



7<sup>th</sup> Floor - 4922 48th Street,  
P.O. Box 2130, Yellowknife, NT X1A 2P6

Tel: 867-669-0506 Fax: 867-873-6610  
[www.mvlwb.com](http://www.mvlwb.com)

March 19, 2021

File: MV2021D0005

David Harpley, Vice President  
Environment and Permitting Affairs  
Canadian Zinc Corporation  
Unit 1710 – 650 West Georgia Street  
Vancouver BC V6B 4N9

Sent by e-mail

Dear David Harpley,

**Re: Prairie Creek Mine – Land Use Permit Application Incomplete – Mining and Milling – Prairie Creek, NT**

On March 11, 2021, the Mackenzie Valley Land and Water Board (Board) staff received the Application for Land Use Permit (Permit) MV2021D0005<sup>1</sup> for mineral exploration and mining and milling at Prairie Creek Mine from Canadian Zinc Corporation (CZN).

The Application has been reviewed and found to be lacking information required under section 19 and paragraph 22(1)(a) of the Mackenzie Valley Land Use Regulations (MVLUR). For the Application to be considered complete, refer to the MVLWB *Guide to the Land Use Permitting Process*<sup>2</sup> (Guide) and submit the information outlined in Table 1.

Upon receipt of this information, the Application will be reviewed as per the *Mackenzie Valley Resource Management Act*. If this information is not provided within 90 days of the date of this letter, staff will return the Application

Please contact Kimberley Murray at (867) 766-7458 with any questions or concerns regarding this letter.

<sup>1</sup> See MVLWB Online Registry for [MV2021D0005](#).

<sup>2</sup> MVLWB (2020) [Guide to the Land Use Permitting Process](#).

Yours sincerely,

A handwritten signature in black ink that reads "Kimberley Murray". The signature is written in a cursive, flowing style.

Kimberley Murray  
Regulatory Specialist

Copied to: Danielle Rogers, GNWT-Lands, Manager, Resource Management, Dehcho Region  
Melinda Lenoir, GNWT-Lands, Regional Superintendent, Dehcho Region  
Charlene Coe, GNWT-Lands, Land Use Advisor, North Slave Regional Office

Attached: Table 1: Additional Information Required for the Land Use Permit Application

**Table 1: Additional Information Required for the Land Use Permit Application**

Application Form Section	Topic	Additional Information Required
Page 1	Existing or current Permit file number	1) In the Cover Letter (page 1) CZN indicated that the new authorizations will have scopes that cover exploration and mining and milling activities. Revise Application form to include Permit MV2020C0008.
2.	Name and Contact Information – Corporate Head Office	2) Provide a current copy of the Certificate of Corporate Registration from the Government of the Northwest Territories for inclusion into the Application Package.
4.	GIS data	3) Refer to the section 5 of the MVLWB <i>Guideline for Geographic Information Systems (GIS) Submission Standard</i> . <sup>3</sup> Provide GIS data for all project features associated with mining and milling and mineral exploration.
8.	Consolidated Project Description	4) CZN has included Section 3.0 Addressing EA Commitments, but only discusses commitments from EA0809-002. As CZN has indicated that the new authorizations will have scopes that cover mineral exploration and mining and milling activities, please include a description of how CZN will address any commitments, measures, and suggestions from previous Environmental Assessments related to mineral exploration (EA00-002, EA01-003, EA0405-002).
11.	Waste Management Methods	5) Revise the Waste Management Plan to include the following information as outlined in the <i>MVLWB Guidelines for Developing a Waste Management Guidelines</i> <sup>4</sup> : <ul style="list-style-type: none"> <li>a) Clear description of the scope – section 2.1 discusses decline and maintenance activities but does address construction and operations;</li> <li>b) Description of each waste type (characteristics, sources, volume/mass estimates, potential environmental effects) and the management of each waste type from generation to disposal.</li> <li>c) Rationale for management methods for each waste type, with consideration of waste management hierarchy;</li> <li>d) Design report and supporting information pertaining to the Sewage Treatment Plan refurbishment and expansion;</li> <li>e) An estimation on the generation rate of sewage sludge;</li> <li>f) Section 2.3 of the Waste Management Plan discusses the potential to develop sewage sludge cells (along with bioremediation cells). CZN appears to conceptualize this as one facility which may need to be developed, while the remainder of the plan indicates that sewage sludge will be produced as a waste stream from the Sewage Disposal Plant. Please clarify whether the sewage sludge cells and bioremediation cells will be required to manage the sewage sludge waste stream. If it will be required, please indicate whether</li> </ul>

<sup>3</sup> MVLWB (2016) [Guideline for Geographic Information Systems \(GIS\) Submission Standard](#).

<sup>4</sup> MVLWB (2011) [Guidelines for Developing a Waste Management Guidelines](#).

		<p>it will be constructed in accordance with the <a href="#">MVLWB Guideline for the Design, Operation, Monitoring, Maintenance and Closure of Petroleum Hydrocarbon-Contaminated Soil Treatment Facilities in the Northwest Territories (2020)</a>.</p> <p>The information requirements of b) and c) can be included as part of other plans. The Plan seems to allude to this in section 1.3; however, it should be clearly indicated within the Waste Management Plan where that information can be found, and it should also be clearly indicated in the associated plans that they contain information pertaining to waste management.</p>
	Explosives Management Plan	<p>6) In the Reasons for Decision for Licence MV2020L2-0003 and Permit MV2020D0007<sup>5</sup> the Board indicated that an Explosives Management Plan could be required with the new Applications reflecting CZN’s updated mine plan, especially if CZN is proposing changes to the management of explosives (page 27). CZN has identified changes to explosives management in the Consolidated Project Description (page 13). Of note, the Waste Management Plan makes reference to an Explosives Management Plan which was not submitted as part of the application. Please submit an Explosives Management Plan.</p>
	Contaminant Loading Management Plan	<p>7) In the Reasons for Decision for Licence MV2020L2-0003 and Permit MV2020D0007<sup>6</sup> the Board indicated that a Contaminant Loading Management Plan could be required with the new Applications reflecting CZN’s updated mine plan, especially if CZN is proposing changes to the management of concentrates (page 26). CZN has identified changes to management of concentrates at the mine site in the Consolidated Project Description (page 22). Please submit a Contaminant Loading Management Plan with the Application, addressing relevant requirements identified in Licence MV2020L2-0003<sup>7</sup>, Part E, Condition 7 and Schedule 4, Condition 4.</p>
15.	Spill Contingency Plan	<p>8) Revise the Spill Contingency Plan to include the following information as outlined in INAC <i>Guidelines for Spill Contingency Planning</i><sup>8</sup>:</p> <ul style="list-style-type: none"> <li>a) Description of worst-case scenario(s) for the site;</li> <li>b) Include a risk assessment evaluating emergency scenarios;</li> <li>c) Include response planning for all scenarios deemed to be high risk; and</li> <li>d) Provide a memorandum of understanding with the off-site service providers CZN plans to utilize for support in the event of emergencies.</li> </ul>

<sup>5</sup> See MVLWB Online Registry for [MV2020D0007](#) – CZN – Issuance – Type A Land Use Permit – Feb16-21 ([hyperlink](#)).

<sup>6</sup> See MVLWB Online Registry for [MV2020D0007](#) – CZN – Issuance – Type A Land Use Permit – Feb16-21 ([hyperlink](#)).

<sup>7</sup> See MVLWB Online Registry for [MV2020L2-0003](#) – CZN – Issuance – Type A Water Licence – Feb16-21 ([hyperlink](#)).

<sup>8</sup> INAC (2007) [Guidelines for Spill Contingency Planning](#).

17.	Impacts and Mitigation Measures – Preliminary Screening	<p>9) Revise the Application Package to clearly describe, with supporting rationale, which project activities CZN believes need to be screened. This could be discussed in the Consolidated Project Description and listed at the start of the Impacts and Mitigations Table for ease of review. The Pathway column of Table 4-1 from the Consolidated Project Description (page 49) indicates this to an extent, and so does Table 1-1 (page 8). However, all alterations to existing components and additions of new components do not appear to be in one place (e.g., the new waste rock pile does not appear to be considered in Table 4-1).</p> <p>10) It appears that many project changes, as indicated from Table 1-1 of the Consolidated Project Description, have not been considered in the Impacts and Mitigations Table submitted by CZN. Please update the Impacts and Mitigations Table considering all project activities CZN believes need to be screened (see item 14 above). Cumulative impacts and climate change must be considered when updating the Impacts and Mitigations Table. Please also indicate whether any mitigation measures were developed as a result of input from affected parties.</p>
18.	Closure and Reclamation	<p>11) Revise the Closure and Reclamation Plan to include the following information as outlined in MVLWB/AANDC <i>Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories</i><sup>9</sup>, as follows:</p> <ul style="list-style-type: none"> <li>a) Board staff are of the opinion that constructed project components, and constructed components that will not be significantly altered, warrant interim stage closure and reclamation planning, while conceptual closure and reclamation planning is appropriate for new project components in the design stage. Because of this, the Closure and Reclamation Plan as submitted has been deemed lacking in sufficient information for constructed project components; and</li> <li>b) The Closure and Reclamation Plan as submitted does not appear to contain component specific objectives and criteria for mineral exploration activities. Please update the plan to include all activities and components associated with the application.</li> </ul>
	Closure Cost Estimate	<p>12) In the Cover Letter (page 1) CZN indicated that the new authorizations will have scopes that cover exploration and mining and milling activities. Please update the Closure Cost Estimate to include mineral exploration activities.</p>
<b>Topic</b>		<b>Additional Information Required</b>
Administrative Updates		<p>13) The review conducted by Board staff found that a number of links throughout the application documents did not work, and instances where appendices were not included. Please review all documents and ensure all intended reference material is correctly linked and/or provided in appendices.</p>
Supporting Information		<p>14) Review all documents and ensure that any studies to support information in the documents are provided with the Application for public review (e.g., Robinson</p>

<sup>9</sup> MVLWB/AANDC (2013) [Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories.](#)

	GeoConsultants Inc. 2019). All documents referenced will need to be on the Public Registry for Permit MV2021D0005.
Cross References to Other Documents	15) When cross-referencing other documents, ensure the intent of the cross reference is clear and that the applicable section of the referenced document is stated so the information can easily be found.
Mineral Exploration	16) In the Cover Letter (page 1) CZN indicated that the new authorizations will have scopes that cover exploration and mining and milling activities. Mineral exploration details appear to be lacking throughout the Application. Please review all documents and ensure considerations for mineral exploration are included.
Project Schedule	17) In the Issuance Letter <sup>10</sup> for the Renewal Application for Licence MV2020L2-0003, the Board indicated that when CZN submits the Applications with its updated mine plan, the Board expects CZN to provide a realistic project schedule. Board staff note that the project schedule provided with the Application (e.g., page 11 of the Water Management Plan) only encompasses 2020-2024. As CZN has applied for a 25-year Licence, please include a realistic project schedule for 25 years.

---

<sup>10</sup> See MVLWB Online Registry for [MV2020L2-0003](#) – CZN – Issuance – Type A Water Licence – Feb16-21 ([hyperlink](#)).