

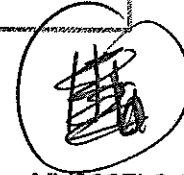
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Mackenzie Valley Land and Water Board  
7th Floor - 4910 50th Avenue • P.O. Box 2130  
YELLOWKNIFE, NT X1A 2P6  
Phone (867) 669-0506 • FAX (867) 873-6610



June 7, 2007

File: MV2007L8-0026

(a)

### Distribution List – Deh Cho Region

Dear Sir/Madame:

#### Type 'B' Water License Application - Canadian Zinc Corporation Winter Road Repairs, Prairie Creek to Liard Highway

Attached for your review and comment is the aforementioned Type 'B' Water License application.

Please note that the winter road is exempt from Preliminary Screening pursuant to Section 157.1 of the *Mackenzie Valley Resource Management Act (MVRMA)*. The Mackenzie Valley Land and Water Board is asking reviewers to submit comments regarding the terms and conditions of the Water License only.

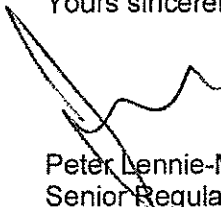
There are colour photographs of the locations of the proposed road repairs attached to this application. The colour photographs, Water License application, all other supporting information is available through our website at:  
<http://www.mvlwb.com/scr/search.php?landid=%203070>.

If you wish to get colour hard copies of any application documents, please contact me.

Please submit your comments in writing by **June 25, 2007** quoting Water License MV2007L8-0026. Should you find that additional time is required to complete further studies or investigations, contact me prior to this date.

If you have any questions regarding the water license application, contact me at (867) 669-0506 or email [permits@mvlwb.com](mailto:permits@mvlwb.com).

Yours sincerely,

A handwritten signature, likely of Peter Lennie-Misgeld, written in black ink.

Peter Lennie-Misgeld  
Senior Regulatory Officer

Attachment

## MVLWB Registry

---

**From:** Peter Lennie-Misgeld [peter@mvlwb.com]  
**Sent:** Wednesday, June 06, 2007 10:05 AM  
**To:** 'Janna Ward'; rmiller@mvlwb.com  
**Subject:** FW: Road WL Application - 2nd email



Letter to MVLWB re Water Licence  
Water Licen... Appln Road Repai...

-----Original Message-----

**From:** DAVID HARPLEY [mailto:dharpley@shaw.ca]  
**Sent:** Tuesday, June 05, 2007 6:47 PM  
**To:** Peter Lennie-Misgeld  
**Subject:** Road WL Application - 2nd email

Application and letter.



June 5, 2007

Peter Lennie-Misgeld  
Senior Regulatory Officer  
Mackenzie Valley Land and Water Board  
7<sup>th</sup> Floor-4910 50<sup>th</sup> Avenue,  
Yellowknife, NT  
X1A 2P6

Dear Mr. Lennie-Misgeld:

**RE: Application for a Class 'B' Water License to Conduct Repairs to the Prairie Creek Mine Winter Road (LUP MV2003F0028)**

Please find attached Canadian Zinc Corporation's (CZN's) application for a Class 'B' water license for the above noted activity, together with a project description and application fee.

As you know, CZN already holds land use permit (LUP) MV2003F0028 for "Rehabilitation, maintenance, and use of a winter road connecting Prairie Creek Mine and Liard Highway". The application (which was ruled to be exempt or 'grandfathered' from environmental assessment by the NWT Supreme Court) and approval process for that permit included the repairs that are the subject of this water license application. This application is required to enable CZN to make use of the LUP as intended. In terms of information requirements for this application, we respectfully suggest that you also include information from the application and permitting process for the LUP.

In planning to conduct repairs of eroded segments of the road, it was brought to our attention that a water license is required for the work because of Schedule V, Item 2 of the Northwest Territories Waters Act (1993). Item 2 states that for watercourse training including channel and bank alterations, the removal or placement of less than 100 m<sup>3</sup> of material does not require a water license. Therefore, it follows that the removal or placement of more than 100 m<sup>3</sup> of material does require a water license. As we will need to place more than 100 m<sup>3</sup> of rock armour and coarse fill, we are making this application for a water license.

Cadillac Explorations Ltd. held LUP N80F249, issued in March, 1980, for construction, operation and maintenance of a winter road. This permit was issued prior to June 22, 1984, the date of the Mackenzie Valley Resource Management Act (MVRMA), and to the NWT Waters Act and the water license requirement. Accordingly, CZN considers this water license application to be exempt or 'grandfathered' from Part 5 of the MVRMA, just as LUP MV2003F0028 was, and is therefore not subject to screening for environmental impact review (as per s. 157.1 of the Act).

Road repairs will require material to be placed in creek bed that is considered to be fish habitat. Therefore, habitat compensation and an authorization from Fisheries and Oceans Canada (DFO) are required to allow this. ~~CZN has discussed requirements with DFO at length, and has prepared and submitted a comprehensive application to DFO in support of a Fisheries Act authorization. A copy of that application will be provided to you.~~

We would like to complete the repairs this summer before August 15 when the Bull trout spawning season is expected to start. This will greatly facilitate winter road construction and operation next winter, and avoid vehicle travel down the frozen beds of Prairie and Funeral Creeks. The repairs also have environmental importance because the erosion-susceptible segments of the road continue to be eroded each year. Consequently, we wish to repair and stabilize the road as soon as possible.

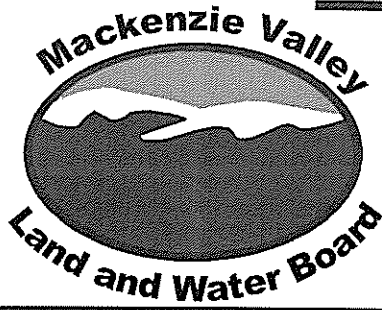
We trust the information provided will enable an expedient permitting process. If you have any questions or further requests, please contact us.

Yours truly,  
CANADIAN ZINC CORPORATION



David P. Harpley, P. Geo.  
Environmental Coordinator

cc. R. Bailey, GNWT



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

**APPLICATION FOR WATER LICENCE, AMENDMENT OF LICENCE,  
 OR RENEWAL OF LICENCE**

**\*\*TYPE B\*\***

**Application/License No:**  
 (amendment or renewal only)

<p><b>1. Name and Mailing Address of Applicant</b>  <u>Canadian Zinc Corporation</u>   <u>Suite 1710 – 650 West Georgia Street</u>   <u>Vancouver, BC V6B 4N9</u>           Telephone: <u>(604) 688-2001</u>          Fax: <u>(604) 688-2043</u></p>	<p><b>2. Address of Head Office in Canada if Incorporate</b>  <u>Canadian Zinc Corporation</u>   <u>Suite 1710 – 650 West Georgia Street</u>   <u>Vancouver, BC V6B 4N9</u>           Telephone: <u>(604) 688-2001</u>          Fax: <u>(604) 688-2043</u></p>
--	--

**3. Location of Undertaking (describe and attach a map, indicating watercourses and location of any proposed waste deposits).**

From:

Latitude 61° 33' N

Longitude 124° 48' W

To:

Latitude 61° 08' N

Longitude 122° 48' W

**4. Description of Undertaking (describe and attach plans)**

Rehabilitation and maintenance of part of an existing approximately 175 km long by 5 m wide winter road connecting the Prairie Creek Mine to the Liard Highway near Lindberg Landing to support re-supply for planned advanced exploration activity and removal of surplus reagents, equipment and supplies. Specifically, to repair eroded segments of the all season road section from the mine to Km 8.3 (see Project Description attached).

**5. Type of Undertaking.**

- |                       |              |                  |       |
|-----------------------|--------------|------------------|-------|
| 1. Industrial         | _____        | 5. Agriculture   | _____ |
| 2. Mining and Milling | <u>  X  </u> | 6. Conservation  | _____ |
| 3. Municipal          | _____        | 7. Recreation    | _____ |
| 4. Power              | _____        | 8. Miscellaneous | _____ |

**6. Water Use**

- |  |              |                                      |       |
|--|--------------|--------------------------------------|-------|
| To obtain water                            | _____        | Flood control                        | _____ |
| To cross a watercourse                     | _____        | To divert water                      | _____ |
| To modify the bed or bank of a watercourse | <u>  X  </u> | To alter the flow of, or store water | _____ |

Other (describe): \_\_\_\_\_

**7. Quantity of water involved (litres per second, litres per day or cubic meter per year, including both quantity to be used and quality to be returned to source.**

None.

**8. Waste deposited (quantity, quality, treatment and disposal)**

Placement of approximately 5,000 m<sup>3</sup> of quarried, inert armour rock and 1,200 m<sup>3</sup> of inert fill behind it to re-establish an all season road bed.

**9. Other persons or properties affected by this Undertaking (give name, mailing address and location. Attach a list if necessary.**

No persons or properties affected directly by this undertaking.

Local Outfitter – South Nahanni Outfitters; No active trapping in proximity to road segments requiring repair.

Other interested parties: Nahanni Butte Dene Band, Lidlii Kue First Nation, Acho Dene Koe First Nation, Deh Cho First Nations

**10. Predicted environmental impacts of Undertaking and proposed mitigation.**

Temporary loss of approximately 2,000 m<sup>3</sup> of fisheries habitat that will be replaced with an equivalent quantity of new or enhanced habitat under the direction and authorization of Fisheries and Oceans Canada.

Positive impact will result from armouring of erosion-susceptible segments of the road, preventing further erosion and sediment discharge.

Sediment production from placement of armour and fill to be mitigated by use of silt fencing as necessary and where possible, and washing of armour rock after quarrying. Possible interference with Bull trout spawning season to be avoided by ceasing in-stream works by August 15, or sooner if spawning activity is noted.

Positive impact will result from road repairs since this will allow use of the all season road bed for winter road operations and avoid the use of the frozen creek bed.

**11. Contractors and sub-contractors (names, addresses and functions). Attach a list if necessary.**

Craig Thomas, Bathurst , Fisheries Biologist, Bathurst Arctic Services, PO Box 820, Yellowknife, NT, X1A 2N6

Nick Bevington, Civil Engineer, Earth Tech Canada, 3<sup>rd</sup> Floor GoGa Cho Building, 4916 – 47<sup>th</sup> Street, P.O. Box 1259, Yellowknife, NT X1A 2N9

Gary Van Der Vinne, Hydrologist, Northwest Hydraulic Consultants, 9819 - 12 avenue SW, Edmonton, Alberta, T6X 0E3

Equipment operators to be trained Canadian Zinc staff. Estimated total number of personnel – 4-6.

**12. Studies undertaken to date. Attach a list if necessary.**

Field fisheries assessment of crossings and stream bed for whole road conducted in 2005.

Follow-up field inspection of eroded segments of road in 2006.

Preliminary design of road repair works and sizing of slope armour.

**13. Proposed time schedule.**

Start date: July 1, 2007

Completion date: December 31, 2007 for eroded sections presently known, although additional repairs may be required in subsequent years

Name (print): David P. Harpley



Signature:

Title (print): Environmental Coordinator

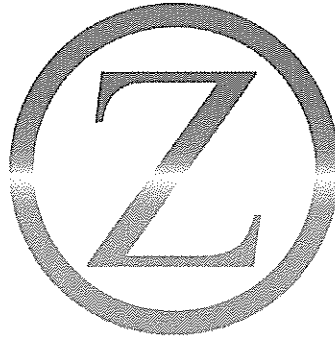
Date: June 5, 2007

***FOR OFFICE USE ONLY***

**Application Fee Amount:**     \$ \_\_\_\_\_     **Receipt No:**     \_\_\_\_\_

**Water Use Deposit Amount:**     \$ \_\_\_\_\_     **Receipt No:**     \_\_\_\_\_





**ROAD REHABILITATION  
PROJECT DESCRIPTION  
PRAIRIE CREEK MINE**

SUBMITTED IN SUPPORT OF:  
Type "B" Water License Application

SUBMITTED TO:  
Mackenzie Valley Land and Water Board  
4910-50<sup>th</sup> Avenue,  
Yellowknife, NT  
X1A 2P6

SUBMITTED BY:  
Canadian Zinc Corporation  
Suite 1710 – 650 West Georgia Street  
Vancouver, BC, V6B 4N9

June, 2007

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## APPENDICES

Appendix A	Photographs of Eroded Segments of the Prairie Creek Winter Road
Appendix B	Package Given to Chief Vital re Road Repairs at Meeting in Nahanni Butte, May 28, 2007

## 1.0 INTRODUCTION

Canadian Zinc Corporation (CZN) holds land use permit (LUP) MV2003F0028 which entitles it to conduct the following activities: "Rehabilitation, maintenance, and use of a winter road connecting Prairie Creek Mine site to Liard Highway". This application for a Class 'B' water license is a complimentary permit to the LUP, and is necessary to enable CZN to undertake the activities intended in the LUP. A water license application is necessitated by a clause in the Northwest Territories Waters Act (1993). In order to undertake the rehabilitation, CZN also requires an authorization from Fisheries and Oceans Canada (DFO). A separate application had been made to DFO in support of this authorization.

### 1.1 BACKGROUND

The winter road from the Prairie Creek Mine site to the Liard Highway is approximately 175 km long (see Figure 1). From the mine at 61° 33' North latitude and 124° 48' West longitude, the road follows Prairie Creek and a tributary of Prairie Creek called Funeral Creek, taking the road east over the Mackenzie Mountains into the Sundog Creek catchment. This section of the road crosses challenging terrain, and was built previously (to Km 37) to all season standards. Since the all season portion of the road was last used in 1995, segments of it adjacent to Prairie Creek and Funeral Creek have been eroded by creek encroachment during high water events, so much so that the road is impassable at these locations (see photographs in Appendix A). To greatly facilitate winter road construction and operation, and to avoid vehicle travel down the frozen beds of the two creeks, CZN proposes to repair the eroded segments of the all season stretch to Km 24.5 on Sundog Creek where there is a substantial waterfall and fish migration barrier. The road repairs will also have a positive environmental impact in that they will prevent further erosion and sediment discharge from the erosion-susceptible segments of the road.

Road repairs will involve placing rock boulders as armour against erosion, with fill placed behind to reconstruct the road bed. Greater than 100 m<sup>3</sup> of material will need to be placed, and this triggers a Class 'B' Water License requirement under Schedule V, Item 2 of the Northwest Territories (NWT) Waters Act (1993). Cadillac Explorations Ltd. held LUP N80F249, issued in March, 1980, for construction, operation and maintenance of a winter road. This permit was issued prior to June 22, 1984, the date of the Mackenzie Valley Resource Management Act (MVRMA), and to the NWT Waters Act and the Water License requirement. CZN's application for the LUP was ruled by the Supreme Court of the NWT to be exempt or 'grandfathered' from Part 5 of the MVRMA, and not subject to screening for environmental impact review (as per s. 157.1 of the Act). Therefore, this water license application is considered to be similarly exempt.

Road repairs will require material to be placed in creek bed that is considered to be fish habitat. Therefore, habitat compensation and an authorization from Fisheries and Oceans Canada (DFO) are required to allow this. CZN has discussed requirements with DFO at length, and has prepared and submitted a comprehensive application to DFO in support of a Fisheries Act authorization. A copy of that application will be provided to the Mackenzie Valley Land and Water Board (MVLWB). This document in support of a Class 'B' Water License application is a technically

for what  
purpose?  
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abbreviated version of the application to DFO, but includes details of consultations CZN has undertaken and plans to undertake.

## **1.2 PROJECT RATIONALE**

The winter road into Prairie Creek was last operated in its entirety in 1982 for mine construction. Since that time, on-going exploration at the site has largely utilized equipment and fuel brought in up to 1982. All operations since that time have been via air support, which is expensive and limiting in terms of bringing in necessary equipment. Renewed road operation will allow CZN to replenish fuel supplies and bring in equipment to efficiently continue with exploration. At the same time, aging equipment that is no longer needed and hazardous material stockpiled on site can be removed. Sodium cyanide has been stored on site since 1982. The material was intended for the original metallurgical process but is no longer needed. Road operation will allow CZN to remove the material from site for safe disposal. CZN is in the process of developing a removal plan, and will submit the plan and a detailed emergency and spill response plan to the MVLWB for approval (as per Item 26 of the LUP).

Re-established road access will provide a more economical means of transporting equipment and supplies necessary in support of planned advanced exploration activity to be carried out under existing permits. One of the permits is the Phase 3 surface exploration drilling. During the environmental assessment process for this permit, it was discussed that road access would be required to the Rico Claim to allow drilling. Rico is at approximately Km 10 on the road.

## **2.0 PROJECT DESCRIPTION**

### **2.1 ENGINEERING DESIGN**

There are eight road segments adjacent to Prairie Creek that require repair, and six adjacent to Funeral Creek. Table 1 provides details of segment location and length according to kilometre marker from the mine site (see Appendix B for figure showing location of kilometre markers). Two of the segments adjacent to Prairie Creek will not require encroachment of the creek bed to re-establish a one-vehicle road width since this can be achieved by moving the road slightly away from the creek, and cutting further into the adjacent hill slope where necessary. In fact, for all segments, hill slope cuts will be maximized so as to minimize encroachment on creek bed. However, there are practical limitations to this since too much cutting will promote slope instability. Many of the slopes adjacent to the road are very steep. In addition to the road repair segments, engineering will also be associated with the in-stream compensation habitat in Prairie Creek.

The dimensions of each road repair segment were assessed in the field by a civil engineer from Earth Tech (Canada) Inc. Repair details were developed. A summary of these details and material quantities are given in Table 1. The repairs are based on creating an armoured 2 to 1 slope on the creek-side of the road. Northwest Hydraulic Consultants (NHC) was engaged to design the armour for the road segments to be repaired. Their preliminary design conservatively determined that 750 mm size boulders be placed at the toe and on the outside of the slope. Progressively smaller material would then be placed behind the boulders. Before the armour is selected and placed at a particular road repair segment, longitudinal and cross-sectional survey data of the segment will be collected and provided to NHC to allow them to make final calculations of armour size requirements. This is to ensure that the 750 mm boulder size is sufficiently large, but more likely will determine that this 'one-size-fits-all' approach need not apply to all segments, and that a smaller boulder size will be appropriate for some segments or parts of the segment. Survey data will also be collected for the habitat compensation location, and NHC will provide final design guidelines for the structures involved.

### **2.2 REHABILITATION APPROACH**

The first activity will be the preparation of the armour rock. After blasting in the quarry, the rock will be washed and then stockpiled at the quarry site. Wash water will be retained in the quarry or channelled to a vegetated area to avoid rock fines entering Prairie Creek. Rock from the stockpile will be transported to the area being rehabilitated and placed nearby.

Repairs will commence from the mine site, and progress north up Prairie Creek, and then east up Funeral Creek. Equipment will travel along and work from the road bed. Prior to commencing work at each segment, silt fencing will be installed as appropriate and where possible. A backhoe will place the armour rock and slightly smaller boulders behind this. One the toe berm can retain medium-sized talus material, this will be cut from the inside slope or trucked in, and then dozed behind the armour berm. The dozer will level the fill sufficient to allow equipment to continue

along the road. For road segments where a vehicle width is nearly present, or can be created by cutting the inside slope (in Funeral Creek for example), only armouring of the outside slope will be required, and the armour rock will be 'stacked' against the existing slope.

Because of the relatively short period available for the rehabilitation works during the summer, the intent will be to carry out the repairs and stream bed work as quickly as possible. A finer gravel-like material would be brought in by truck to top off the final road bed, but this would be done at a later date. The final bed would be graded using a Cat grader.

The works will at all times be carried out under the guidance of, and monitored by, professionals. Craig Thomas, Professional Biologist, will be present to supervise the habitat compensation works, and some of the road repair works. In addition, a community environmental monitor will also be present over the summer while the Phase 3 surface exploration drilling is in progress, and this person will also monitor the repair works.

CZN has a fuel spill response plan for the Prairie Creek site which was approved by and is on file with the Mackenzie Valley Land and Water Board. CZN will also use this plan for the planned road repairs, unless an updated version is available by the time the works commence.

### **2.3 REHABILITATION EQUIPMENT AND SUPPLIES**

A sizeable fleet of equipment exists at the Prairie Creek Mine site. This includes equipment suitable for the road repair program. The equipment expected to be used is listed below.

Volvo BM4600 Loader
Hitachi UH122 backhoe
Cat D8 with ripper
Cat D8
Cat D6
Cat 14G grader
Cat 14 E grader
3 – Volvo 5350 rock wagons
Low boy trailer

Large diameter, hard rock will be required for the road armour. A previously used quarry exists immediately east of the north end of the existing airstrip. CZN will apply for a Quarrying Permit to extract the necessary rock from this location. An on-site air-track drill will be used at the quarry site to drill holes, and the required quantity of hard cherty dolomite will be blasted. Medium-sized talus material to fill behind the armour would be obtained from road cuts and other land-based sources local to the road segment being repaired.

## **2.4 CREEK CROSSINGS AND FISH HABITAT**

The repairs will involve crossing Casket Creek (at Km 5.5) which is potentially fish habitat, and a tributary of Funeral Creek (at Km 13.1), which is considered unlikely to be fish habitat due to the steepness, high elevation, and ephemeral flow of the stream. CZN plans to place temporary crossing structures at these locations to allow repairs to continue. These would be replaced with more permanent structures in the process of winter road construction and operation prior to the following spring.

### **Casket Creek**

The course of Casket Creek has been naturally diverted downstream by an alluvial fan at its mouth with Prairie Creek. In 2005, the diverted stream was a channel approximately two feet wide, with shallow banks. Immediately south is a low elevation promontory into the Prairie Creek floodplain, around which the existing road traverses. CZN plans to re-align the road over this promontory, thus avoiding contact with Prairie Creek. The Casket Creek channel will then be crossed by placing footings on either side, well outside the wetted width, likely timber cribs, and then laying steel I-beams between the footings so that the beams would be under the tracks of the equipment. A small amount of local gravel and cobbles will be placed against the cribs at each end to act as ramps. Decking will then be placed over the beams. If the channel is found to be dry, the bed will be forded. On later trips, if the channel contains water, the temporary crossing structure will be built as described. If it is unusually wet and the channel is too broad to cross as described, further repairs to the north will have to be deferred to a later time, unless access is possible upslope avoiding the crossing location. If a second channel is encountered at the Casket Creek alluvial fan, the same approach as for the first channel will be adopted.

When the winter road comes west in January, the temporary crossing structures will be removed and replaced with semi-permanent open bottom structures. The span may be a Bailey bridge or a pre-cast deck. We will investigate this further and consult with DFO to discuss the selection and construction plans/requirements. The intent is to have the new structure in-place well before the 2008 freshet.

### **Funeral Creek**

Although we believe the tributary to Funeral Creek at Km 13.1 is not fish habitat, if it is water bearing at the time of crossing, we will collect data and take photographs and relay these to DFO via the on-site satellite-based internet. If DFO agree the crossing is not fish habitat, we will proceed to install several large closed-bottom steel culverts that are readily available nearby. If not, we will wait until the crossing location is dry or frozen. The original culvert at this location was a single 24-inch closed-bottom type. This was washed-out. Because this crossing is steep on both sides and prone to significant erosion, two 24-inch diameter culverts will be placed to pass a potential intense rainfall event, and to allow equipment passage through the crossing area. Local coarse clean or washed fill will be placed over the culverts to create the road bed.

After the work has been completed, we will assess the need for replacement of the culverts with an open-bottom structure when the winter road comes through, and consult DFO. It may be preferable to leave the culverts in place. If this occurs, we understand that regular inspection will be required to ensure the culverts remain clear of snow and able to pass the freshet and intense rainfall events.

### **Sundog Creek**

CZN plans to travel east to Km 24.5 on the road, during summer if possible, to conduct repairs where there has been surface erosion of the road from runoff events. There is a water fall approximately 3 m in height at Km 24.5, and the 2005 fisheries assessment determined that the falls is a barrier to fish migration, and that there is unlikely to be a resident fish population above the falls because the stream likely runs dry, and/or freezes to the bottom in winter (see fisheries assessment below). The road alignment crosses Sundog Creek in several places over this stretch. As is the case in the Prairie Creek catchment, the stream bed is typified by cobbles and coarse gravel, with very little fine material. Travel down the upper segment of Sundog Creek to the falls is not expected to create any water quality issues downstream. However, stream flows will be monitored to check for the presence of turbid water, and measures will be taken to limit sediment production and filter out sediment if necessary.

## **2.5 REHABILITATION SCHEDULE**

CZN will attempt to complete all work in stream bed considered to be fish habitat by August 15, this being the start of the assumed Bull trout spawning season. However, CZN understands that Funeral Creek will require monitoring for evidence of spawning activity prior to that date, and if such evidence is found, work in the bed will be suspended. Any work in the bed not completed by August 15 will be continued after freeze-up, probably in November and December. If this occurs, material will only be placed on ice-free solid ground to avoid potential interference with fish eggs. CZN will consult closely with the DFO representative at all times on this and other issues before conducting work. CZN's intent will be to have all work completed by the end of December ready for winter road operations, potentially from January onwards.



### 3.0 CONSULTATION

The Prairie Creek Mine and winter road is within the area claimed by the Nahanni Butte Dene Band of the Deh Cho First Nations as their Traditional Territory. The nearest settled communities to the mine are:

- Nahanni Butte - 90 km to the south-east
- Fort Liard - 170 km to the south
- Fort Simpson - 180 km to the east

CZN representatives visited Nahanni Butte on May 28, 2007. A community meeting was arranged by the Band for 3 p.m. For CZN, Alan Taylor, Chief Operating Office, Dan O'Rourke, Community and Northern Affairs Advocate, and David Harpley, Environmental Coordinator, were in attendance. Approximately 25 community members attended the meeting, including the newly elected Chief Morris Vital. Others present included Robert Vital, Francis and Flora Betsaka, Leon, Jane and Clayton Konisenta, and Lena Marcellais. Apologies to others present whose names were unknown to the author.

This was the first substantive meeting between CZN and the Nahanni Butte community for some time, and the meeting began with opening exchanges of welcome and pleasure at being present. The Chief then summarized the main issues of interest he had with respect to the Prairie Creek project. Top of his list, and echoed by community members, were jobs, training and benefits. The Company indicated that there would be jobs associated with the winter road. These included summer route slashing, equipment operation for road repairs, and environmental monitors. Community members were encouraged to apply for these jobs, and others at the mine site, and the Company pointed at that it, and the neighbouring Fort Liard and Fort Simpson community leaders, wanted Nahanni Butte residents to be first in line for any jobs available.

Dan O'Rourke also explained that the Company hoped to host two training courses at the mine this summer, one on warehousing and one on diamond drilling. It is hoped that these courses will be operated in conjunction with NWT Mine Training Society in a similar fashion to last year for the Environmental Monitor course. After some discussion on these issues, there was a brief interchange on possibilities for further benefits in the form of business opportunities and profit sharing. It was resolved that there would be further discussions at a later date. The Company invited community members to visit the mine in the near future, with charter aircraft being made available. A date has not yet been confirmed for a visit.

Later in the meeting, David Harpley gave a brief description of repairs the Company is planning to make to eroded segments of the road near the mine. He explained that applications were going to be made to the MVLWB and DFO to obtain approvals for this work. A small package of information was given to Chief Vital explaining the nature and location of the intended works, together with copies of photographs showing some of the eroded segments. A copy of the package given is contained in Appendix B. Mr Harpley had also brought three poster sized drawings of the entire winter road, upon which photographs were digitally overlaid. The posters

were spread over a table, and the Chief, Robert Vital, Jane Konisenta and some school children gathered around and there was a brief factual discussion. The posters were left with the Chief, and the meeting adjourned at approximately 5.30 p.m.

CZN is planning further follow-up consultation sessions with the Nahanni Butte Dene Band, with the next meeting scheduled to occur on June 13, 2007. The Company will endeavour to consult the community on a number of topics, including plans for the road repairs and the need for regulatory approvals.

The Company was hoping to meet with the leadership of Fort Liard on May 28, 2007. Dan O'Rourke contacted Chief Harry Deneron by telephone, but the Chief indicated he was not available at that time. Arrangements were made to meet in Fort Liard on June 6, 2007, at which time the Company expects to describe its road repair plans in detail, as well as its plans for future mine operations.

Dan O'Rourke met briefly with Chief Keyna Norwegian from Fort Simpson on May 31, 2007 in Yellowknife. The Chief was in the city on business and not available for a meeting to discuss the road repairs. However, arrangements were made to meet in Fort Simpson on June 7, 2007, at which time the Company expects to engage in a meeting with leadership to describe its road repair plans in detail, as well as its plans for future mine operations.

## Prairie Creek Road Repair Details

Segment	Km from Mine		Length (m)	Cut (m <sup>3</sup> )	Place (m <sup>3</sup> )		Encroachment	
	Start	Finish			Armour	Fill	Distance (m)	Area (m <sup>2</sup> )
<b>Prairie Creek</b>								
A	2.837	2.867	30	90	12	30	1.5	15
B1	3.760	3.826	66	124	124	0	2.0	140
B1	3.760	3.894	134	76	1500	375	5.0	670
B2	3.956	4.046	90	90	270	70	4.0	360
B3	4.044	4.214	170	170	1000	65	4.0	680
B4	4.213	4.249	36	70	80	70	3.0	108
C1	4.813	4.844	31	0	0	0	0.0	0
D1	5.425	5.491	66	0	300	30	4.5	300
D1	5.425	5.559	134	0	1400	500	7.0	940
E1	5.910	6.050	140	0	0	0	0.0	0
<b>Funeral Creek</b>								
1	7.100	7.115	15	30	15	0	1.5	23
2	7.150	7.165	15	25	55	10	3.0	45
3	7.220	7.235	15	25	60	10	3.0	45
4	7.750	7.770	20	60	90	30	5.0	100
5	7.960	7.970	10	30	60	15	5.0	50
6	8.300	8.315	15	30	55	15	4.0	60
<b>Total</b>				<b>820</b>	<b>5,021</b>	<b>1,220</b>		<b>3,536</b>

Figure 1 Winter Access Road Alignment – Prairie Creek Mine to Liard River

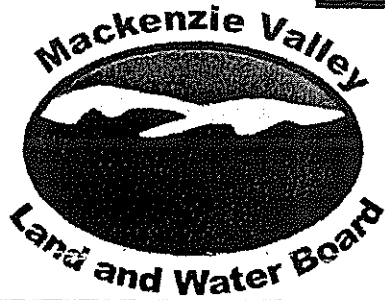


## **APPENDIX A**

### **Photographs of Eroded Segments of the Prairie Creek Winter Road**

## **APPENDIX B**

### **Package Given to Chief Vital re Road Repairs at Meeting in Nahanni Butte, May 28, 2007**



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) 873-5610

FOR OFFICE USE ONLY

Cheques are to be made payable to "Receiver General of Canada"

Proponent Name: Canadian Zinc Corporation

Application Number WL: MV2007L8-0026

Application Fee Amount: \$30.00

Receipt Number: C148507

Annual Water Use Fee Amt:                     

Receipt Number:                     

Paid by Cash or Cheque #: 012194  
(Please circle)

J. Ward  
Signature

June 8/07  
Date



GENERAL RECEIPT / RÉCÉPISSÉ GÉNÉRAL

Date <b>June 8/07</b>		Nature and no. of remittance - Forme et n° de la remise <b>cheque #012194</b>		Invoice no. - N° de facture <b>June 5/07</b>		Branch - Direction <b>MVLWB</b>	
Received the sum of / Reçu la somme de <b>Thirty</b>				Location - Endroit <b>YK</b>		<del>100</del> Dollars \$ <b>30.00</b>	

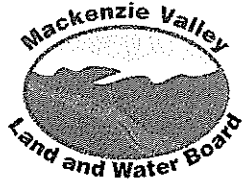
From - De

(Canadian Zinc Corporation)  
Suite 1710 - 650 W. Georgia St  
PO Box 11644, Vancouver BC  
V6B 4N9

For - Pour

application for water  
License -  
MY200728-0026  
J. Ward  
Authorized officer - Fonctionnaire autorisé





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

~~11~~ (b)

August 20, 2007

File: MV2007L8-0026

Distribution List

Dear Sir/Madame:

**Draft Water License Terms and Conditions  
Canadian Zinc Corporation, MV2007L8-0026  
Winter Road Repairs, Prairie Creek to Liard Highway**

Attached for your review and comments is the aforementioned Draft Water Licence Terms and Conditions.

Please submit your comments in writing by **September 6, 2007** quoting Water Licence MV2007L8-0026. Should you find that additional time is required to review this document, please contact me prior to this date.

If you have any questions regarding the above stated reports/plans, please contact me at (867) 669-0506 or email [permits@mvlwb.com](mailto:permits@mvlwb.com).

Yours sincerely,

A handwritten signature in cursive script that reads "Tyree Mullaney".

Tyree Mullaney  
Regulatory Officer

Attachment

DISTRIBUTION LIST by Fax**Canadian Zinc Area - Dehcho****FIRST NATIONS**

Chief Stanley Sanguéz	T'hedzéhK'edeli First Nation (JMR)		867-809-2002 or 809-2071
Chief Berna Landry	Deh Gah Got'ie Dene Council (Ft Prov.)		867-699-3134
Chief Tim Lennie	Pehdzeh Ki First Nation (Wrigley)	23	867-581-3229
Chief Keyna Norwegian	Liidlii Kue First Nation (Ft Simpson)	25	867-695-2665
Grand Chief Herb Norwegian	Deh Cho First Nations	35	867-695-2038
Chief Morris Vital	Nahanni Butte First Nation	36	867-602-2910
Chief Harry Deneron	Acho Dene Koe First Nation (Fort Liard)	37	867-770-4144
Chief Dolphus Jumbo	Sambaa K'e Dene Band (Trout Lake)	38	867-206-2828

**COMMUNITIES**

Mayor Raymond Michaud	Village of Fort Simpson	17	867-695-2005
Mayor Maggie Levavasseur	Hamlet of Fort Providence	18	867-699-3210
Mayor Mike Drake	Hamlet of Fort Liard	39	867-770-4004

**ABORIGINAL ORGANIZATIONS**

Laura Pitkanen	Dehcho Representative		705-756-4466
President Albert Lafferty	Fort Providence Métis Council #57		867-699-4319
President Marie Lafferty	Fort Simpson Métis Local #52		867-695-2040
Darren Campbell	Fort Providence Resource Management Board	27	867-699-3133
Camillia Zoe-Chocolate	Dene Nation	40	920-2254
Monika Templin	Deh Cho Land Use Planning Committee	41	867-699-3166
President Ernie McLeod	Fort Liard Métis Local #67	42	867-770-3266
Frank Kotchea	Nahendeh Land & Environmental Services	43	867-770-4573

**GOVERNMENT**

Lorraine Seale	Environment and Conservation - INAC		669-2701
Julie Jackson	Policy & Planning Directorate, INAC		669-2736
Darnell McCurdy	South Mackenzie District Office	57	669-2720
Carolyn Relf	Mineral & Petroleum Resources Directorate	59	669-2705
Tom Andrews	GNWT - PWNHC	60	873-0205
Jason McNeill	GNWT - ENR	63	873-4021
Duane Fleming	GNWT - Health	65	669-7517
Greg Brady	GNWT - ITI		873-0645
Mike Fournier	Environment Canada	66	873-8185
Ernest Watson	DFO	68	669-4940
Chuck Blyth	Nahanni National Park Reserve	46	867-695-2446
Katherine Cumming	Parks Canada	47	204-983-0031

**OTHERS**

Karley Ziegler	CPAWS	49	karley@cpaws.org
Alison Woodley	CPAWS	49	awoodley@cpaws.org
Vern Christensen	MVEIRB	50	766-7074

## **PART A: SCOPE AND DEFINITIONS**

### **Scope**

1. This License entitles Canadian Zinc Corporation to conduct winter road repairs and associated uses along the winter road route located at 61°33' to 61°08" N; 124° 48' to 122° 48" W, Northwest Territories.
2. This License is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Northwest Territories Waters Act, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this License shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
3. Compliance with the terms and conditions of this License does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

### **Definitions**

In this License: **MV2007L8-0026**

“**Act**” means the *Northwest Territories Waters Act*;

“**Analyst**” means an Analyst designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

“**Regulations**” means Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

“**Minister**” means the Minister of Indian Affairs and Northern Development;

“**Board**” means the Mackenzie Valley Land and Water Board established under Part 4 of the *Mackenzie Valley Resource Management Act*;

“**Inspector**” means an Inspector designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

“**Licensee**” means the holder of this License:

“**Waste**” means waste as defined by Section 2 of the *Northwest Territories Waters Act*;

**“Modification”** means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion.

**“Water Use Fee”** means a fee for the use of Water as defined by Section 33 of the *Northwest Territories Waters Act*.

**“Waters”** means any Waters as defined by Section 2 of the *Northwest Territories Waters Act*.

## **PART B: GENERAL CONDITIONS**

1. The Water Use Fee shall be paid annually in advance.
2. The Licensee shall file a Final Report with the Board within sixty (60) days of completion of the project which shall contain the following information:
  - a) any revisions to the approved Contingency Plan;
  - b) a list and description of all unauthorized discharges including volumes, spills and summaries of follow-up action taken.
3. The Licensee shall ensure a copy of this License is maintained at the site of operation at all times.

## **PART C: CONDITIONS APPLYING TO WASTE DISPOSAL**

1. The Licensee shall ensure that no unauthorized wastes associated with this undertaking enter any waters.

## **PART D: CONDITIONS APPLYING TO MODIFICATIONS**

1. The Licensee may carry out modifications to the planned undertakings:
  - a) without written approval from the Board, provided that such modifications are consistent with the terms of this License and the Licensee has notified the Board in writing of such modifications at least ten (10) days prior to beginning the modifications; or
  - b) with the written approval of the Board and under such conditions decided by the Board.

## **PART E: CONDITIONS APPLYING TO CONTINGENCY PLANNING**

1. If during the period of this License, an unauthorized discharge of waste occurs, or

if such a discharge is foreseeable, the Licensee shall:

- a) employ the appropriate contingency plan;
- b) advise an Inspector immediately via the 24 Hour NWT Spill Report Line (867) 920-8130; and
- c) submit to an Inspector, a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

**PART F: CONDITIONS APPLYING TO THE UNDERTAKING**

- 1. The Licensee shall ensure that any fuels, chemicals, or wastes associated with this undertaking do not enter any waters. All fuel is to be stored at a location that is at a minimum of one hundred (100) metres from the ordinary high water mark of any water body.
- 2. The Licensee shall ensure that all equipment entering the water shall be clean and inspected for leaks prior to entering the water.
- 3. Materials being used for road repairs shall not contain vegetation, soils, or other materials and shall be clean and free of contaminants.
- 4. The Licensee shall use, whenever possible, techniques and equipment that minimize the creation, amount and duration of suspended solids during any work in any watercourse.
- 5. The Licensee shall ensure that the winter road repairs conforms to the application submitted to the Board.
- 6. All sites affected by construction or removal activities shall be stabilized and landscaped as necessary, and erosion control measures implemented to minimize sediment deposition into the watercourse.
- 7. The Licensee shall install sediment and erosion control measures at road repair sites as required to prevent silt migration. All such measures will be conducted to the satisfaction of an Inspector.

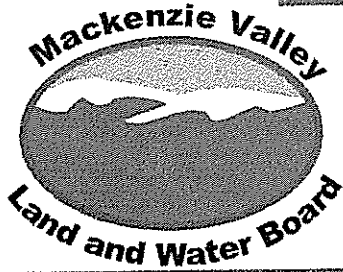
**MACKENZIE VALLEY LAND AND WATER BOARD**

---

**Witness**

---

**Chair**



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

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Fax numbers		
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☎18676952040  
☎6692701  
☎6692736  
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EA0809-002 DM



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

Accessed by  
Review Board  
~~XXXX~~  
Nov 2008

RFRH

File: MV2007L8-0026

(C)  
(A)

March 20, 2008

Mr. Dave Harpley  
Environmental Coordinator  
Canadian Zinc Corporation  
Suite 1760-650 West Georgia Street  
VANCOUVER BC V6B 4N9

Fax: (604) 688-2001

Dear Mr. Harpley:

**ISSUANCE OF A TYPE "B" WATER LICENSE**

Attached is Water License MV2007L8-0026 granted by the Mackenzie Valley Land and Water Board (MVLWB) in accordance with the *Northwest Territories Waters Act*. A copy of this License has been filed in the Public Registry at the office of the MVLWB. The MVLWB approved Water License MV2007L8-0026 for a period of five (5) year commencing March 20, 2008 and expiring March 19, 2013.

Attached are general procedures for the administration of licenses in the Northwest Territories. The MVLWB requests that you review these and address any questions to the Boards office.

Please be advised that this letter, with attached procedures, 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 License requirements are being met. All Public Registry material will be considered if an amendment to the License is requested.

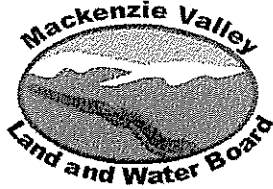
The full cooperation of Canadian Zinc Corporation is anticipated and appreciated.

Yours sincerely,

Willard Hagen  
Chair

**Attachments**

Copied to: Darnell McCurdy, District Manager, South Mackenzie District, INAC  
Francis Jackson, Water Resources Division, INAC  
Distribution List of Reviewers



**MACKENZIE VALLEY LAND AND WATER BOARD  
WATER LICENSE**

Pursuant to the *Mackenzie Valley Resource Management Act* and Regulations, the Mackenzie Valley Land and Water Board, hereinafter referred to as the Board, hereby grants to:

Canadian Zinc Corporation.  
(Licensee)

of Suite 1710-650 West Georgia Street  
Vancouver BC V6B 4N9  
(Mailing Address)

Hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this License.

License Number: MV2007L8-0026

License Type: B

Water Management Area: Northwest Territories 03

Location: 61°33' to 61°08" N; 124° 48' to 122° 48" W,

Purpose: To modify the bed or bank of a watercourse

Description: Winter road repairs in Prairie and Funeral Creek

Quantity of water **not to be exceeded:** N/A

Effective Date of License: March 20, 2008

Expiry Date of License: March 19, 2013

This License issued and recorded at Yellowknife includes and is subject to the annexed conditions.

**MACKENZIE VALLEY LAND AND WATER BOARD**

adhBrien  
Witness

[Signature]  
Chair

## **PART A: SCOPE AND DEFINITIONS**

### **Scope**

1. This License entitles Canadian Zinc Corporation to conduct winter road repairs and associated uses along the winter road route located at 61°33' to 61°08" N; 124° 48' to 122° 48" W, Northwest Territories.
2. This License is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Northwest Territories Waters Act, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this License shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
3. Compliance with the terms and conditions of this License does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

### **Definitions**

In this License: **MV2007L8-0026**

“**Act**” means the *Northwest Territories Waters Act*;

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“**Regulations**” means Regulations proclaimed pursuant to Section 33 of the *Northwest Territories Waters Act*;

“**Minister**” means the Minister of Indian Affairs and Northern Development;

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“**Inspector**” means an Inspector designated by the Minister under Section 35(1) of the *Northwest Territories Waters Act*;

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“**Waste**” means waste as defined by Section 2 of the *Northwest Territories Waters Act*;

“**Modification**” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion.

**“Water Use Fee”** means a fee for the use of Water as defined by Section 33 of the *Northwest Territories Waters Act*.

**“Waters”** means any Waters as defined by Section 2 of the *Northwest Territories Waters Act*.

#### **PART B: GENERAL CONDITIONS**

1. The Water Use Fee shall be paid annually in advance.
2. The Licensee shall file a Final Report with the Board within sixty (60) days of completion of the project which shall contain the following information:
  - a) any revisions to the approved Contingency Plan;
  - b) a list and description of all unauthorized discharges including volumes, spills and summaries of follow-up action taken.
3. The Licensee shall ensure a copy of this License is maintained at the site of operation at all times.

#### **PART C: CONDITIONS APPLYING TO WASTE DISPOSAL**

1. The Licensee shall ensure that no unauthorized wastes associated with this undertaking enter any waters.

#### **PART D: CONDITIONS APPLYING TO MODIFICATIONS**

1. The Licensee may carry out modifications to the planned undertakings:
  - a) without written approval from the Board, provided that such modifications are consistent with the terms of this License and the Licensee has notified the Board in writing of such modifications at least ten (10) days prior to beginning the modifications; or
  - b) with the written approval of the Board and under such conditions decided by the Board.

#### **PART E: CONDITIONS APPLYING TO CONTINGENCY PLANNING**

1. If during the period of this License, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a) employ the appropriate contingency plan;
  - b) advise an Inspector immediately via the 24 Hour NWT Spill Report Line (867) 920-8130; and
  - c) submit to an Inspector, a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.





2. The Licensee shall provide a detailed Spill Contingency Plan no later than 30 days after the issuance of the Water Licence for approval for the Board.

**PART F: CONDITIONS APPLYING TO THE UNDERTAKING**

1. The Licensee shall ensure that any fuels, chemicals, or wastes associated with this undertaking do not enter any waters. All fuel is to be stored at a location that is at a minimum of one hundred (100) metres from the ordinary high water mark of any water body.
2. The Licensee shall ensure that all equipment entering the water shall be clean and inspected for leaks prior to entering the water.
3. Materials being used for road repairs shall not contain vegetation, soils, or other materials and shall be clean and free of contaminants.
4. The Licensee shall use, whenever possible, techniques and equipment that minimize the creation, amount and duration of suspended solids during any work in any watercourse.
5. The Licensee shall ensure that the winter road repairs conform to the application submitted to the Board.
6. All sites affected by construction or removal activities shall be stabilized and landscaped as necessary, and erosion control measures implemented to minimize sediment deposition into the watercourse.
7. The Licensee shall install sediment and erosion control measures at road repair sites as required preventing silt migration. All such measures will be conducted to the satisfaction of an Inspector.

**MACKENZIE VALLEY LAND AND WATER BOARD**

  
\_\_\_\_\_  
**Witness**

  
\_\_\_\_\_  
**Chair**

**MACKENZIE VALLEY LAND AND WATER BOARD  
SURVEILLANCE NETWORK PROGRAM**

LICENSEE: Canadian Zinc Corporation  
 LICENCE NUMBER: MV2007L8-0026  
 EFFECTIVE DATE OF LICENCE: March 20, 2008  
 EFFECTIVE DATE OF SURVEILLANCE NETWORK PROGRAM (SNP): March 19, 2013

**1. Surveillance Network Program Description & Sampling Requirements**

For the purposes of this water Licence, the sampling parameters have been grouped into the following categories:

**Hydrocarbons** = Extractable Hydrocarbons (ExtHC), and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX); and

**Total Metals** = Total elemental analysis by ICP-Metal Scan of: Silver (Ag), Arsenic (As), Aluminum (Al), Barium (Ba), Cadmium (Cd), Cobalt (Co), Copper (Cu), Chromium (Cr), Iron (Fe), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Selenium (Se), Strontium (Sr) and Zinc (Zn).

Notes:

- If any sampling requirement falls within two (2) required sampling categories, it need only be sampled once.
- In all cases where lab samples are collected, the field parameters should be duplicated (i.e. analysed in the field plus the lab).
- Ambient conditions should be recorded at the time of sample collection or taking field measurements.
- Where metals are analyzed, hardness must be analyzed as well.

**Surveillance Network Program (SNP) Station P1 (A, B1, B2, B3, B4, C, D)**

Description:	Prairie Creek – Sampling will occur 100m upstream and 100m downstream of each site when conducting in stream work
Location:	Coordinates TBD
Sampling Frequency and Parameters:	Daily sampling of field parameters: Turbidity, Temperature, pH, Conductivity, and Dissolved Oxygen during in stream construction.

	<p>Daily sampling of TSS for laboratory analysis during in stream construction.</p> <p>Weekly sampling of Total Metals and Ammonia during in stream construction.</p>
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**Surveillance Network Program (SNP) Station F1 (1, 2, 3, 4, 5, 6, 7)**

Description:	Funeral Creek - Sampling will occur 100m upstream and 100m downstream of each site when conducting in stream work.
Location:	Coordinates TBD
Sampling Frequency and Parameters:	<p>Daily sampling of field parameters: Turbidity, Temperature, pH, Conductivity, and Dissolved Oxygen during in stream construction.</p> <p>Daily sampling of TSS for laboratory analysis during in stream construction.</p> <p>Weekly sampling of Total Metals and Ammonia during in stream construction.</p>

More frequent sample collection may be required at the request of an Inspector.

**2. Quality Assurance/Quality Control**

1. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of "Standards Methods for the Examination of Water and Wastewater", or by such other methods approved by an Analyst.
2. All analyses shall be performed in a laboratory approved by an Analyst.
3. A quality assurance/quality control plan which includes both field and laboratory requirements shall be submitted to an Analyst for approval not less than sixty (60) days in advance of any sampling conducted.
4. The plan referred to in Part 2, Item 3, (above) shall be implemented as approved by an Analyst.

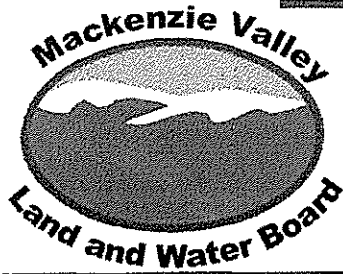
**3. Reports**

1. The Licensee shall within thirty (30) days following the month being reported, submit to the Board all data and information required by the "Surveillance Network Program" including the results of the approved quality assurance plan.
2. The Licensee shall, unless otherwise requested by an Inspector, include all of the data and information required by the "Surveillance Network Program" including the results of the approved quality assurance/quality control program in the Licensee's Annual Report, which Report shall be submitted to the Board on or before March 31<sup>st</sup> of the year following the calendar year being reported.

**MACKENZIE VALLEY LAND AND WATER BOARD**

  
\_\_\_\_\_  
**Witness**

  
\_\_\_\_\_  
**Chair**



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

FILE NUMBER: MV2007L8-0026

Date: March 26, 2008

To: Mr. Dave Harpley

Organization: Canadian Zinc Corporation

Fax Number: (604) 688-2001  
Darnell McCurdy, SMD, INAC  
Francis Jackson, Water Resources, INAC

Copied To: Distribution List

From: Elaine Brière for Willard Hagen, Chair

Number of pages including cover 3

**Remarks:**

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- Enclosures
- As requested
- For your information
- For your comment
- For your approval

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DISTRIBUTION LIST by Fax**Canadian Zinc Area - Dehcho****FIRST NATIONS**

Chief Stanley Sanguéz	TthedzehK'edeli First Nation (JMR)		867-809-2002 or 809-2071
Chief Berna Landry	Deh Gah Got'ie Dene Council (Ft Prov.)		867-699-3134
Chief Darcy E. Moses	Pehdzeh Ki First Nation (Wrigley)	23	867-581-3229
Chief Keyna Norwegian	Liidlii Kue First Nation (Ft Simpson)	25	867-695-2665
Interim Grand Chief Jerry Antoine	Deh Cho First Nations	35	867-695-2038
Chief Fred Tesou	Nahanni Butte First Nation	36	867-602-2910
Chief Harry Deneron	Acho Dene Koe First Nation (Fort Liard)	37	867-770-4144
Chief Dolphus Jumbo	Sambaa K'e Dene Band (Trout Lake)	38	867-206-2828

**COMMUNITIES**

Mayor Duncan Carvin	Village of Fort Simpson	17	867-695-2005
Mayor Tina Gargan	Hamlet of Fort Providence	18	867-699-3210
Mayor Morris McLeod	Hamlet of Fort Liard	39	867-770-4004

**ABORIGINAL ORGANIZATIONS**

Laura Pitkanen	Dehcho Representative		705-756-4466 pitkanen@csolve.net
President Albert Lafferty	Fort Providence Métis Council #57		867-699-4319
President Marie Lafferty	Fort Simpson Métis Local #52		867-695-2040
Priscilla Canadian	Fort Providence Resource Management Board	27	867-699-3133
Camilla Zoe-Chocolate	Dene Nation	40	920-2254
Michael Nadli	Deh Cho Land Use Planning Committee	41	867-699-3166
President Ernie McLeod	Fort Liard Métis Local #67	42	867-770-3266
Frank Kotchea	Nahendeh Land & Environmental Services	43	867-770-4573

**GOVERNMENT**

Lorraine Seale	Environment and Conservation - INAC		669-2701
Julie Jackson	Policy & Planning Directorate - INAC		669-2736
Janice Murphy	Aboriginal and Territorial Relations Directorate - INAC		MurphyJ@inac-ainc.gc.ca
Francis Jackson	Water Resources - INAC	58	
Darnell McCurdy	South Mackenzie District Office	57	669-2720
Angela Norris	Mineral & Petroleum Resources Directorate	59	669-2705
Tom Andrews	GNWT - PWNHC	60	873-0205
Glen Mackay	GNWT - PWNHC	60	873-0205
Claire Singer	GNWT - ENR	63	873-4021
Duane Fleming	GNWT - Health	65	669-7517
Peter Csicsia	GNWT - ITI		873-0645
Mike Fournier	Environment Canada	66	873-8185
Ernest Watson	DFO	68	669-4940
Chuck Blyth	Nahanni National Park Reserve	46	867-695-2446
Katherine Cumming	Parks Canada	47	204-983-0031

**OTHERS**

Administration	CPAWS	49	nwtadmin@cpaws.org
Vern Christensen	MVEIRB	50	766-7074
Allan Taylor	Canadian Zinc		604-688-2043

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