

March 14, 2023 Via email

Jonathan Tsetso
Superintendent
Nahanni National Park Reserve
10002 100 Street, P.O. Box 348,
Fort Simpson, NT
XOE ONO

## Re: Application for a New Type A Water Licence – Nahanni National Park Reserve

Canadian Zinc Corporation (CZN) is pleased to provide the attached application for Type A Water Licence for the Prairie Creek Mine All Season Road (ASR).

#### **Background**

CZN holds a Type B Water Licence (WL), PC2014L8-0006, which authorizes the use of water up to 299 m³ per day. Recent interpretations of water use¹ see that daily water use from all water sources is restricted to a maximum of 299 m³. This daily water withdrawal limit has been an impediment to the construction of an ice bridge over the Liard River and to winter road construction progress in general during this past winter road construction season². CZN must be able to use more than 299 m³ of water daily in order to rectify this situation for future winter roads, which will need to be suitable to carry supplies into the Prairie Creek Mine site, and for ice bridge construction³ at the Liard River which will be required during the Mine's operational life.

<sup>&</sup>lt;sup>1</sup> Based in part on the Land and Water Boards of the Mackenzie Valley *Reference Bulletin Water Use* (dated June 11, 2020).

<sup>&</sup>lt;sup>2</sup> Winter road construction in the 2022-2023 season has also been challenged by a lack of snow in the area. It is possible to overcome the lack of snow, but it means more water is then required to construct the winter road and the 299 m<sup>3</sup> daily limit is not sufficient.

<sup>&</sup>lt;sup>3</sup> Acknowledge the Liard Crossing ice bridge does not fall within the Nahanni National Park Reserve, but this background is included to be consistent with the MVLWB and CIRNAC applications/permits.



This change in water use daily limit requires that CZN apply for 3 Type A WLs; an application for the Territorial (non-Federal) lands; an application for the federal or IAB Lands<sup>4</sup>, and an application to Parks Canada for the portion of the ASR located in the Nahanni National Park Reserve (attached). CZN also requests to add a water use to the Tetcela River location to include winter road construction (see Part D Condition 2 (h) in WL PC2014L8-0006). These are the only requested changes; all other activities remain the same as is currently authorized by the existing Type B WL PC2014L8-0006 for the All Season Road (ASR).

CZN appreciates that this is potentially a complex and time-consuming process involving a lot of resources. As per the *Cooperating Memorandum of Understanding* between the MVLWB and Parks Canada<sup>5</sup>, it is CZN's expectation that this will be a coordinated process to the extent possible in that the timing of the respective assessments, various regulatory functions, and requests of CZN will be optimized. CZN is also aware, from engagement with other Indigenous Governments and reviewers, that there is a similar expectation for coordination between the parties and to use the familiar, robust MVLWB process for these Type A WL applications. In turn, CZN commits to a cooperative approach and providing information in a reasonable timeframe.

The following paragraphs contain the exact information as presented to, or requested of, the MVLWB; slightly adjusted to be applicable for this water licence application in the Nahanni National Park Reserve. Please see the application package submitted to the MVLWB for specific information related to the Type A WL applications that fall within Territorial and Federal Lands along the ASR.

#### **Management Plans**

CZN is constructing the ASR in a 2-step process; Phase 1 being construction of a winter access road, and Phase 2 being construction of a fully operational all season access road<sup>6</sup>. These phases and their various requirements, including the submission and content of management plans, is solidly entrenched in the scope and structure of the current permitting (both the Land

<sup>&</sup>lt;sup>4</sup> Note there are no defined water sources on the IAB Lands.

<sup>&</sup>lt;sup>5</sup> See MOU MVLWB PARKS CANADA

<sup>&</sup>lt;sup>6</sup> Phase 3 relates to the operation of the ASR and is defined as "...activities to support the operation of the All-Season Road including transportation of loaded Concentrate, consumable materials and supplies to support mine operations, and road maintenance."



Use Permit and Type B WL) for the ASR. CZN requires that there be no changes to this phased approach.

CZN has submitted various management plans, including an Engagement Plan, Waste Management Plan, and Spill Contingency Plan, as required by the existing Type B WL and related Land Use Permits for work on Phase 1 (winter road) of the ASR. With the exception of the Closure and Reclamation Plan<sup>7</sup>, these have all been approved. CZN is currently preparing revised versions of these management plans in relation to the commencement of Phase 2 work for the ASR.

Given that no changes other than an increase in the daily water use limit is being applied for with this Type A WL application(s), and specifically no scope changes are being proposed, CZN submits that the Phase 2 management plans that are currently being prepared, and will be submitted during this proceeding under the Type B WL(s), will be likely be aligned with the requirements in the Type A. Once a work plan for the Type A proceeding is developed and made available, CZN will evaluate it along with the current project schedule and advise Parks and Board staff if there are any changes in the proposed management plan submission(s) schedule for Phase 2 management plans. CZN will continue to work closely with Parks and Board staff to ensure that there is as smooth a transition as possible as it relates to the management plans in terms of any "switch over" between the Type B to a Type A WL.

### **Engagement**

Evidence of CZN's engagement with Indigenous Groups specific to these applications is provided in the attached letters and engagement records (see Appendix A). Additionally, there is an approved Engagement Plan for the ASR<sup>8</sup>.

<sup>&</sup>lt;sup>7</sup> CZN submitted the Phase 1 Winter Road Closure and Reclamation Plan to Parks Canada in October 2022 (see <u>CZN ASR Phase 1 Closure and Reclamation Plan-Version 1</u>). As of the date of this letter, CZN is waiting for a decision on this plan.

<sup>&</sup>lt;sup>8</sup> See the MVLWB public registry at: PC2014L8-0006 -CZN-All Season Road Project-Engagement Plan V2-Dec3-19



#### **New Standard Water Licence Conditions**

Canadian Zinc (CZN) has reviewed the Board's *MVLWB Standard Water Licence Conditions and Schedules Template* Version 2.0 dated February 1, 2022. Please note that this was a high-level initial review, and it is understood that there will be an opportunity to review and comment on a full draft of proposed WL conditions during the Type A licencing process. At this time, CZN requests that all of the "non-standard" conditions related to the three Phases of the ASR (Phase 1 winter road, Phase 2 ASR construction, Phase 3 ASR operation) be carried over from the Type B WL(s) into a new Type A WL(s).

#### Closure Cost Estimate

As there are no activity changes being applied for, the approved October 3, 2019 estimate of reclamation costs is considered to remain applicable for this application(s)<sup>9</sup>.

#### Fees

Two cheques are being mailed to the Parks Canada office in Fort Simpson. One in the amount of \$30.00 to cover the WL application fees and one in the amount of \$7,300.00 to cover water use fees<sup>10</sup>.

#### **Technical Session & Public Hearing**

As this application(s) is for an increase in the daily water use limit with no other changes proposed, CZN submits that a technical session and public hearing are not necessary. However, CZN does understand that a public hearing is mandatory for a Type A WL application and that as per legislation, a public hearing cannot be dispensed of until the 10th day before the day of the proposed hearing.

<sup>&</sup>lt;sup>9</sup> Memorandum prepared by Allnorth: <u>PC014F0013 PC2014L8-0006-Canadian Zinc-Final Security Estimates-Oct</u> <u>03 19</u>

<sup>&</sup>lt;sup>10</sup> Water use fees were calculated using the Water Use Fees Calculator (Version 1.4) found on the MVLWB website.



CZN suggests that the question of the desire for a technical session and public hearing on this application(s) be posed on the ORS at the same time as review comments are being received on the application(s) itself. The feedback collected on this question may help all parties better anticipate resourcing requirements earlier in the Type A process.

#### Request for Exemption from Preliminary Screening

CZN requests that this application for an increase in the daily limit for water use be exempt from Preliminary Screening as per Schedule 1 Part 1, paragraph 2.1 of the *Exemption List Regulations* which states:

- 2.1 A development, or a part thereof, for which a permit, licence or authorization is requested that
- (a) was part of a development that fulfilled the requirements of the environmental assessment process established by the Mackenzie Valley Resource Management Act; and
- (b) has not been modified since the development referred to in paragraph (a) fulfilled the requirements of the environmental assessment process established by the Mackenzie Valley Resource Management Act.

As indicated, and as seen in the attached application;

- all of the activities were part of a development that fulfilled the requirements of the environmental assessment process established by the *Mackenzie Valley Resource Management Act* (EA1415-01);
- the total proposed water use will not exceed the available capacity as indicated by the volume limits in the existing WL PC2014L8-0006, Part D, condition 2;
- all activities are limited to the boundaries of the Project footprint assessed and approved in the Developer's Assessment Report (DAR) submitted during the environmental assessment process; and
- the description of the project and associated design information have not been materially modified since the environmental assessment and remain the same as CZN presented in an Updated Project Description in March 2019<sup>11</sup> in relation to the existing Type B WL(s).

<sup>&</sup>lt;sup>11</sup> See MVLWB online public registry at: PC2014L8-0006-CZN -Post-EA Information Package-Feb 20-19



### Cancellation of Type B Water Licence

CZN requests that the Type B WL, PC2014L8-0006, be cancelled upon issuance of the Type A WL for the ASR. In the interest of efficiency, it may be that this request to cancel the Type B WL can also be posed on the MVLWB ORS with the posting of this Type A WL application.

CZN trusts you will find this application complete. Please feel free to reach out to CZN should there be any questions or concerns with the material as presented. We look forward to working with all parties through this process.

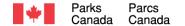
Sincerely,

Lynn Boettger

**Permitting Manager** 

Lyn Britter

Attachments





### APPLICATION FOR CREEK CROSSINGS ALONG MINING ROAD ACCESS IN NAHANNI **NATIONAL PARK RESERVE OF CANADA: WATER**

**New Authorization** X **Amendment** 

as per the Canada National Parks Act and Regulations

1. Name and Mailing Address of Applicant	2. Address of Head Office in Canada if Incorporate
Claudine Lee, VP Corporate Social Responsib	bility Canadian Zinc Corporation
Suite 907 510 Burrard Street	Suite 907 510 Burrard Street
Vancouver, BC V6C 3A8	Vancouver, BC V6C 3A8
Telephone: 403-466-4195	Telephone: 403-466-4195
Fax: N/A	Fax: N/A
3. Identify the type of undertaking.	
Industrial	Mining and milling
Municipal	Construction
Recreation	MiscellaneousX
4. Indicate which of the following ac	ctivities are proposed.
To obtain water	X Flood control
To cross a watercourse	X To divert water
To modify the bed or bank of a watercourse	To alter the flow of, or store water
Other (describe): To increase the daily	y water use limit to 2000 m³/day
5. For each activity you have identi-	ified above, please attach a document describing

- the below criteria where applicable:
  - a. Specify the purpose of the above activities and/or why the water is required. Describe all activities and attach plans.







Please refer to the cover letter "Background" section for details on the purpose of why this increase to the daily water use limit is being requested.

Activities are to remain the same as authorized by the existing Type B WL PC2014L8-0006. No changes to the activities or scope are being requested.

This Licence entitles the Licensee to use Water and dispose of Waste for construction, operation, closure and reclamation of the Prairie Creek All Season Road Project, within Nahanni National Park Reserve of Canada, connecting Prairie Creek Mine site to the Liard Highway and associated facilities, as described in the Environmental Assessment, the Licensee's Post-Environmental Assessment Information Package and subsequent Preliminary Screening Report dated August 20, 2019.

Management plans can be found on the Mackenzie Valley Land and Water Board (MVLWB) online registry at <a href="https://mvlwb.com/registry/PC2014L8-0006">https://mvlwb.com/registry/PC2014L8-0006</a> (and also under the related Land Use Permit at <a href="https://mvlwb.com/registry/PC2014F0013">https://mvlwb.com/registry/PC2014F0013</a>). At the time of this application, all of the Phase 1 (winter road) management plans have been approved by Parks Canada with the exception of the Engagement Plan (submitted November 2022) which CZN understands is currently under review.

Please see the cover letter under "Management Plans" for more details.

b. Describe all equipment to be used, methods to be employed, and indicate all watercourses that may be affected along with the location of any proposed waste deposits. Provide a statement specifying the location of any equipment to be installed in taking water. In addition, please include a map that plots the above with recognizable landmarks and latitude/longitude indicated.

All equipment to be used, methods, watercourse crossings, and location of any proposed waste deposits remain as applied for and authorized by the existing Type B WL PC2014L8-0006.

Further detailed information is available on the MVLWB online registry at <a href="https://mvlwb.com/registry/PC2014L8-0006">https://mvlwb.com/registry/PC2014L8-0006</a> (and also under the related Land Use Permit at <a href="https://mvlwb.com/registry/PC2014F0013">https://mvlwb.com/registry/PC2014F0013</a>).

c. If this water is to be potable, is a water quality test attached? Provide documentation that the water quality is suitable for the purpose for which it is required.

This water is not to be potable. Water quality is to be sampled and monitored as per the existing Type B WL PC2014L8-0006.







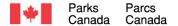
d. Quantity of water involved (litres per second, litres per day or cubic meter per year), including both quantity to be used and quality to be returned to source.

CZN is requesting a daily water use limit of 2000 m<sup>3</sup>/day (this is an increase from the current 299 m<sup>3</sup>/day under Type B WL PC2014L8-0006).

The Type B water licence has a list of specific streams and lakes from which CZN can draw water (as per PC2014L8-0006, Part D Condition 2 – see table below). For the streams, CZN is allowed to draw less than 10% of the instantaneous flow. For the lakes, CZN is allowed to draw up to a total volume specific to each lake per winter season. No changes are proposed to the water sources for the Type A licence. As such, environmental protection of the streams and lakes will be maintained as it is currently under the Type B WL.

**CZN** does request to add a water use to the Tetcela River location to include winter road construction (see h in the table below taken from PC2014L8-0006, Part D Condition 2). Water withdrawal at this location will be guided by the operating Water Survey of Canada (WSC) gauging station. On February 1, 2019 the flow in the Tetcela River at the road station was recorded at 0.232 m³/sec. Assuming 10% of this, the daily volume would be 2,004 m³. This shows that the river could easily sustain the proposed limit. In addition, there are two large lakes in the park from which we can draw water.







2. The Licensee shall only obtain Water for the Project from the following sources:

ID	Water Source Name	Location and Coordinates	Type of Water course	Purpose of Water Use	Maximum Quantity (m³ per year)	Maximum Quantity in Any Single Ice- Covered Season (m³)
a)	Mosquito Lake	KM 63.5 446703 E, 6825712 N	Lake	Winter road	44,448	33,528
b)	Lake 70	KM 70.5 448577 E, 6819566 N	Lake	Winter road	64,995	52,475
c)	Sundog Creek	KM 23.1 415639 E, 6829210 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
d)	Sundog Creek II	KM 29.0 420657 E, 6826795 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
e)	Sundog Creek III	KM 37.5 427063 E, 6829318 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
f)	Polje Creek	KM 53.2 440692 E, 6830793 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
g)	Fishtrap Creek	KM 94.6 465061 E, 6813845 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
h)	Tetcela River	KM 89.4 461383 E, 6815676 N	River	Camp; Culvert Installation, Dust Suppression	<10% instantaneous flow	NA
i)	Cat camp pit	KM 39.4 428523 E, 6830490 N	Ground water	Winter road	5750	NA

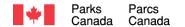
e. Waste deposited (quantity, quality, treatment and disposal).

All wastes deposited in terms of quantity, quality, treatment and disposal are the same as currently authorized by <a href="PC2014L8-0006">PC2014L8-0006</a> (and the companion Land Use Permit PC2014F0013). No changes are being proposed with this application.

f. Other persons or properties affected by this Undertaking (give name, mailing address and location). Include a list if necessary.

Not applicable. See Appendix A for Engagement Activities.







g. Predicted environmental impacts of Undertaking and proposed mitigation.

Potential environmental and resource impacts for an All-Season Road were assessed in an Environmental Assessment (EA1415-01). The assessment of potential environmental impacts of the project and proposed mitigations is contained in CZN's Developers Assessment Report dated April 2015.

The Decision of the Review Board in their Report of EA dated September 12, 2017 was that the project "be approved subject to the measures described in this report, which are necessary to prevent significant adverse impacts on the environment".

CZN is requesting that this application be exempt from screening because the scope of the project is the same, with no changes to the number of and limits on water sources (see cover letter for more details).

h. Studies undertaken to date.

Refer to April 2015 Developers' Assessment Report submitted for <u>EA1415-01</u> and the MVLWB online public registry for <u>PC2014L8-0006</u> (and the companion Land Use Permit PC2014F0013).

6. Contractors and sub-contractors (names, addresses and functions). Attach a list if necessary and identify the activity or activities they will be responsible for.

Contractors responsible for future winter roads are currently not known.

7.	Proposed time schedule.							
	Start date:	November 2023	Completion date:	see note				
	Type A WL	ent Type B WL, PC2014L8- length in line with any asso ese Type A WL applications	ciated Type A WL(s) issu					

Name (print):	Claudine Lee	Signature:_	Claudino L	) Q
Γitle (print):	VP Corporate Social Responsi	bility	Date: _	March 14, 2023



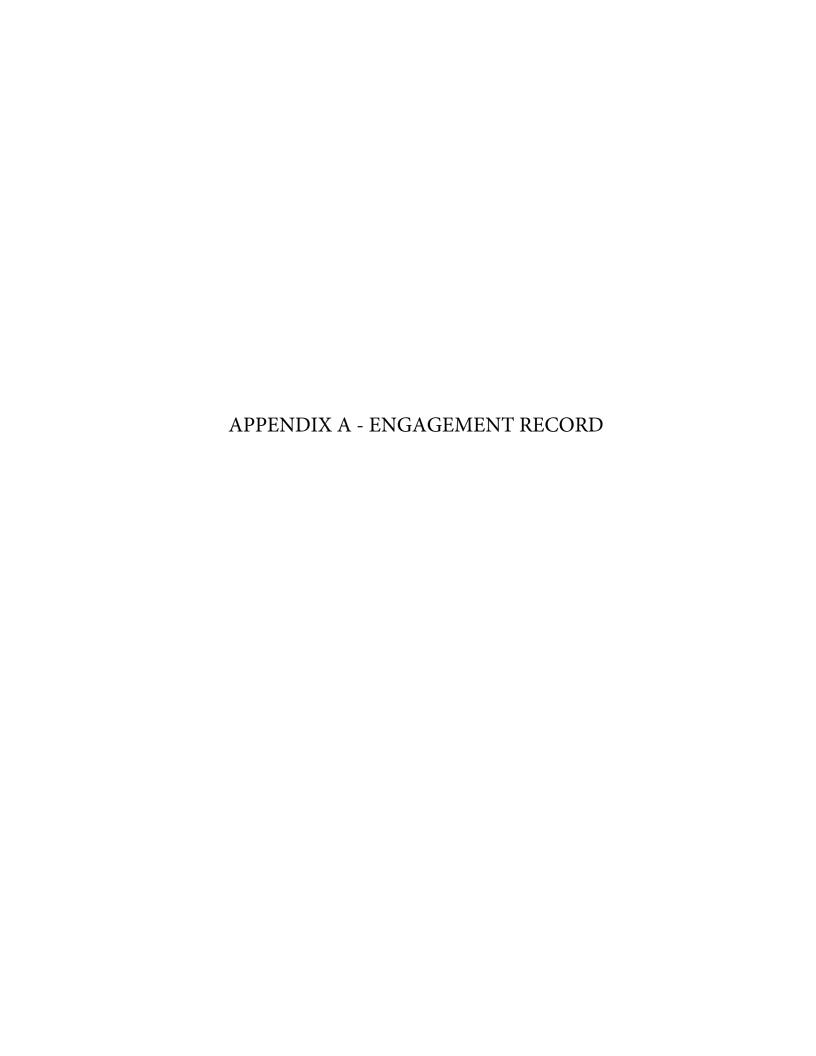




## For Office Use Only

Application fee (\$30)	Receipt No:		
Water use deposit	Receipt No:		
Please make all cheques	payable to the "Receiver General of Canada"		
Date Application Received	d:		
Version:			







**Parent Company of Canadian Zinc** 

January 31, 2023

Chief Steve Vital Naha Dehe Dene Band General Delivery Nahanni Butte, NT X0E 0N0

Dear Chief Steve:

Re: Applications for Type A Water Licences, Prairie Creek Mine All Season Road

Further to our letters of February 13, 2020 and December 3, 2020 (attached), this letter is to inform you that Canadian Zinc Corporation (CZN) intends to proceed with applications for Type A Water Licences for the all season road (ASR).

CZN already holds Type B Water Licences MV2014L8-0006 (territorial) and PC2014L8-0006 (park). These licences restrict daily water use from all sources to a maximum of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered winter road construction contracts, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress.

CZN commenced Phase 1 winter road construction in December 2022. We found that the Type B daily water use limit proved to be an impediment to construction of an ice bridge over the Liard River. The contractor wanted to pump considerably more than the limit. In addition, we have found that winter road construction is challenged by a lack of snow. However, the use of snow making machines is not an option because of the water demand. We wish to rectify this situation for future winter roads, which will need to be suitable to carry supplies into the Mine, by acquiring Type A Water Licences.

In our applications for Type A Water Licences, we will be applying to raise the daily limit only. Each current Type B licence has a list of specific streams and lakes from which we can draw water. For the streams, we are only allowed to draw less than 10% of the instantaneous flow. For the lakes, we are only allowed to draw up to a total volume specific to each lake per winter season. We are not proposing to change those restrictions for the Type A licences. As such, environmental protection of the streams and lakes will be maintained as before.

For the territorial Type A licence, we will propose a daily limit of 2,000 m<sup>3</sup>/day. On December1, 2021, the flow in the Liard River at the Fort Liard Station was recorded at 605 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be over 5.2 million m<sup>3</sup>. The catchment area of the Liard River

at the Mine road crossing is much larger, hence the flow will be higher. As such, the river can easily sustain the proposed daily licence limit.

For the park Type A licence, we will propose a daily limit of 1,000 m<sup>3</sup>/day. On February 1, 2019 the flow in the Tetcela River at the road station was recorded at 0.232 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be 2,004 m<sup>3</sup>. In addition, there are two large lakes in the park from which we can draw water.

We are available to answer any questions you may have.

Sincerely,
CANADIAN ZINC CORPORATION

David P. Harpley VP Permitting



February 13, 2020

Chief Darrell Betsaka Naha Dehe Dene Band General Delivery Nahanni Butte, NT X0E 0N0

Dear Chief Darrell,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

# 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

February 13, 2020 NDDB

CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

## 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

## Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs

cc Don MacDonald, CEO, NorZinc



#### Parent of Canadian Zinc Corporation

December 3 2020

Naha Dehe Dene Band General Delivery Nahanni Butte, NT X0E 0N0

Dear Chief Darrell,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to

December 3, 2020 NDDB

protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 

cc Don MacDonald, CEO, NorZinc



February 13, 2020

Chief Darrell Betsaka Naha Dehe Dene Band General Delivery Nahanni Butte, NT X0E 0N0

Dear Chief Darrell,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

# 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

February 13, 2020 NDDB

CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

## 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

## Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs

cc Don MacDonald, CEO, NorZinc



#### Parent of Canadian Zinc Corporation

December 3 2020

Naha Dehe Dene Band General Delivery Nahanni Butte, NT X0E 0N0

Dear Chief Darrell,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to

December 3, 2020 NDDB

protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 

cc Don MacDonald, CEO, NorZinc

April 2, 2020 Naha Dehé Dene Band General Delivery Nahanni Butte, NT

X0E 0N0

Chris Hotson
Regulatory Manager
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th St.
PO Box 2130
Yellowknife, NT. X1A 2P6

Submitted via Email: chotson@mvlwb.com

Re: Canadian Zinc Permits

Dear Sir,

Canadian Zinc wrote to us on February 13, 2020 to advise that they will be making applications to amend certain permits and apply for a new surface exploration permit. The details of the applications are as follows:

- LUP MV2019C0011 for underground exploration, application to change security payment requirement from 90 days after permit issue to before the undertaking;
- Licence MV2019L2-0006 for underground exploration, application to change security payment requirement from 90 days after permit issue to 9 months after permit issue;
- Replacement for LUP MV2013C0002 for surface exploration, which expires next month; and,
- Licences MV2014L8-0006 and PC2014L8-0006 for the all-season road, applications to change the Licences from Type B to Type A in order to allow more than 300 m³/day of water to be withdrawn from previously defined sources.

This letter is to confirm that Canadian Zinc has engaged with us on these applications and that we support the company submitting the applications to commence the regulatory process. We reserve our right to provide further comments during the subsequent formal review processes.

Sincerely,

Chief Darrell Betsaka Naha Dehé Dene Band

David / Betrola

c. Chief Gerry Antoine Łíídlji Kué First Nation

Dr. Kathy Racher

## Re: Road Type A WL's

Elliot Holland <elliot.holland@imcprojects.ca>
Fri 2023-02-03 3:10 PM
To:David Harpley <David.Harpley@norzinc.com>
Cc:Claudine Lee <Claudine.Lee@norzinc.com>

David

On behalf of Naha Dehe Dene Band, I can confirm that NDDB is aware of these applications and will review them in detail when they are submitted to the MVLWB.

Best

Elliot

Elliot Holland Advisor to NDDB (867)446-0309

Name of Proponent:	Canadian Zinc (CZN)
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Name of Affected Party: Naha Dehe Dene Band (NDDB)

Name(s) of representative(s) from affected party who participated in engagement	Name(s) of representative(s) from proponent who participated in engagement	Date	Reason(s) for Engagement	Overview of Issue(s) Resolved	Overview of Issue(s) Unresolved
Chief Darrel Betsaka	David Harpley	Feb. 13, 2020	ASR Type A WL	Letter re Type A applications	
Chief Darrel Betsaka	David Harpley	Dec. 3, 2020	ASR Type A WL	Letter re Type A applications	
Chief Steve Vital	David Harpley	Jan. 31, 2023	ASR Type A WL	Letter re Type A applications	
Elliot Holland, NDDB technical rep.	David Harpley	Feb. 3, 2023	ASR Type A WL	Letter re Type A applications	

		Albergley.
Name & Signature of Proponent (representative):	David Harpley	10
Name & Signature of Affected Party (representative):		

# **Pre-Submission Engagement Log**

Date	Attendees	Engagement Activity Type	Issue(s) Raised by Affected Party	Recommendation from Affected Party	Proponent Response to Issue	Information Materials Provided?	Written Correspondence, meeting notes or minutes?
Feb. 13,	Chief Darrel	Letter to Chief	None	None	-	Υ	Υ
2020	Betsaka						
Dec. 3,	Chief Darrel	Letter to Chief	None	None	-	Υ	Υ
2020	Betsaka						
Jan. 31,	Chief Steve	Letter to Chief	None	None	-	Υ	Υ
2023	Vital						
Fab 2	Elliot Holland,	Email reply	None	None	-	N	Υ
Feb. 3, 2023	NDDB						
2023	technical rep.						



**Parent Company of Canadian Zinc** 

January 31, 2023

Chief Kele Antoine Liidlii Kue First Nation PO Box 469 Fort Simpson, NT X0E 0N0

Dear Chief Kele,

Re: Applications for Type A Water Licences, Prairie Creek Mine All Season Road

Further to our letters of March 19, 2020 and December 3, 2020 (attached), this letter is to inform you that Canadian Zinc Corporation (CZN) intends to proceed with applications for Type A Water Licences for the all season road (ASR).

CZN already holds Type B Water Licences MV2014L8-0006 (territorial) and PC2014L8-0006 (park). These licences restrict daily water use from all sources to a maximum of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered winter road construction contracts, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress.

CZN commenced Phase 1 winter road construction in December 2022. We found that the Type B daily water use limit proved to be an impediment to construction of an ice bridge over the Liard River. The contractor wanted to pump considerably more than the limit. In addition, we have found that winter road construction is challenged by a lack of snow. However, the use of snow making machines is not an option because of the water demand. We wish to rectify this situation for future winter roads, which will need to be suitable to carry supplies into the Mine, by acquiring Type A Water Licences.

In our applications for Type A Water Licences, we will be applying to raise the daily limit only. Each current Type B licence has a list of specific streams and lakes from which we can draw water. For the streams, we are only allowed to draw less than 10% of the instantaneous flow. For the lakes, we are only allowed to draw up to a total volume specific to each lake per winter season. We are not proposing to change those restrictions for the Type A licences. As such, environmental protection of the streams and lakes will be maintained as before.

For the territorial Type A licence, we will propose a daily limit of 2,000 m<sup>3</sup>/day. On December1, 2021, the flow in the Liard River at the Fort Liard Station was recorded at 605 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be over 5.2 million m<sup>3</sup>. The catchment area of the Liard River

at the Mine road crossing is much larger, hence the flow will be higher. As such, the river can easily sustain the proposed daily licence limit.

For the park Type A licence, we will propose a daily limit of 1,000 m<sup>3</sup>/day. On February 1, 2019 the flow in the Tetcela River at the road station was recorded at 0.232 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be 2,004 m<sup>3</sup>. In addition, there are two large lakes in the park from which we can draw water.

We are available to answer any questions you may have.

Sincerely,
CANADIAN ZINC CORPORATION

David P. Harpley VP Permitting



March 19, 2020

Chief Gerry Antoine Liidlii Kue First Nation PO Box 469 Fort Simpson, NT X0E 0N0

Dear Chief Gerry,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

# 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

March 19, 2020 LKFN

CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

### 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

## Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs



#### Parent of Canadian Zinc Corporation

December 3 2020

Liidlii Kue First Nation PO Box 469 Fort Simpson, NT X0E 0N0

Dear Chief Gerry,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

#### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to

December 3, 2020 LKFN

protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 



March 19, 2020

Chief Gerry Antoine Liidlii Kue First Nation PO Box 469 Fort Simpson, NT X0E 0N0

Dear Chief Gerry,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

## 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

March 19, 2020 LKFN

CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

### 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

## Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs



#### Parent of Canadian Zinc Corporation

December 3 2020

Liidlii Kue First Nation PO Box 469 Fort Simpson, NT X0E 0N0

Dear Chief Gerry,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

#### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to

December 3, 2020 LKFN

protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 

Road Type A Water Licences miningcoordinator@liidliikue.com To: David Harpley

Cc:'Dieter Cazon' <resources@liidliikue.com>

Hi David,

We are fine to wait to review the application when it is formally out for review.

Thanks, Trieneke Wed 2023-02-01 12:55 PM

Name of Proponent:	Canadian Zinc (CZN
vame of Proponent:	Canadian Zinc (CZI

Name of Affected Party: Liidlii Kue First Nation (LKFN)

Name(s) of representative(s) from affected party who participated in engagement	Name(s) of representative(s) from proponent who participated in engagement	Date	Reason(s) for Engagement	Overview of Issue(s) Resolved	Overview of Issue(s) Unresolved
Chief Gerry Antoine	David Harpley	Mar. 19, 2020	ASR Type A WL	Letter re Type A applications	
Chief Gerry Antoine	David Harpley	Dec. 3, 2020	ASR Type A WL	Letter re Type A applications	
Chief Kele Antoine	David Harpley	Jan. 31, 2023	ASR Type A WL	Letter re Type A applications	
Trieneke Gastmeier, Technical Representative	David Harpley	Feb. 1, 2023	ASR Type A WL	Letter re Type A applications	

Name & Signature of Proponent (representative):	David Harpley	10
Name & Signature of Affected Party (representative):		

## **Pre-Submission Engagement Log**

Date	Attendees	Engagement Activity Type	Issue(s) Raised by Affected Party	Recommendation from Affected Party	Proponent Response to Issue	Information Materials Provided?	Written Correspondence, meeting notes or minutes?
Mar. 19,	Chief Gerry	Letter to Chief	None	None	-	Υ	Υ
2020	Antoine						
Dec. 3,	Chief Gerry	Letter to Chief	None	None	-	Υ	Υ
2020	Antoine						
Jan. 31,	Chief Kele	Letter to Chief	None	None	-	Υ	Υ
2023	Antoine						
Feb. 1,	Trieneke	Email reply	None	None	-	N	Υ
2023	Gastmeier,						
	Technical						
	Representative						



**Parent Company of Canadian Zinc** 

January 31, 2023

Sub-Chief Brenda Berrault Acho Dene Koe First Nation General Delivery Fort Liard, NT XOG 0A0

Dear Sub-Chief Brenda,

Re: Applications for Type A Water Licences, Prairie Creek Mine All Season Road

Further to our letters of April 7, 2020 and December 3, 2020 (attached), this letter is to inform you that Canadian Zinc Corporation (CZN) intends to proceed with applications for Type A Water Licences for the all season road (ASR).

CZN already holds Type B Water Licences MV2014L8-0006 (territorial) and PC2014L8-0006 (park). These licences restrict daily water use from all sources to a maximum of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered winter road construction contracts, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress.

CZN commenced Phase 1 winter road construction in December 2022. We found that the Type B daily water use limit proved to be an impediment to construction of an ice bridge over the Liard River. The contractor wanted to pump considerably more than the limit. In addition, we have found that winter road construction is challenged by a lack of snow. However, the use of snow making machines is not an option because of the water demand. We wish to rectify this situation for future winter roads, which will need to be suitable to carry supplies into the Mine, by acquiring Type A Water Licences.

In our applications for Type A Water Licences, we will be applying to raise the daily limit only. Each current Type B licence has a list of specific streams and lakes from which we can draw water. For the streams, we are only allowed to draw less than 10% of the instantaneous flow. For the lakes, we are only allowed to draw up to a total volume specific to each lake per winter season. We are not proposing to change those restrictions for the Type A licences. As such, environmental protection of the streams and lakes will be maintained as before.

For the territorial Type A licence, we will propose a daily limit of 2,000 m<sup>3</sup>/day. On December1, 2021, the flow in the Liard River at the Fort Liard Station was recorded at 605 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be over 5.2 million m<sup>3</sup>. The catchment area of the Liard River

at the Mine road crossing is much larger, hence the flow will be higher. As such, the river can easily sustain the proposed daily licence limit.

For the park Type A licence, we will propose a daily limit of 1,000 m<sup>3</sup>/day. On February 1, 2019 the flow in the Tetcela River at the road station was recorded at 0.232 m<sup>3</sup>/sec. Assuming 10% of this, the daily volume would be 2,004 m<sup>3</sup>. In addition, there are two large lakes in the park from which we can draw water.

We are available to answer any questions you may have.

Sincerely,
CANADIAN ZINC CORPORATION

David P. Harpley VP Permitting



April 7, 2020

Chief Eugene Hope Acho Dene Koe First Nation General Delivery Fort Liard, NT X0G 0A0

Dear Chief Eugene,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

# 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

April 7, 2020 ADKFN

CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

### 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m<sup>3</sup>/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

#### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. A letter reply was received from the Naha Dehe Dene Bend, of copy of which is attached. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs

April 2, 2020 Naha Dehé Dene Band General Delivery Nahanni Butte, NT

X0E 0N0

Chris Hotson
Regulatory Manager
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th St.
PO Box 2130
Yellowknife, NT. X1A 2P6

Submitted via Email: chotson@mvlwb.com

Re: Canadian Zinc Permits

Dear Sir,

Canadian Zinc wrote to us on February 13, 2020 to advise that they will be making applications to amend certain permits and apply for a new surface exploration permit. The details of the applications are as follows:

- LUP MV2019C0011 for underground exploration, application to change security payment requirement from 90 days after permit issue to before the undertaking;
- Licence MV2019L2-0006 for underground exploration, application to change security payment requirement from 90 days after permit issue to 9 months after permit issue;
- Replacement for LUP MV2013C0002 for surface exploration, which expires next month; and,
- Licences MV2014L8-0006 and PC2014L8-0006 for the all-season road, applications to change the Licences from Type B to Type A in order to allow more than 300 m³/day of water to be withdrawn from previously defined sources.

This letter is to confirm that Canadian Zinc has engaged with us on these applications and that we support the company submitting the applications to commence the regulatory process. We reserve our right to provide further comments during the subsequent formal review processes.

Sincerely,

Chief Darrell Betsaka Naha Dehé Dene Band

David / Betrola

c. Chief Gerry Antoine Łíídlji Kué First Nation

Dr. Kathy Racher



#### Parent of Canadian Zinc Corporation

December 3 2020

Chief Eugene Hope Acho Dene Koe First Nation General Delivery Fort Liard, NT X0G 0A0

Dear Chief Eugene,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

#### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information

December 3, 2020 ADKFN

package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

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Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

#### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 



April 7, 2020

Chief Eugene Hope Acho Dene Koe First Nation General Delivery Fort Liard, NT X0G 0A0

Dear Chief Eugene,

Re: Applications to the Mackenzie Valley Land and Water Board Exploration Permits and All Season Road, Prairie Creek Mine Project

This letter is to provide you with details of Canadian Zinc Corporation's (CZN) proposed applications to the Mackenzie Valley Land and Water Board (the Board) including to amend or renew exploration permits relating to the Prairie Creek Mine (the Mine) site.

When it obtained the operating permits in 2013, CZN had hoped to be in a position to move forward with commercial production by now. However, there were delays in the permitting of the all-season access road, consequently delaying the Company's ability to develop the Mine.

Current capital markets are challenging and, as announced on February 4, 2020, the Company is seeking during 2020 to make the Mine more financially attractive via throughput enhancements. This will be assisted by the potential conversion of inferred resources into indicated resources through exploration drilling.

Details of the proposed applications are provided below.

# 1. Underground Exploration (2<sup>nd</sup> Decline) Type A Land Use Permit

LUP MV2012C0008 for underground exploration (2<sup>nd</sup> decline tunnel) was issued on May 10, 2012 for a term of five years, was extended for two years in May 2017, and expired on May 10, 2019. CZN did not develop a 2<sup>nd</sup> underground exploration decline tunnel, although MV2012C0008 was used in 2015 to conduct exploration drilling from the first decline tunnel.

The Company may still wish to develop a new decline in order to continue underground exploration of the Mine mineral deposit by conducting further drilling underground from the new decline, with the intention of further upgrading the mineral resources. For this reason, CZN applied for and obtained a new five-year LUP, MV2019C0011 on September 9, 2019.

The new LUP includes a condition requiring CZN to pay a security deposit of \$236,338 within 90 days of LUP issue. The amount represents a significant increase compared to MV2012C0008, which had a security amount of \$30,000. The increase is related to the Board's conclusion that

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CZN is currently responsible for the treatment of all water emanating from the Mine, and evidence provided by the Government of the Northwest Territories (GNWT) defining an increased security requirement related to this water.

Water emanating from the Mine, at the 870 m level portal, consists of 2 separate streams: one stream is water from the 1<sup>st</sup> decline delivered to the portal by a pipeline; the other is drainage from workings that pre-date CZN's tenure on the property. That tenure is based on an existing Surface Lease which limits CZN's current liabilities. Based on the Lease, CZN believes the Company is responsible for managing the decline water, but not the drainage from the pre-existing workings. For this reason, CZN does not agree with the increased security.

CZN wrote to the Board on November 27, 2019 to ask for a review of their September 9 decision, or deferral of the increase to allow CZN time to discuss this matter further with the GNWT (Lands) who are responsible for tenure of the land. In a letter dated December 17, 2019 the Board declined CZN's request for a review of the security, and advised that CZN will need to submit a request to change the timeline of the security increase in order to obtain a deferral.

Rather than submit a request to change the timeline of the security increase, CZN plans to apply for a change to the LUP so that the security need only be paid before the undertaking (2<sup>nd</sup> decline) proceeds. This in effect would be a deferral until such time that CZN wishes to use the LUP. This would also provide time for CZN to have discussions with the GNWT.

## 2. Underground Exploration (2<sup>nd</sup> Decline) Type B Water Licence

Water Licence MV2001L2-0003 was issued on September 10, 2003 for development of the 1<sup>st</sup> underground decline. The Water Licence term was extended for the 2<sup>nd</sup> decline, but expired on September 9, 2019. A new Water licence, MV2019L2-0006 was issued on September 9, 2019. Similar to LUP MV2019C0011, the new Water Licence includes a condition requiring CZN to pay an increased security deposit within 90 days of Licence issue. The increased amount is \$210,648 compared to a previous amount of \$70,000.

CZN's November 27, 2019 letter to the Board also asked for a review of this decision or deferral of the increase. Similar to the LUP, the Board's December 17, 2019 reply declined CZN's request.

CZN cannot apply to change the Licence so that the security need only be paid before the undertaking because the Licence is currently being used to regulate the management of all mine water. However, CZN will apply for a change to the timeline of the security increase in order to obtain a deferral and provide time for CZN to discuss the matter (responsibility for managing water from the pre-existing mine workings) with the GNWT (Environment and Natural Resources). Since these discussions will require some time, we will request a deferral of approximately 3 months from the date of this letter. Therefore, we will apply to change the Licence to reflect payment of the security within 9 months of Licence issue.

Depending on the outcome of CZN's discussions with the GNWT, CZN may also apply to amend the Licence to be specific to decline water only.

### 3. Exploration Drilling Type A Land Use Permit

CZN has held a land use permit (LUP) for normal course exploration diamond drilling at locations throughout the Prairie Creek mineral leases since May 2006. LUP MV2004C0030 was issued on May 11, 2006 and expired on May 10, 2013. LUP MV2013C0002 was issued on April 25, 2013 and expires on April 24, 2020.

CZN intends to apply for a new five-year LUP. This would continue to allow exploration drilling on the wider Prairie Creek property.

#### 4. All Season Road Water Licence

CZN obtained Type B Water Licences MV2014L8-0006 (territorial land), MV2019L8-0002 (IAB Lands) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land) in November 2019 for construction and operation of an all season road. Road construction will start with a winter road, and will include subsequent winter roads in order to provide access for all season road construction.

The Type B Water Licences for territorial and NNPR lands each have a daily water withdrawal limit of 299 m<sup>3</sup>/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A territorial and NNPR land Licences in order to increase the water withdrawal limit.

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

#### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. We would appreciate it if you could confirm our engagement with you on these matters by providing a reply by letter or email. A letter reply was received from the Naha Dehe Dene Bend, of copy of which is attached. Thank you.

Sincerely,

David P. Harpley

VP Environment and Permitting Affairs

April 2, 2020 Naha Dehé Dene Band General Delivery Nahanni Butte, NT

X0E 0N0

Chris Hotson
Regulatory Manager
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th St.
PO Box 2130
Yellowknife, NT. X1A 2P6

Submitted via Email: chotson@mvlwb.com

Re: Canadian Zinc Permits

Dear Sir,

Canadian Zinc wrote to us on February 13, 2020 to advise that they will be making applications to amend certain permits and apply for a new surface exploration permit. The details of the applications are as follows:

- LUP MV2019C0011 for underground exploration, application to change security payment requirement from 90 days after permit issue to before the undertaking;
- Licence MV2019L2-0006 for underground exploration, application to change security payment requirement from 90 days after permit issue to 9 months after permit issue;
- Replacement for LUP MV2013C0002 for surface exploration, which expires next month; and,
- Licences MV2014L8-0006 and PC2014L8-0006 for the all-season road, applications to change the Licences from Type B to Type A in order to allow more than 300 m³/day of water to be withdrawn from previously defined sources.

This letter is to confirm that Canadian Zinc has engaged with us on these applications and that we support the company submitting the applications to commence the regulatory process. We reserve our right to provide further comments during the subsequent formal review processes.

Sincerely,

Chief Darrell Betsaka Naha Dehé Dene Band

David / Betrola

c. Chief Gerry Antoine Łíídlji Kué First Nation

Dr. Kathy Racher



#### Parent of Canadian Zinc Corporation

December 3 2020

Chief Eugene Hope Acho Dene Koe First Nation General Delivery Fort Liard, NT X0G 0A0

Dear Chief Eugene,

Re: Applications to the Mackenzie Valley Land and Water Board

New Operations Land Use Permit and Water Licence for Expanded Project and Changes to Effluent Criteria for Exploration Water Licence, Prairie Creek Mine

This letter is to provide you with details of Canadian Zinc Corporation's (CZN's) planned applications to the Mackenzie Valley Land and Water Board (the Board) for new long-term operating permits, and to amend effluent criteria in an existing exploration Water Licence. Details are provided below.

#### **Long-Term Operations Permits for an Expanded Project**

CZN plans to apply to the Board for a Land Use Permit (LUP) and long-term Water Licence (25 years) for an expanded Prairie Creek Mine (the Mine). Projected mine capital and operating costs have increased over time, and so we have had to change our mine plan to make sure the project is profitable and thus 'financeable'.

The proposed expansion will consist of an increased mining rate, which will allow metal concentrates to be produced at a higher rate. The original mine life is expected to be maintained through further exploration drilling, which occurred recently and is planned to continue in 2021. This drilling is occurring within the existing inferred mineral resources which we expect to lead to an increase in the mineable reserves.

We will also be proposing some changes to the original operating Water Licence MV2008L2-002. These changes relate to improved wastewater management plans, the operation of larger temporary stockpiles, and a larger waste rock pile.

The Company recently discussed these proposed applications informally with regulators and representatives of a number of local First Nations, and provided an informal information

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package. An abbreviated version of the package is attached for your information. This letter is to formally notify you of the planned applications.

### Changes to Effluent Criteria for Exploration Water Licence MV2019L2-006

Water Licence MV2019L2-006 was issued on September 9, 2019 and regulates the development of a 2<sup>nd</sup> underground exploration decline, and the treatment and discharge of mine water. CZN has been treating mine water since 2006 when the 1<sup>st</sup> underground decline was initiated. That decline is currently flooded, and while it produces some water, the water does not require treatment to meet effluent limits in the Licence. Mine water from the other mine workings, developed by Cadillac Explorations prior to CZN's site tenure, requires treatment.

The main constituent in the mine water requiring treatment is zinc. The existing Licence contains an effluent limit for total zinc. Total zinc refers to the sum of the concentration of zinc dissolved in the water as well as the concentration of zinc in sediment particles in the water. CZN has had difficulty in removing sediment from the treated water, which has sometimes led to the total zinc concentration exceeding the effluent criterion in the Licence. CZN has been successful in lowering the dissolved zinc concentration.

Prior to 2018, the federal Canadian Council for Ministers of the Environment (CCME) maintained a total zinc guideline for the protection of aquatic life. In 2018, the CCME replaced the total zinc guideline with a new one for dissolved zinc. In doing this, the CCME signalled that it is the dissolved form of zinc that is important for protection, not the total form. Accordingly, CZN is planning to apply to the Board to change the zinc criterion in the Licence from total to dissolved, consistent with the CCME dissolved zinc guideline. This will not mean any reduction by CZN of water treatment efforts, only it should avoid exceedances of the Licence criterion which incorrectly associate total zinc with a reduction in aquatic life protection.

#### **All Season Road Water Licences**

In the spring of this year, we advised you that CZN was planning to apply for a Type A Water Licences for the all season road (ASR) to replace the Type B Water Licences MV2014L8-0006 (territorial land) and PC2014L8-0006 (Nahanni National Park Reserve (NNPR) land). This is to advise you that we have not yet made these applications, but still plan to do so.

The Type B Water Licences each have a daily water withdrawal limit of 299 m³/day. This is the maximum allowed for a Type B Licence. When CZN tendered a winter road construction contract last year, many contractors indicated that the water withdrawal limit was an impediment to winter road construction progress. As a result, CZN plans to apply for Type A Licences in order to increase the water withdrawal limit.

December 3, 2020 ADKFN

Water for winter road construction will be sourced from local lakes and streams. Each source has a defined limit in the Licences on the amount (lakes) or rate (streams) of withdrawal to protect aquatic life. We are not proposing to change those limits. Therefore, the plan to increase the daily water withdrawal limit will not alter the existing aquatic life protections.

#### Follow-Up

Should you have any questions or concerns related to any of the above-mentioned applications, please contact us. Please note that, once the Board accepts our applications, there will also be many opportunities for you to provide comments as part of the Board's formal review process. If you wish to provide written comments to us, please do by letter or email. If you have no comments at this time, we would appreciate a written acknowledgement of our engagement, which also can be by letter or email.

Thank you.

Sincerely,

David P. Harpley

**VP Environment and Permitting Affairs** 

### Follow-up on ASR Type A Water Licence

#### Acho Dene Koe Lands < lands@adkfirstnation.ca>

Tue 2023-02-07 1:26 PM

To: David Harpley < David. Harpley@norzinc.com>

Cc: Claudine Lee < Claudine.Lee@norzinc.com>;Acho Dene Koe Administration

- <administration@adkfirstnation.ca>;Scott Mackay (scott.mackay@sharedvaluesolutions.com)
- <scott.mackay@sharedvaluesolutions.com>

Good Afternoon David.

Thank you for meeting with Morgan and I today to discuss NorZinc's plans to apply for a Type A water licence for the ASR. This licence is necessary based on a potential for greater than anticipated water demands (under the existing Type B Water Licence) during the construction phase. As a result, the existing Type B licence which limits use to 299 m3/day may present a barrier to construction if winter conditions are not ideal during the construction phase. As noted, it is too early in the process to identify technical concerns, however, we will review the application documents once available and re-engage with you to work to resolve issues as they arise.

Thank you again for your time.

Kind regards,

Mark

#### Mark MacDougall

Lands Manager

#### Acho Dene Koe First Nation

Lands Office (Contracted):
Shared Value Solutions
62 Baker Street
Guelph, Ontario

N1H 4G1

Email: lands@adkfirstnation.ca

Local: 226-706-8888 Toll Free: 1-866-293-9042 Fax: 226-314-1200

First Nation Office:
General Delivery

Fort Liard, NT XOG 0A0



Website: www.adkfirstnation.ca

Name of Proponent:	Canadian Zinc (CZN)
-	

Name of Affected Party: Acho Dene Koe First Nation (ADKFN)

Name(s) of representative(s) from affected party who participated in engagement	Name(s) of representative(s) from proponent who participated in engagement	Date	Reason(s) for Engagement	Overview of Issue(s) Resolved	Overview of Issue(s) Unresolved
Chief Gene Hope	David Harpley	Apr. 7, 2020	ASR Type A WL	Letter re Type A applications	
Chief Gene Hope	David Harpley	Dec. 3, 2020	ASR Type A WL	Letter re Type A applications	
Sub-Chief Berrault	David Harpley	Dec. 3, 2020	ASR Type A WL	Letter re Type A applications	
Mark MacDougall, Technical Rep.	David Harpley	Feb. 7, 2023	ASR Type A WL	Letter re Type A applications	
Mark MacDougall, Technical Rep.	David Harpley	Feb. 7, 2023	ASR Type A WL	Letter re Type A applications	

Name & Signature of Proponent (representative):	David Harpley	, 10
Name & Signature of Affected Party (representative):		

# **Pre-Submission Engagement Log**

Date	Attendees	Engagement Activity Type	Issue(s) Raised by Affected Party	Recommendation from Affected Party	Proponent Response to Issue	Information Materials Provided?	Written Correspondence, meeting notes or minutes?
Apr. 7, 2020	Chief Gene Hope	Letter to Chief	None	None	-	Υ	N
Dec. 3, 2020	Chief Gene Hope	Letter to Chief	None	None	-	Υ	N
Dec. 3, 2020	Sub-Chief Berrault	Letter to Chief	None	None	-	Υ	N
Feb. 7, 2023	Mark MacDougall, Technical Rep.	Meeting	Questions related to the need for a higher daily water use limit	None	-	N	N
Feb. 7, 2023	Mark MacDougall, Technical Rep.	Email reply	None	None	-	N	Y