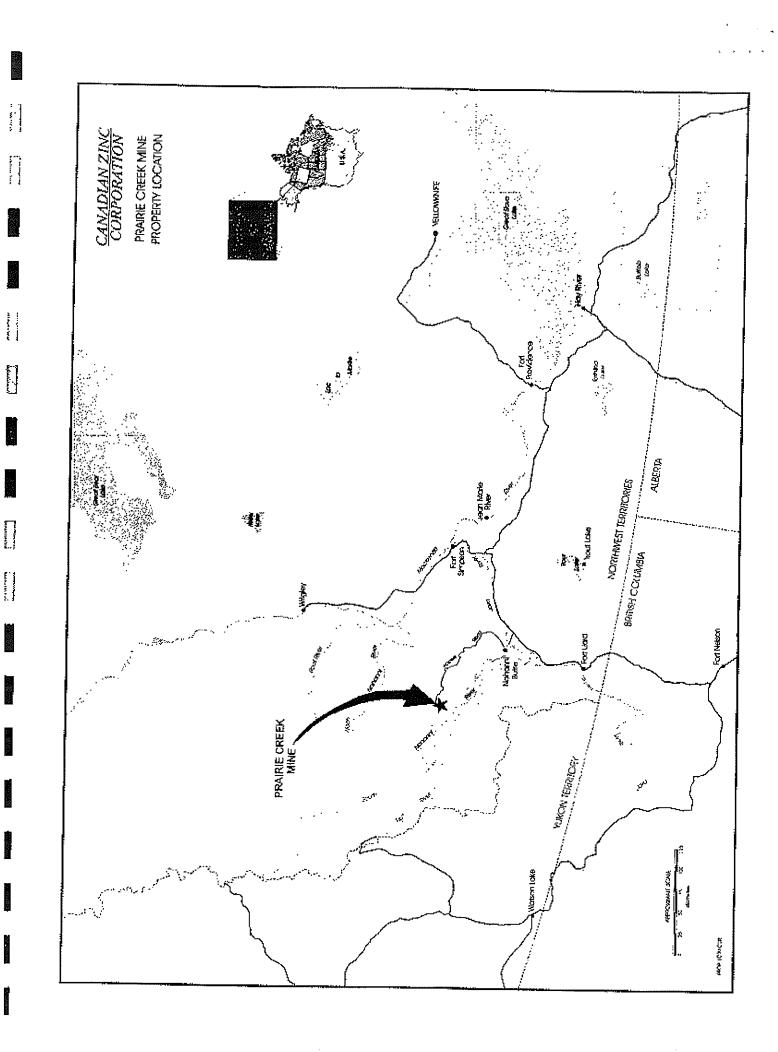
of the second

....

-

-

		Hg bbb	4 8 5.2 0.24 0.16	Zh spm	22.70 1450 158 72
NP/TAP	62.1 200 1 285 1 179.1	ë %	0.47 0.27 0.15 0.27	_	15 13 92
NNP kgCaCO3n	+983 +1025 +444 +340	Cu	23 23 25 25 25	<u></u> " %	0 005 0 005 0 005 0 005
CaNP kgCaCO3#	982 1026 437 334	ç	ი ი 120 44	is Wat	130 92 19 29
CO2 %	43.2 45.1 19.2 14.7	Co ppm	ପ୍ର ବ୍ୟୁ ବ୍ୟୁ	P.b mod	3200 380 54 41
NP kgCaCO34	999 1030 446 342	Cd	13.5 7.5 0.5 0.5	а Ш аа	270 80
Sx-S AP kgcacost	Ç 10 2 €	Ç.	17.8 10.7 3.99 4.82	ĭ ∀ uidd	0 T O V
Total AP	8225	Be ppm	0.25 0.25 0.25 0.25	Z %	0.62 0.42 0.07 0.2
S S S S S	0.53 0.06 0.06 0.1	Ba ppm	5 8 2 E	Mo Ppm	0.5 3 &
504 · S	0.005 0.005 0.005 0.005	As ppm	5 5 5 5	Mn ppm	290 250 95 95
Total S %	0.51 0.05 0.06	₹ ॐ	0.12 0.08 0.75 0.52	5 0%	35.5 4.4 1.2 1.3
Paste pH	0 60 00 00 1 60 00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ag	3 05 05	¥ %	021 009 05 05
Description	PC94-63;324 5m PC94-614;314,8m PC94-63,260 9m PC94-61A;263,2m	Description	PC94-63:324 5m PC94-61A,314 6m PC94-63,260 9m PC94-61A:283.2m	Description	PC94-63.324.5m PC94-61A.314.6m PC94-63.260.9m PC94-61A;283.2m
Sample ID Rock Type	Upper spar Upper spar Chert/Dolostone Chert/Dolostone	Rock Type	Upper spar Upper spar ChertiDolostone Chert/Dolostone	Rock Type	Upper spar Upper spar Chert/Dolostone Chert/Dolostone
Sample ID	մու 6-1 unit 6-2 unit 7-1 Unit 7-2	Sample ID	Unit 8-1 Unit 6-2 Unit 7-1 Unit 7-2	Semple ID Rock Type	Unit 6-1 Unit 6-2 Unit 7-1 Unit 7-2





Parks Canada Paros Canada

Nahanni National Park Reserve PO Box 348, Fort Simpson, NT X0E 0N0

9 April, 2001

Mackenzie Valley Land and Water Board 7th Floor – 4910 50th Avenue, PO Box 2130 Yellowknife, NT X1A 2P6

Attn: Greg Smith, Regulatory Officer

RE: MVLWB File MV2001C0022, MV2001C0023, MV2001L2-0003

Dear Mr. Smith,

Parks Canada, Nahanni National Park Reserve, hereby requests that the above-mentioned three applications, namely the Canadian Zinc Corporation's Surface Exploration Program, Underground Decline Development and Exploration, and Water License for Metallurgic Plant Operation — Prairie Creek Mine, be referred to the Mackenzie Valley Environmental Impact Review Board for assessment. This referral is being made as per Section 126(2)(a) of the Mackenzie Valley Resource Management Act.

Nahami National Park Reserve is of the opinion that these proposed projects have the potential to impact the ecological integrity of the park reserve. These potential impacts include effects on transboundary wildlife such as grizzly bears, Dall's sheep and woodland caribou, and effects on water quality and fish habitat in both Prairie Creek and the South Nahami River.

If there are any further questions, please contact our office at (867)695-3151, or (867)695-2446 (Fax).

Thank you for your assistance in this matter.

Sincerely

Chuck Blyth Superintendent

Nahanni National Park Reserve

cc. Roland Scinjanovs, Chair, MVEIRB

Canada'

COPY

CANADA'S NATIONAL PARKS AND NATIONAL HISTORIC SITES LES PARCS NATIONAUX ET LES LIEUX HISTORIQUES NATIONAUX DU CANADA

FACSIMILE

TÉLÉCOPIE

Nahanni National Park Reserve /

Reserve de parc national Nahanni

P.O. Box 348/ C.P. 348

Fort Simpson, NT, X0E 0N0

Telephone/Téléphone: 867- 695-3151

Facsimile/Télécopieur: 867-695-2446

TOIA ROLAND SEMJANOUS

FIRES SOUTH

Tol / Tél.

Fax / Téléc.

867 5 873-6614

From / De .

DOUGLAS TATE

Date

09 APRIL 2001

Pages

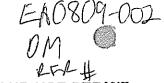
2

<u>Message</u>

LETTER REGARDING CANADIAN ZINC APPLICATIONS
15 ATTACHED.

Dova







LAND USE PERMIT

Revelv Boad
Amendment No 1/20

Permit Class Permit No

"A" MV2001

MV2001C0023

Nov 2008

(2)

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

Canadian Zinc Corporation

Permittee

To proceed with the land use operation described in application of:

Signature	Date
J. Peter Campbell	March 5, 2001
Type of Land use Operation	
Decline Development and Metallurgical Pilo	ot Plant
Location	
61° 33'N and 124° 48' W	

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated Yellowknife this 26 day of August , 2003 at

Signature Chair

Signature Witness

Commencement Date Expiry Date September 10, 2003

September 9, 2008

NOTE

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE BY-LAW OR ORDER. DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

CONDITIONS ANNEXED TO AND FORMING PART

OF LAND USE PERMIT NUMBER MV2001C0023

Part A: Scope of Permit

- 1. This permit entitles Canadian Zinc Corporation to conduct the following activities:
 - a) Mining exploration and associated activities including underground decline development at the 905 metre elevation and metallurgic pilot plant at the Prairie Creek Mine. Location:

61° 33'N; 124° 48' W

- The Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, Item 1 of this permit.
- 3. Compliance with the terms and conditions of this permit does not absolve the Permittee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

Part B: Definitions

- "Act" means the Mackenzie Valley Resource Management Act;
- "Artesian Aquifer" means a water-bearing stratum, which when encountered during drilling operations, produces a pressurized flow of groundwater that reaches an elevation above the ground surface;
- "Board" means the Mackenzie Valley Land and Water Board established under Part 4 of the Mackenzie Valley Resource Management Act;
- "Dogleg" means clearing a line, trail or right-of-way that is curved sufficiently so that no part of the clearing beyond the curve is visible when approached from either direction;
- "Drill Waste" means all materials or chemicals, solid or liquid, associated with the drilling of boreholes and includes borehole cuttings;
- "Inspector" means an Inspector designated by the Minister under the Mackenzie Valley Resource Management Act;
- "Sewage" means all toilet wastes and grey water; and
- "Sump" means a man-made pit, trench hollow or cavity in the earth's surface used for the purpose of depositing waste material therein.

Part C: Conditions Applying to All Activities (the headings correspond to Subsection 26 of the Mackenzie Valley Land Use Regulations)

26(1)(a) LOCATION AND AREA

	26(1)(a) LOCATION AND AREA	
1.	The Permittee shall not conduct this land use operation on any lands not designated in the accepted application.	PLANS
2.	The Permittee shall use an existing campsite.	CAMP LOCATION
3.	The Permittee shall not construct parallel lines or roads unless authorized by the inspector.	PARALLEL ROADS
	26(1)(b) TIME	i, ti
4.	The Permittee's Field Supervisor shall first contact an Inspector at (867) 695-2626 and then the Board at (867)669-0506 at least forty-eight (48) hours prior to the commencement of this land use operation.	CONTACT INSPECTOR/ BOARD
5.	The Permittee shall advise an Inspector at least ten (10) days prior to the completion of the land use operation of (a) the plan for removal or storage of equipment and materials, and (b) when final clean-up and restoration of the land used will be completed.	REPORTS BEFORE REMOVAL
6.	The Permittee shall provide in writing to the Board and Inspector, at least forty-eight (48) hours prior to commencement of this land use operation, the following information: (a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served; (b) alternates; and (c) all methods for contacting the above person(s).	IDENTIFY AGENT
7.	The Permittee shall notify an Inspector at least ten (10) days prior to backfilling any sump.	BACKFILLING NOTIFICATION
8.	The Board and/or Inspector reserve the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe.	CLOSURE
	26(1)(c) TYPE AND SIZE OF EQUIPMENT	
9.	The Permittee shall not use any equipment except of the type, size, and number that is listed in the accepted application.	ONLY APPROVED EQUIPMENT
	26(1)(d) METHODS AND TECHNIQUES	No. Sec. Sec. 11. JFI Sec. 1 T. S.
10.	The Permittee shall plug all boreholes to the satisfaction of an Inspector as the land use operation progresses.	PLUG HOLES

11.	The Permittee shall refill and restore borehole craters as the land use operation progresses.	REFILL CRATERS
12.	The Permittee shall remove or cut off and seal all drill casings at ground level immediately upon completion of drilling.	REMOVAL AND SEALING OF DRILL CASINGS
	26(1)(e) TYPE, LOCATION, CAPACITY AND OPERATION OF ALL FACILITIES	STATE ONOTINGS
13.	The Permittee shall not locate any sump within one hundred (100) metres of the ordinary high water mark of any water body, unless otherwise authorized in writing by an Inspector.	SUMPS FROM WATER
14.	The Permittee shall maintain freeboard of not less than one (1.0) metre in all surface sumps.	FREEBOARD OF SUMPS
15.	 The Permittee shall: (a) place and mound all material previously excavated over the sump area to ensure ponding does not occur; and (b) overlap the material a minimum of two (2) metres beyond the edges of the existing sump wall. 	BACKFILL SUMP - OVERLAP
16.	The Permittee shall ensure that the land use area is kept clean at all times.	CLEAN WORK AREA
	26(1)(f) CONTROL OR PREVENTION OF PONDING OF WATER, FLOODING, EROSION, SLIDES AND SUBSIDENCE OF LAND	
17.	 (a) The Permittee shall, where flowing water from bore holes is encountered, plug the bore hole in such a manner as to permanently prevent any further outflow of water; and (b) the artesian occurrence shall be reported to the Inspector immediately. 	PLUG ARTESIAN WELLS
18.	The land use operation shall not cause obstruction to any natural drainage.	NATURAL DRAINAGE
19.	The Permittee shall not cut any stream bank.	STREAM BANKS
20.	The Permittee shall construct dykes and diversion ditches as authorized in writing by an Inspector.	DYKES/ DIVERSION
21.	The Permittee shall install erosion control structures as the land use operation progresses.	PROGRESSIVE EROSION CONTROL
22.	The Permittee shall slope the sides of waste material piles to a horizontal/vertical ratio of two (2) horizontal to one (1) vertical unless otherwise authorized in writing by an Inspector.	WASTE IATERIAL PILES

26(1)(g) USE, STORAGE, HANDLING AND ULTIMATE DISPOSAL OF ANY CHEMICAL OR TOXIC MATERIAL

23.	The Permittee shall not use chemicals in connection with the land use operation that were not identified in the accepted application.	APPROVAL OF CHEMICALS
24.	The Permittee shall remove all drill waste containing poisonous or persistent chemical additives to an approved disposal facility.	DRILL WASTE DISPOSAL
25.	The Permittee shall not allow any drilling waste to spread to the surrounding lands.	DRILL WASTE CONTAINMENT
26.	The Permittee shall dispose of all combustible waste petroleum products by incineration or removal.	WASTE !! PETROLEUM !! DISPOSAL
27.	The Permittee shall dispose of all toxic or persistent substances in a manner as approved in writing by the Board.	WASTE CHEMICAL DISPOSAL
28.	The Permittee shall report all spills immediately to the 24 hour Spill Report Line (867) 920-8130, which is in accordance with instructions contained in "Spill Report" form N.W.T. 1752/0593.	REPORT CHEMICAL AND PETROLEUM SPILLS
	26(1)(h) WILDLIFE AND FISHERIES HABITAT	
29.	The Permittee shall submit a Wildlife Management Plan to be implemented upon approval by the Board before land use operations commence:	WILDLIFE MANAGEMENT PLAN
	 (a) a bear response protocol that allows personnel to respond adequately to problem bears; (b) measures for the protection of the existing mineral lick near the minesite that provide for its continued use by wildlife with minimal disturbance; (c) a wildlife movement and interactions monitoring program; and (d) a wildlife education protocol for all employees working on site. 	
30.	The Permittee shall maintain a wildlife-sighting log.	WILDLIFE-
31.	The Permittee shall not harass wildlife during this land use operation.	SIGHTING LOG NO WILDLIFE HARASSMENT
32.	The Permittee shall use food handling and garbage disposal procedures that do not attract bears.	BEAR/MAN CONFLICT
	26(1)(i) STORAGE, HANDLING AND DISPOSAL OF REFUSE OR SEWAGE	
33.	The Permittee shall dispose of all sewage and grey water as proposed in the accepted application.	SEWAGE DISPOSAL

34.	The Permittee shall incinerate all combustible garbage and debris, except plastics, daily.	INCINERATION
35.	The Permittee shall remove all scrap metal, discarded machinery, parts, barrels kegs, plastics, and building materials as specified in the accepted application.	REMOVE WASTE MATERIAL
	26(1)(j) PROTECTION OF HISTORICAL, ARCHAEOLOGICAL AND BURIAL SITES	
36.	The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site.	DISTURBANCE OF SITE
37.	The Permittee shall immediately cease any activity which disturbs an archaeological, historical, and/or burial site and contact the Prince of Wales Northern Heritage Centre at (867) 873-7688 and then Mackenzie Valley Land and Water Board at (867) 669-0506 should an archaeological site or specimen be encountered or disturbed by any land use activity.	CONTACTS
	26(1)(k) OBJECTS AND PLACES OF RECREATIONAL, SCENIC AND ECOLOGICAL VALUE	
	26(1)(I) SECURITY DEPOSIT	
38.	The Permittee shall deposit with the Minister a security deposit in the amount of \$30,000.00 pursuant to Section 32 of the Mackenzie Valley Land Use Regulations.	SECURITY DEPOSIT
39.	The Permittee shall be liable for any cost of damages over and above the amount of the security deposit.	LIABILITY FOR DAMAGES
40.	All costs to remediate the area under this permit are the responsibility of the Permittee.	RESPONSIBILIT Y FOR REMEDIATION
	26(1)(m) FUEL STORAGE	COSTS
41.	The Permittee shall report in writing to an Inspector the location and quantity of all fuel caches within ten (10) days after their establishment.	REPORT FUEL LOCATION
42.	The Permittee shall not place any fuel storage containers within one hundred (100) metres of the normal high water mark of any water body, unless otherwise authorized in writing by an Inspector.	FUEL BY STREAM
43.	The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies.	FUEL CONTAINMENT

FUEL CONTAINMENT	The Permittee shall use secondary containment for fuel storage between 410 and 4,000 litres that is authorized in writing by the Inspector.	44.
CAPACITY	The volume of the dyked area shall be ten per cent (10%) greater than the capacity of the largest fuel container placed therein.	45.
CHECK FOR LEAKS	The Permittee shall: (a) examine all fuel storage containers for leaks a minimum of once every day or as otherwise authorized by an inspector; and (b) repair all leaks immediately.	46.
SPILL RESPONSE	The Permittee shall ensure that adequate contingency plans and spill kits are in place, prior to commencement of operations, to respond to any potential spills.	47.
CONTINGENCY PLAN	The Permittee shall submit to the Board an update of the contingency plan, for chemical and petroleum spills, if there are any changes in the operation during the life of the permit.	48.
	26(1)(n) METHODS AND TECHNIQUES FOR DEBRIS AND BRUSH DISPOSAL	
	26(1)(o) RESTORATION OF THE LANDS	
CLEAN-UP	The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of this Permit outlined in the Abandonment and Restoration Plan as per Appendix I, titled "Conditions Applying to Abandonment and Restoration".	49.
	26(1)(p) DISPLAY OF PERMITS AND PERMIT NUMBERS	
DISPLAY PERMIT	The Permittee shall display a copy of this Permit in each campsite established to carry out this land use operation.	50.
COPY OF PERMIT	The Permittee shall keep on hand, at all times during this land use operation, a copy of the Land Use Permit.	51.
	26(1)(q) MATTERS NOT INCONSISTENT WITH THE REGULATIONS	
NOTIFICATION TO ALL EMPLOYEES/ CONTRACTORS	The Permittee shall ensure that all persons working under the authority of the Land Use Permit are aware of and will adhere to the conditions as stated in the Land Use Permit.	52.
EXISTING LINES ROADS	The Permittee shall use existing lines or roads wherever possible.	53.

Canadian Zinc Corporation Water License MV2001L2-0003 and Land Use Permit MV2001C0023

APPENDIX I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

- The Licensee shall, within six (6) months of issuance of this License, submit to the Board for approval an Abandonment and Restoration Plan which shall take into consideration all areas referred to in Part G, Item 1 of Water License MV2001L2-0003, and Condition forty-nine (49) under Section 26(1)(o) of Land Use Permit MV2001C0023.
- 2. The Licensee shall address the following when completing or revising the Abandonment and Restoration Plan:
 - a) the water intake facilities;
 - b) the water treatment and waste disposal sites and facilities;
 - c) the petroleum and chemical storage areas;
 - d) any site affected by waste spills;
 - e) the natural runoff waters from the development site;
 - the restoration of natural drainage and the restoration of stream banks at the operation site(s);
 - g) the potential for groundwater contamination;
 - h) any facilities or areas which may have been affected by development such that potential pollution problems exist;
 - i) a phased approach and implementation schedule;
 - j) maps delineating all disturbed areas, borrow material locations and site facilities;
 - k) a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment;
 - a Solid Tailings Final Disposal Plan for the Solid Tailings generated by the operation of the Pilot Plant to be implemented before the expiry of the license;
 - m) the waste rock and ore storage areas,
 - n) the acid generation potential and leachability of tailings, waste rock and ore piles, and any other areas identified as having the potential to leach or be acid generating,
 - o) all lands affected by licensed undertakings, and

- p) list of facilities and infrastructure, currently existing or constructed as part of the licensed undertakings, that may be used in future proposed activities.
- The Licensee shall revise the Plan referred to in Item 1 if not approved. The
 revised Plan shall be submitted to the Board for approval within six (6)
 months of receiving notification of the Board's decision.
- 4. Notwithstanding the time schedule referred to in the Abandonment and Restoration Plan, the Licensee shall endeavour to carry out Progressive Reclamation of areas which are abandoned prior to closure of operations.
- The Licensee shall complete the reclamation work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
- 6. The Licensee shall review the Abandonment and Restoration Plan annually and shall modify the Plan as necessary to reflect changes in operation, technology, and results of reclamation and/or other studies. The proposed modifications shall be submitted to the Board for approval.
- Upon implementation of the Abandonment and Restoration Plan, the Licensee shall provide to the Board updates of all abandonment and restoration activities by March 31st of each year.
- Compliance with the Abandonment and Restoration Plan specified in this License does not limit the legal liability of the Licensee, other than liability arising from provisions of the Act and its Regulations.

Induan

MACKENZIE VALLEY LAND AND WATER BOARD

File: MV2001C0023

Fax: (604) 688-2043



Mackenzie Valley Land and Garer Board 7th Floor + 4910 50th Avenue * P.O. Box 2130 VELLOWENDER SET VIA 200

YELLOWKNIFE, NT X1A 2P6 Phone (867) 669-0806 • FAX (867) 873-6610

September 12, 2003

Mr. J. Peter Campbell

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

Dear Mr. Campbell:

ISSUANCE OF A TYPE "A" LAND USE PERMIT

Attached is Land Use Permit MV2001C0023 granted by the Mackenzie Valley Land and Water Board (MVLWB or the Board) in accordance with the *Mackenzie Valley Resource Management Act*. A copy of this permit has been filed in the Public Registry at the office of the MVLWB. The MVLWB approved Land Use Permit MV2001C0023 for a period of five (5) years commencing September 10, 2003 and expiring September 9, 2008.

Please read all Conditions carefully and note that as per Land Use Permit Condition thirty-eight (38) a security deposit in the amount of \$30, 000 shall be posted with the Minister and copied to the Board prior to the start of the operation pursuant to Section 71 of the MVRMA and Section 32 of the Mackenzie Valley Land Use Regulations.

Please be advised that this letter, with attached permit, all inspection reports, and correspondence related thereto, are part of the Public Registry and are intended to keep all interested parties informed of the manner in which the Permit requirements are being met. All Public Registry material will be considered if an amendment to the Permit is requested.

The full cooperation of Canadian Zinc Corporation is anticipated and appreciated.

Yours_sincerely,

Melody J. McLeod

Chair

Attachments

Copied to: Ed Hornby, South Mackenzie District, DIAND, Yellowknife

Stephen Mathyk, Regulatory Officer, MVLWB Sarah Baines, Regulatory Officer, MVLWB

Distribution List of Reviewers





Permit Class	Permit No	Amendment No
"A"	MV2001C0023	

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

Canadian Zinc Corporation

Permittee

To proceed with the land use operation described in application of:

Signature	Date
J. Peter Campbell	March 5, 2001
Type of Land use Operation	, = 1,
Decline Development and Metallurgical Pilot P	Plant
Location	(
61° 33'N and 124° 48' W	

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at	Yellowknife	this	26	day of	August		2003
Signature Cl	2 mles		Sign	ature Witness	alusen		
Commence Septembe	ment Date er 10, 2003	·····		iry Date ptember 9	, 2008	- , -, -, -, -, -, -, -, -, -, -, -, -,	

NOTE

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE BY-LAW OR ORDER. DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

CONDITIONS ANNEXED TO AND FORMING PART

OF LAND USE PERMIT NUMBER MV2001C0023

Part A: Scope of Permit

- This permit entitles Canadian Zinc Corporation to conduct the following activities:
 - a) Mining exploration and associated activities including underground decline development at the 905 metre elevation and metallurgic pilot plant at the Prairie Creek Mine. Location:

61° 33'N; 124° 48' W

- The Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, Item 1 of this permit.
- 3. Compliance with the terms and conditions of this permit does not absolve the Permittee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

Part B: Definitions

- "Act" means the Mackenzie Valley Resource Management Act;
- "Artesian Aquifer" means a water-bearing stratum, which when encountered during drilling operations, produces a pressurized flow of groundwater that reaches an elevation above the ground surface;
- "Board" means the Mackenzie Valley Land and Water Board established under Part 4 of the Mackenzie Valley Resource Management Act;
- "Dogleg" means clearing a line, trail or right-of-way that is curved sufficiently so that no part of the clearing beyond the curve is visible when approached from either direction;
- "Drill Waste" means all materials or chemicals, solid or liquid, associated with the drilling of boreholes and includes borehole cuttings;
- "Inspector" means an Inspector designated by the Minister under the Mackenzie Valley Resource Management Act;
- "Sewage" means all toilet wastes and grey water; and
- "Sump" means a man-made pit, trench hollow or cavity in the earth's surface used for the purpose of depositing waste material therein.

Part C: Conditions Applying to All Activities (the headings correspond to Subsection 26 of the Mackenzie Valley Land Use Regulations)

26(1)(a) LOCATION AND AREA

1.	The Permittee shall not conduct this land use operation on any lands not designated in the accepted application.	PLANS
2,	The Permittee shall use an existing campsite.	CAMP LOCATION
3.	The Permittee shall not construct parallel lines or roads unless authorized by the inspector.	PARALLEL ROADS
	26(1)(b) TIME	
4.	The Permittee's Field Supervisor shall first contact an Inspector at (867) 695-2626 and then the Board at (867)669-0506 at least forty-eight (48) hours prior to the commencement of this land use operation.	CONTACT INSPECTOR/ BOARD
5.	The Permittee shall advise an Inspector at least ten (10) days prior to the completion of the land use operation of (a) the plan for removal or storage of equipment and materials, and (b) when final clean-up and restoration of the land used will be completed.	REPORTS BEFORE REMOVAL
6.	The Permittee shall provide in writing to the Board and Inspector, at least forty-eight (48) hours prior to commencement of this land use operation, the following information: (a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served; (b) alternates; and (c) all methods for contacting the above person(s).	IDENTIFY AGENT
7.	The Permittee shall notify an Inspector at least ten (10) days prior to backfilling any sump.	BACKFILLING NOTIFICATION
8.	The Board and/or Inspector reserve the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe.	CLOSURE
	26(1)(c) TYPE AND SIZE OF EQUIPMENT	
9.	The Permittee shall not use any equipment except of the type, size, and number that is listed in the accepted application.	ONLY APPROVED EQUIPMENT
	26(1)(d) METHODS AND TECHNIQUES	
10.	The Permittee shall plug all boreholes to the satisfaction of an Inspector as the land use operation progresses.	PLUG HOLES

11.	The Permittee shall refill and restore borehole craters as the land use operation progresses.	REFILL CRATERS
12.	The Permittee shall remove or cut off and seal all drill casings at ground level immediately upon completion of drilling.	REMOVAL AND SEALING OF DRILL CASINGS
	26(1)(e) TYPE, LOCATION, CAPACITY AND OPERATION OF ALL FACILITIES	
13.	The Permittee shall not locate any sump within one hundred (100) metres of the ordinary high water mark of any water body, unless otherwise authorized in writing by an Inspector.	SUMPS FROM WATER
14.	The Permittee shall maintain freeboard of not less than one (1.0) metre in all surface sumps.	FREEBOARD OF SUMPS
15.	 The Permittee shall: (a) place and mound all material previously excavated over the sump area to ensure ponding does not occur; and (b) overlap the material a minimum of two (2) metres beyond the edges of the existing sump wall. 	BACKFILL SUMP - OVERLAP
16.	The Permittee shall ensure that the land use area is kept clean at all times.	CLEAN WORK AREA
	26(1)(f) CONTROL OR PREVENTION OF PONDING OF WATER, FLOODING, EROSION, SLIDES AND SUBSIDENCE OF LAND	
17,	 (a) The Permittee shall, where flowing water from bore holes is encountered, plug the bore hole in such a manner as to permanently prevent any further outflow of water; and (b) the artesian occurrence shall be reported to the Inspector immediately. 	PLUG ARTESIAN WELLS
18.	The land use operation shall not cause obstruction to any natural drainage.	NATURAL DRAINAGE
1 9.	The Permittee shall not cut any stream bank.	STREAM BANKS
20.	The Permittee shall construct dykes and diversion ditches as authorized in writing by an Inspector.	DYKES/ DIVERSION
21.	The Permittee shall install erosion control structures as the land use operation progresses.	PROGRESSIVE EROSION CONTROL
2 2.	The Permittee shall slope the sides of waste material piles to a horizontal/vertical ratio of two (2) horizontal to one (1) vertical unless otherwise authorized in writing by an Inspector.	WASTE MATERIAL PILES

Ú

(")

26(1)(g) USE, STORAGE, HANDLING AND ULTIMATE DISPOSAL OF ANY CHEMICAL OR TOXIC MATERIAL

APPROVAL OF 23. The Permittee shall not use chemicals in connection with the land CHEMICALS use operation that were not identified in the accepted application. DRILL WASTE 24. The Permittee shall remove all drill waste containing poisonous or DISPOSAL persistent chemical additives to an approved disposal facility. DRILL WASTE 25. The Permittee shall not allow any drilling waste to spread to the CONTAINMENT surrounding lands. WASTE 26. The Permittee shall dispose of all combustible waste petroleum PETROLEUM products by incineration or removal, DISPOSAL ., WASTE The Permittee shall dispose of all toxic or persistent substances in a 27. CHEMICAL manner as approved in writing by the Board. DISPOSAL REPORT 28. The Permittee shall report all spills immediately to the 24 hour Spill CHEMICAL AND Report Line (867) 920-8130, which is in accordance with instructions **PETROLEUM** contained in "Spill Report" form N.W.T. 1752/0593. **SPILLS** 26(1)(h) WILDLIFE AND FISHERIES HABITAT WILDLIFE 29. The Permittee shall submit a Wildlife Management Plan to be MANAGEMENT implemented upon approval by the Board before land use PLAN operations commence: (a) a bear response protocol that allows personnel to respond adequately to problem bears; (b) measures for the protection of the existing mineral lick near the minesite that provide for its continued use by wildlife with minimal disturbance: (c) a wildlife movement and interactions monitoring program; and (d) a wildlife education protocol for all employees working on site. WILDLIFE-30. The Permittee shall maintain a wildlife-sighting log. SIGHTING LOG NO WILDLIFE 31. The Permittee shall not harass wildlife during this land use HARASSMENT operation. The Permittee shall use food handling and garbage disposal BEAR/MAN 32. CONFLICT procedures that do not attract bears. 26(1)(i) STORAGE, HANDLING AND DISPOSAL OF REFUSE OR SEWAGE

The Permittee shall dispose of all sewage and grey water as

proposed in the accepted application.

33.

SEWAGE

DISPOSAL

34.	The Permittee shall incinerate all combustible garbage and debris, except plastics, daily.	INCINERATION
35.	The Permittee shall remove all scrap metal, discarded machinery, parts, barrels kegs, plastics, and building materials as specified in the accepted application.	REMOVE WASTE MATERIAL
	26(1)(j) PROTECTION OF HISTORICAL, ARCHAEOLOGICAL AND BURIAL SITES	
36.	The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site.	DISTURBANCE OF SITE
37.	The Permittee shall immediately cease any activity which disturbs an archaeological, historical, and/or burial site and contact the Prince of Wales Northern Heritage Centre at (867) 873-7688 and then Mackenzie Valley Land and Water Board at (867) 669-0506 should an archaeological site or specimen be encountered or disturbed by any land use activity.	CONTACTS
	26(1)(k) OBJECTS AND PLACES OF RECREATIONAL, SCENIC AND ECOLOGICAL VALUE	
	26(1)(I) SECURITY DEPOSIT	
38,	The Permittee shall deposit with the Minister a security deposit in the amount of \$30,000.00 pursuant to Section 32 of the Mackenzie Valley Land Use Regulations.	SECURITY DEPOSIT
39.	The Permittee shall be liable for any cost of damages over and above the amount of the security deposit.	LIABILITY FOR DAMAGES
40.	All costs to remediate the area under this permit are the responsibility of the Permittee.	RESPONSIBILIT Y FOR REMEDIATION COSTS
	26(1)(m) FUEL STORAGE	
4 1.	The Permittee shall report in writing to an Inspector the location and quantity of all fuel caches within ten (10) days after their establishment.	REPORT FUEL LOCATION
42.	The Permittee shall not place any fuel storage containers within one hundred (100) metres of the normal high water mark of any water body, unless otherwise authorized in writing by an Inspector.	FUEL BY STREAM
43.	The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies.	FUEL CONTAINMENT

44.	The Permittee shall use secondary containment for fuel storage between 410 and 4,000 litres that is authorized in writing by the Inspector.	FUEL CONTAINMENT
45.	The volume of the dyked area shall be ten per cent (10%) greater than the capacity of the largest fuel container placed therein.	CAPACITY
46.	The Permittee shall: (a) examine all fuel storage containers for leaks a minimum of once every day or as otherwise authorized by an inspector; and (b) repair all leaks immediately.	CHECK FOR LEAKS
47.	The Permittee shall ensure that adequate contingency plans and spill kits are in place, prior to commencement of operations, to respond to any potential spills.	SPILL RESPONSE
48.	The Permittee shall submit to the Board an update of the contingency plan, for chemical and petroleum spills, if there are any changes in the operation during the life of the permit.	CONTINGENCY PLAN
	26(1)(n) METHODS AND TECHNIQUES FOR DEBRIS AND BRUSH DISPOSAL	
	26(1)(o) RESTORATION OF THE LANDS	
49.	The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of this Permit outlined in the Abandonment and Restoration Plan as per Appendix I, titled "Conditions Applying to Abandonment and Restoration".	CLEAN-UP
	26(1)(p) DISPLAY OF PERMITS AND PERMIT NUMBERS	
50.	The Permittee shall display a copy of this Permit in each campsite established to carry out this land use operation.	DISPLAY PERMIT
51.	The Permittee shall keep on hand, at all times during this land use operation, a copy of the Land Use Permit.	COPY OF PERMIT
	26(1)(q) MATTERS NOT INCONSISTENT WITH THE REGULATIONS	
5 2.	The Permittee shall ensure that all persons working under the authority of the Land Use Permit are aware of and will adhere to the conditions as stated in the Land Use Permit.	NOTIFICATION TO ALL EMPLOYEES/ CONTRACTORS
53.	The Permittee shall use existing lines or roads wherever possible.	EXISTING LINES ROADS

:!

Canadian Zinc Corporation Water License MV2001L2-0003 and Land Use Permit MV2001C0023

APPENDIX I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

- The Licensee shall, within six (6) months of issuance of this License, submit to the Board for approval an Abandonment and Restoration Plan which shall take into consideration all areas referred to in Part G, Item 1 of Water License MV2001L2-0003, and Condition forty-nine (49) under Section 26(1)(o) of Land Use Permit MV2001C0023.
- 2. The Licensee shall address the following when completing or revising the Abandonment and Restoration Plan:
 - a) the water intake facilities;
 - b) the water treatment and waste disposal sites and facilities;
 - c) the petroleum and chemical storage areas;
 - d) any site affected by waste spills;
 - e) the natural runoff waters from the development site;
 - f) the restoration of natural drainage and the restoration of stream banks at the operation site(s);
 - g) the potential for groundwater contamination;
 - h) any facilities or areas which may have been affected by development such that potential pollution problems exist;
 - i) a phased approach and implementation schedule;
 - j) maps delineating all disturbed areas, borrow material locations and site facilities:
 - k) a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment;
 - a Solid Tailings Final Disposal Plan for the Solid Tailings generated by the operation of the Pilot Plant to be implemented before the expiry of the license;
 - m) the waste rock and ore storage areas,
 - n) the acid generation potential and leachability of tailings, waste rock and ore piles, and any other areas identified as having the potential to leach or be acid generating,
 - o) all lands affected by licensed undertakings, and

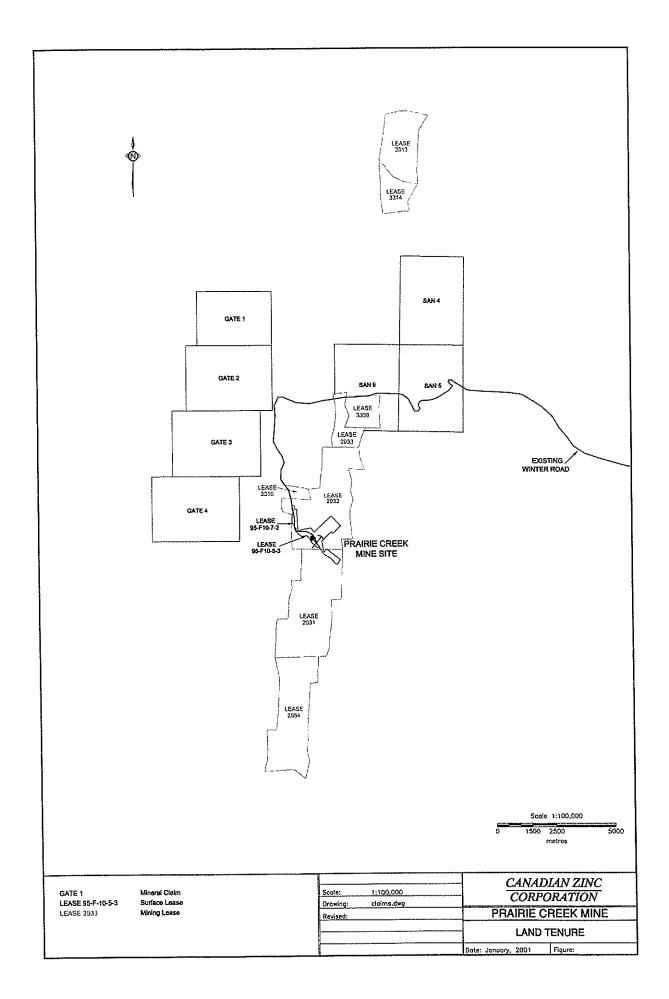
p) list of facilities and infrastructure, currently existing or constructed as part of the licensed undertakings, that may be used in future proposed activities.

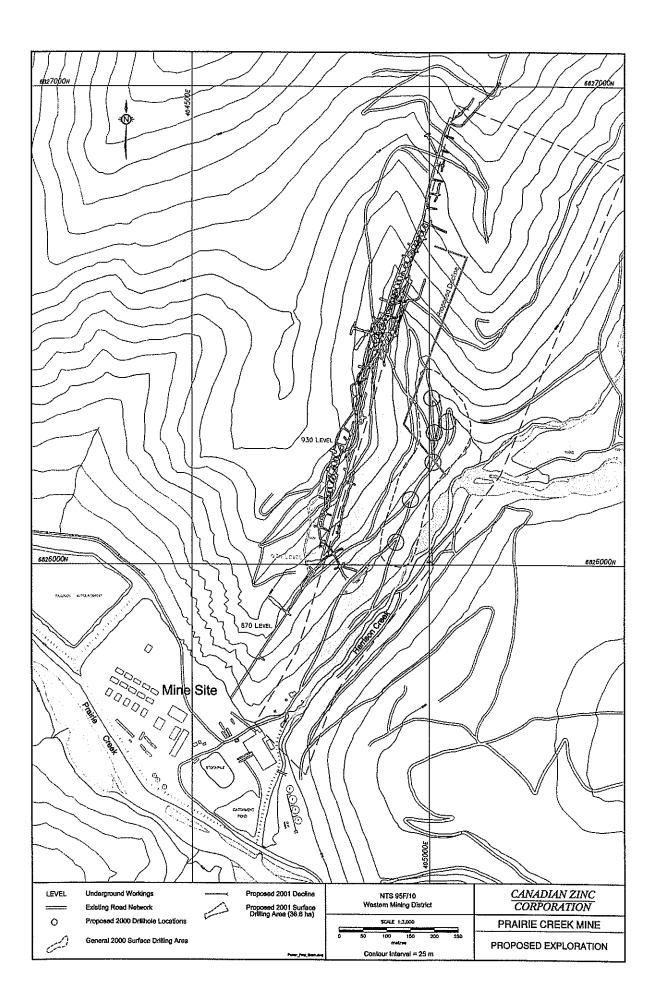
()

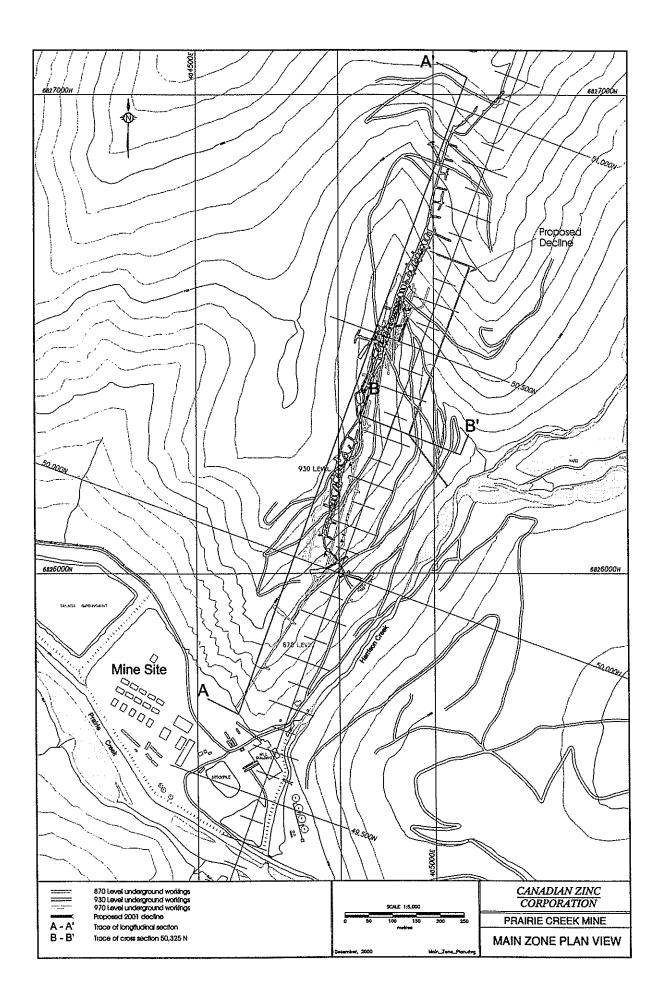
- The Licensee shall revise the Plan referred to in Item 1 if not approved. The
 revised Plan shall be submitted to the Board for approval within six (6)
 months of receiving notification of the Board's decision.
- 4. Notwithstanding the time schedule referred to in the Abandonment and Restoration Plan, the Licensee shall endeavour to carry out Progressive Reclamation of areas which are abandoned prior to closure of operations.
- The Licensee shall complete the reclamation work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
- 6. The Licensee shall review the Abandonment and Restoration Plan annually and shall modify the Plan as necessary to reflect changes in operation, technology, and results of reclamation and/or other studies. The proposed modifications shall be submitted to the Board for approval.
- Upon implementation of the Abandonment and Restoration Plan, the Licensee shall provide to the Board updates of all abandonment and restoration activities by March 31st of each year.
- 8. Compliance with the Abandonment and Restoration Plan specified in this License does not limit the legal liability of the Licensee, other than liability arising from provisions of the *Act* and its Regulations.

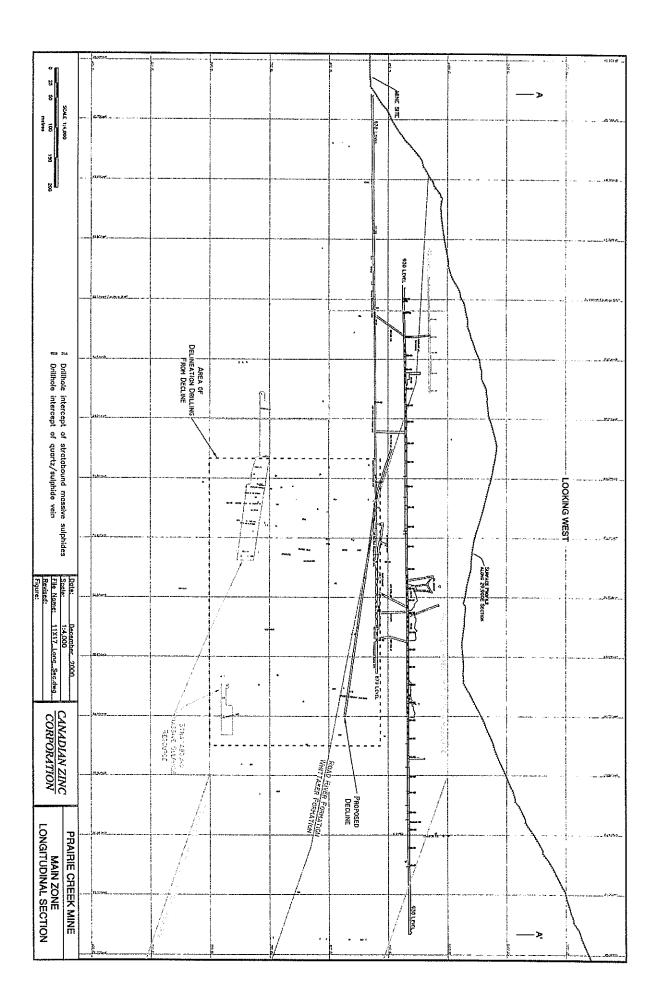
Prolum

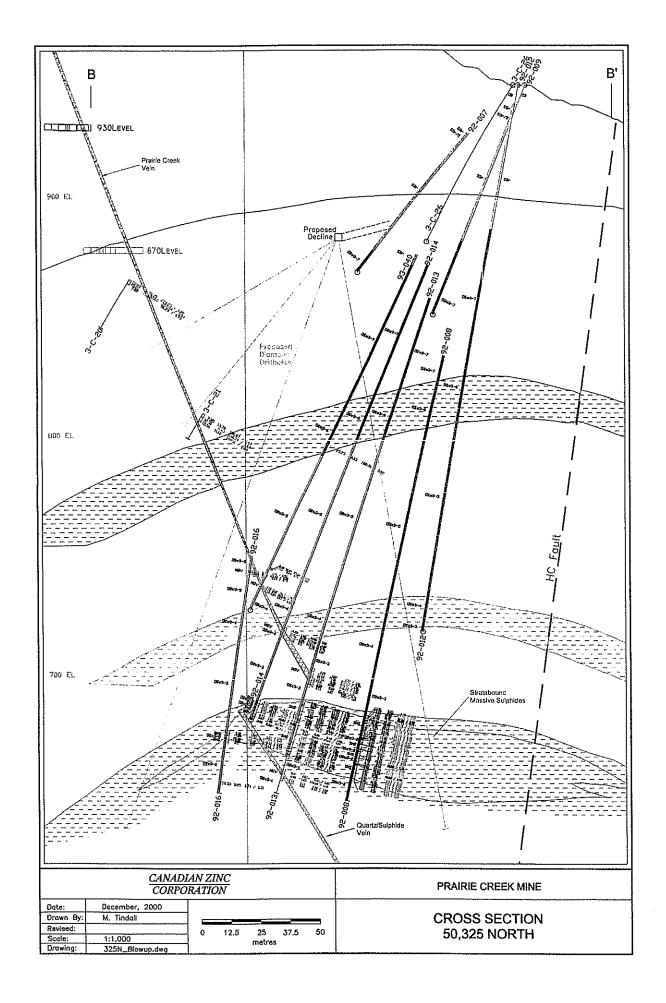
MACKENZIE VALLEY LAND AND WATER BOARD











69, 2c