



Mackenzie Valley Land and Water Board
7th Floor - 4922 48th Street
P.O. Box 2130
YELLOWKNIFE NT X1A 2P6
Phone (867) 669-0506
FAX (867) 873-6610

Staff Report

Applicant: Canadian Zinc Corporation	
Location: Staging area to support All Season Road Project; North side of the Liard River, NT	File Number: MV2019T0021
Date Prepared: August 23, 2019	Date of Board Meeting: August 29, 2019
Subject: New Type A Land Use Permit	

1. Purpose

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board):

- a) A new Land Use Permit (Permit) Application submitted by Canadian Zinc Corporation (CZN);
- b) Seek confirmation on preliminary screening exemption;
- c) Consider the Waste Management Plan;
- d) Consider the Spill Contingency Plan; and
- e) Consider the Engagement Plan.

2. Background

- July 12, 2019 – Application received;
- July 22, 2019 – Application deemed complete and review commenced;
- August 7, 2019 – Reviewer comments and recommendations due and received;
- August 14, 2019 – Responses due and received;
- August 29, 2019 – Application presented to the Board for decision; and
- **September 1, 2019 – End of the 42-day timeline.**

3. Description of Application

On July 12, 2019, CZN applied for a new Permit to barge equipment and materials across the Liard River, and to stage them on the north side of the river at the barge landing, in preparation for the eventual construction of the All Season Road (ASR) Project.¹ They propose to start in early September, prior to freeze-up, and store the equipment and materials for approximately two months. The staging area will be approximately 20 x 40 m, located in a minimally vegetated area approximately 60-100 m from shore, and

¹ The All Season Road Project (Project) is currently undergoing separate proceedings through the application for Land Use Permit [MV2014F0013](#) and associated authorizations. The Project was previously subjected to Environmental Assessment (EA) EA1314-01 by the Mackenzie Valley Environmental Impact Review Board (Review Board). Note that this EA is separate from the Review Board’s Environmental Assessment EA0809-002, which was for the mine and winter road.

will straddle the proposed ASR alignment. The barge landing area connects to the staging area via an existing ATV trail. As such, hand-brushing and clearing is proposed; slashed vegetation will be laid on the ground to protect the route. Disturbance to overburden is proposed to be minimal and rig mats will be used to protect the shore. No camp is proposed to be set up and no fuel is proposed to be stored. No garbage or sewage is proposed to be produced.

Equipment proposed to be stored includes the following: an excavator, a dozer, a crew carrier; one 22 ton skidder; a skid steer; a service truck; four x 1,000 L double walled fuel tanks (empty); two camp trailers (for storage, not use); a portable generator; a 60' section of bridge decking; rig matting; a Porta Potti; and some steel pipe. Once the proceedings for the ASR are complete, CZN intends to use these staged materials to pioneer the ASR in advance of a larger winter construction crew in late 2020.

Management Plans

A Waste Management Plan and Spill Contingency Plan were included with the Application. Board staff suggest that these Plans generally meet applicable guidelines and sufficiently reflect the scope of the proposed activities.

Engagement

An [Engagement Record](#) and [Engagement Plan](#) were included in the Application. CZN provided the overview materials they used for engagement and provided pre-submission engagement logs with each of the following parties:

- Naha Dehe Dene Band (NDDB);
- Liidlii Kue First Nation (LKFN);
- Acho Dene Koe First Nation (ADKFN);
- Sambaa K'e First Nation (SKFN);
- Tthets'ehk'edeli First Nation (TFN)²;
- Fort Simpson Métis Nation;
- Pehdzeh Ki First Nation (PKFN); and
- Dehcho First Nations (DFN).

CZN included Letters of Support specific to this Application from NDDB (July 8, 2019), LKFN (July 12, 2019), ADKFN (July 8, 2019); and SKFN (July 10, 2019). The Engagement Log indicates TFN would send a Letter of Support; however, it is not attached to the Application package. The Engagement Record indicates CZN made several attempts to reach the Fort Simpson Métis Nation; a Letter of Support dated March 14, 2018 was attached to the Application.³ In general, pre-submission engagement meets the Board's *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits* and sufficiently reflects the scope of the proposed activities.

CZN's Application also indicates on-going weekly discussions with the parties regarding the initial development phases of the ASR, and specifies the following engagement-related relationships:

- an Environmental Management Agreement (EMA) with NDDB and LKFN; its purpose is to provide for First Nations participation in the project;
- a Traditional Land Use Agreement (TLUA) with the NDDB; it focuses on business-related impacts of the project; and

² Previously Jean Marie River First Nation.

³ Board staff note that this dated prior to the submission of this Application.

- Impact Benefit Agreements (IMA) with NDDB and LKFN.

Eligibility

GNWT-Lands is of the understanding that CZN meets the regulatory threshold of subsection 18(a) of the Mackenzie Valley Land Use Regulations for activities relating to the All Season Road Project because they hold mineral tenure rights (attached). However, neither CZN nor GNWT-Lands has specified the particular right(s). Although GNWT-Lands believes that CZN has eligibility, they are also of the opinion that further work with CZN is required to clarify these land tenure requirements due to the complexity of multiple land types.

Section 18 of the MVLUR states:

18) A person is eligible for a permit who

- (a) Where the proposed land-use operation is in the exercise of a right to search for, win or exploit minerals or natural resources,*
 - (i) holds the right*
 - (ii) is the manager of operations, where the right is held by two or more persons who have entered into an exploration or operating agreement designating one of them as the manager of operations; or*
 - (iii) is the person who contracts to have the land use operation carried out, where the right is held by two or more persons who have not entered into an exploration or operating agreement designating one of them as manager of operations.*

Type of Area

This Project is located in a non-federal area.

Fees

The required Application Fee of \$150.00 was included with the Application (attached).

Term

CZN has applied for a term of five years.

4. Comments

Triggers

The activities as described trigger a Type A permit as per paragraph 4(a)(ii) of the Mackenzie Valley Land Use Regulations:

(4) No person shall, without a Type A permit, carry on any activity that involves

- (a) on land outside the boundaries of a local government,*
- (ii) the use of a vehicle or machine of a weight equal to or exceeding 10 t, other than on a road or on a community landfill, quarry site or airport,*

No water licence is triggered because there is no direct water use or deposit of waste.

5. Public Review

By August 7, 2019, comments and recommendations on the Application were received from six reviewers:

- Environment and Climate Change Canada (no comments);
- Government of the Northwest Territories – Education, Culture, and Employment (GNWT-ECE);
- GNWT – Environment and Natural Resources – Environment Assessment and Monitoring (GNWT-ENR);
- GNWT-Lands (Inspector, Dehcho Region);
- GNWT-Lands – Project Assessment Branch; and
- GNWT-Lands – Land Use Advisor.

By August 14, 2019, CZN provided short responses to some of the public review concerns. The Review Summary and Attachments (attached) presents the public review.

Main Issues Raised during the Review

The following summarizes the main issues raised during the review:

- GNWT-ECE indicated they do not require future archaeological assessments in the vicinity of the staging area, and requested the draft conditions be updated accordingly.
- GNWT-ENR submitted a list of standard comments reminding CZN of project requirements relating to on and off-site waste transport and management; fuel storage; spill containment, reporting, reclamation, and the Spill Contingency Plan (comment IDs 1-9; 17-19). Wildlife and habitat concerns were also identified (comment IDs 10-16). Board staff suggest that these concerns can be mitigated through draft conditions and revisions to management plans.
- GNWT-Lands requested clarification about the amount of fuel proposed to be stored, sewage wastes to be managed, methods of manage cleared brush and trees; and spill contingency and contact information for the mine site (Inspector, Dehcho Region - comment ID 1-4; Land Use Advisor – comment ID 3-6, 10-11).

Board staff suggest some of the reviewers' comments indicate the Application lacked clarity around the details of activities proposed at the staging area. CZN's responses are brief, largely inadequate, and demonstrate their focus is directed to the staging aspects of the proposed activities, whereas reviewers focused on the operational activities included in physically mobilizing and demobilizing the equipment and materials from the area (i.e., clearing/brushing, waste and sewage management; fuel in equipment on-site; contact information for personnel involved with staging equipment and materials). As such, revisions to the Waste Management Plan and Spill Contingency Plan should be required. A draft condition has been added to reflect the potential for off-site disposal of wastes, which requires CZN to provide written notification to the Board and an Inspector demonstrating that a licenced disposal facility has agreed to accept the wastes and has adequate capacity to do so.

Preliminary Screening

CZN is of the opinion this Application is exempt from further screening because these activities were considered by Environmental Assessment EA1314-01, conducted by the Mackenzie Valley Environmental Impact Review Board.

Draft Permit

The draft Permit (attached) contains recommended conditions based the standard Permit conditions list and reflects concerns and recommendations raised during the public review.

6. Security

Legislative Requirements

The Board may require security as per section 32 of the Mackenzie Valley Land Use Regulations, which state:

- 32(1) The Board may require security to be posted in an amount not exceeding the aggregate of the costs of*
- (a) Abandonment of the land-use operation;*
 - (b) Restoration of the site of the land-use operation; and*
 - (c) Any measures that may be necessary after the abandonment of the land-use operation.*
- 32(2) In setting the amount of security pursuant to subsection (1), the Board may consider*
- (a) The ability of the applicant or prospective assignee to pay the costs referred to in that subsection;*
 - (b) The past performance of the applicant or prospective assignee in respect of any other permit;*
 - (c) The prior posting of security by the applicant pursuant to other federal legislation in relation to the land-use operation; and*
 - (d) The probability of environmental damage or significance of any environmental damage.*

Security Estimate Calculations

CZN did not provide a security calculation. GNWT-Lands recommend security be applied during the public review but did not provide an amount (GNWT-Lands (Darren Campbell) 2 and GNWT-Lands (Tracy Covey) 11). Board staff have completed the reclamation security worksheet and have calculated that the cost to remediate the site would be \$15,892.88 (attached).

7. Conclusion

The draft Permit conditions are based upon the standard condition list, public review, and Board staff recommendations. Board staff conclude that the conditions contained within this draft Permit should mitigate the potential environmental impacts this development may have on the land and water.

Board staff conclude that the Engagement Plan, as submitted, is in conformity with Board's *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits* and can be approved.

Board staff conclude that the Waste Management Plan and Spill Contingency Plan should be revised to reflect the clarifications requested during the public review and resubmitted prior to commencement of activities for staff-level conformity.

8. Recommendation

Board staff recommend the Board:

- a) **Confirm the Application for Land Use Permit MV2019T0021 from Canadian Zinc Corporation is exempt from preliminary screening as per the Exemption List Regulations.**
- b) **Make a motion to approve the Type A Land Use Permit MV2019T0021 for a term of five years and associated Reasons for Decision.**
- c) **Make a motion to approve the Waste Management Plan as required by Land Use Permit MV2019T0021 as an interim submission.** CZN is required to submit a revised submission in accordance with comments and commitments made during this review prior to commencement of activities, for confirmation of conformity from Board staff.
- d) **Make a motion to approve the Spill Contingency Plan as required by Land Use Permit MV2019T0021 as an interim submission.** CZN is required to submit a revised submission in accordance with comments and commitments made during this review prior to commencement of activities, for confirmation of conformity from Board staff.
- e) **Make a motion to approve the Engagement Plan as required by Land Use Permit MV2019T0021.**

A draft decision letter is attached.

9. Attachments

- [Application](#)
 - Map – page 20 (last page of the Application)
 - [Eligibility Email – GNWT-Lands, dated May 24, 2019](#)
 - [Fee Receipt](#)
- Review Summary and Attachments
- Security Estimate
- Draft Land Use Permit Cover Page
- Draft Land Use Permit Conditions
- Draft Reasons for Decision
- Draft Decision Letter from the Board

Respectfully submitted,



Jen Potten
Regulatory Coordinator

Review Comment Table

Board:	MVLWB
Review Item:	Canadian Zinc Corporation - New Land Use Permit Application - Staging Area (MV2019T0021)
File(s):	MV2019T0021
Proponent:	CanZinc Corporation
Document(s):	MV2019T0021 - CZN - Land Use Permit Application and Project Description (1679KB) MV2019T0021 - CZN - Engagement Log (2401KB) MV2019T0021 - CZN - Engagement Plan (210KB) MV2019T0021 - CZN - Spill Contingency Plan (3275KB) MV2019T0021 - CZN - Waste Management Plan (2609KB) MV2019T0021 - CZN - Draft Land Use Permit Conditions (210KB)
Item For Review Distributed On:	July 22 at 17:00 Distribution List
Reviewer Comments Due By:	Aug 7, 2019
Proponent Responses Due By:	Aug 14, 2019
Item Description:	<p>Canadian Zinc Corporation (CZN) has submitted a complete application for a type A land use permit (permit). The purpose of this Application is to allow CZN to barge in and stage certain materials near the north shore of the Liard River in support of their All Season Road Project, for which land use permit and water licencing proceedings are ongoing. The Applicant has also requested an exemption from preliminary screening in accordance with Schedule 1, subsection 2.1(a) of the Exemption List Regulations because the Applicant believes that the development is part of a development which has fulfilled the requirements of the environmental assessment process established by the Mackenzie Valley Resource Management Act.</p> <p>Reviewers are invited to submit comments and recommendations using the Online Review System (ORS) by the review comment deadline specified below. If reviewers seek clarification on the submission, they are encouraged to correspond directly with the Applicant prior to submitting comments and recommendations.</p> <p>Please provide comments and recommendations on the documents linked below. Reviewers may also wish to consider providing an overarching recommendation regarding whether they are in support of the submission, to provide context for comments and recommendations and to assist the Board with its decision.</p> <p>Please note that the draft Permit has been developed using the MVLWB's current Standard Land Use Permit Conditions Template. The purpose of this draft Permit is</p>

	<p>to allow reviewers to comment on possible conditions. These draft materials are not intended to limit in any way the scope of reviewers' comments. The Board is not bound by the contents of the draft Permit and will make its decision at the close of the proceeding on the basis of all the evidence and arguments filed by all reviewers.</p> <p>Board staff agrees that this application is exempt from preliminary screening, in accordance with the Preliminary Screening Exemption List Regulations and Exemption List Regulations. If you have comments or recommendations on the possible exemption, please include them in your submission. INCLUDE RATIONALE. The Board will make a determination on the preliminary screening exemption on August 29, 2019.</p> <p>Please be advised that comments made by reviewers regarding impacts of this project to wildlife and wildlife habitat in this preliminary screening will inform the GNWT Minister of Environment and Natural Resources' determination regarding whether a Wildlife Management and Monitoring Plan will be required for this project as per Section 95 of the Wildlife Act.</p> <p>All documents that have been uploaded to this review are also available on our public Registry. If you have any questions or comments about the ORS or this review, please contact Board staff identified below.</p>
General Reviewer Information:	This review item has also been distributed by fax to Fort Simpson Métis Local #52 Marie Lafferty President (867)695-2040
Contact Information:	Jen Potten 867-766-7468 Julian Morse 867-766-7453

Comment Summary

Environment and Climate Change Canada: Eva Walker				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	ECCC - No Comments	<p>Comment Environment and Climate Change Canada has reviewed the materials provided for the Canadian Zinc Corporation's staging area's Land Use Permit Application's in accordance with the department's mandate and has no comments at this time.</p> <p>Recommendation NA</p>		Noted.
GNWT - ECE (Education, Culture and Employment): Glen Mackay				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Draft Land Use Permit Conditions - Section 26(1)(j)	<p>Comment The Culture and Heritage Division of ECE has reviewed the land use permit application for Canadian Zinc Corporation's staging area and associated access. Our records indicate that this area was investigated during an archaeological impact assessment of alignment changes to the Prairie Creek Winter Road in 2012. We do not require any additional archaeological studies of the staging area.</p> <p>Recommendation We recommend that conditions 49 (Archaeological Overview) and 50 (AIA Potential) be removed from the final land use permit.</p>		<p>Noted.</p> <p>Draft conditions and supporting definitions should be removed from the draft permit conditions.</p>
GNWT - ENR - EAM: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
20	General File	<p>Comment (doc) ENR Letter with Comments and Recommendations</p> <p>Recommendation</p>		Noted.
1	Topic: Industrial and Solid, Liquid or Sewage Waste Disposal	<p>Comment If the Proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the Proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.</p> <p>Recommendation 1) Should the Proponent</p>	Aug 10: We don't intend this.	A draft condition reflecting this concern has been added to the draft Permit: OFF-SITE DISPOSAL.

		<p>intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR requests that the Proponent demonstrate in the Waste Management Plan, and to the Board, that the receiving communities'™ Solid and Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of any industrial waste streams originating from outside municipal boundaries. The Proponent should also demonstrate to the Board that the community has been consulted, and has consented in writing, regarding the use of its infrastructure for disposal of the waste streams and quantities in question, and the disposal of such wastes will not contravene the Waters Act or the Environmental Protection Act and related Regulations and Guidelines.</p>		
2	<p>Topic: Hazardous Waste Management</p>	<p>Comment All Proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT. The Guideline for the General Management of Hazardous Waste in the NWT defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulations, and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to: a) incinerator waste and/or residuals (including bottom ash and fly ash); b) any liquid or solid wastes contaminated with refined petroleum products; c) bilge wastes; d) vehicle or vessel servicing wastes e) drilling wastes; f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures); g) tailings; and h) any hydrocarbon, lead, mercury or other forms of contaminated soils. The Guideline for the General Management of Hazardous Waste in the NWT and the Transportation of Dangerous Good</p>		<p>Noted.</p>

		<p>Regulations may be found at the following sites: http://www.enr.gov.nt.ca/sites/enr/files/guidelines/general_management.pdf http://www.tc.gc.ca/eng/tdg/clear-menu-497.htm</p> <p>Recommendation 1) If the Proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environment Division, ENR to register or for more information contact Mr. Lee Ross, Hazardous Waste Management Specialist, Environmental Protection and Waste Management Division by email (Lee.Ross@gov.nt.ca) or by phone (867) 767-9236 extension 53187.</p>		
3	Topic: Fuel Storage and Spill Contingency Planning and Reporting	<p>Comment ENR acknowledges the proponent's Spill Contingency Plan. In addition, the Proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.</p> <p>Recommendation 1) To assist in spill contingency planning, information is provided in EPA Spill Contingency Planning and Reporting Regulations found here: https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf If clarification or further information is needed please contact the Environment Division, ENR directly to aid in the development of the Plan</p>		Noted. This has already been included in Section 4.3 of the Spill Contingency Plan.
4	None	<p>Comment None</p> <p>Recommendation 2) In accordance with the Spill Contingency Planning and Reporting Regulations Section 10, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.</p>		Noted. This has already been included in Section 4.3 of the Spill Contingency Plan.
5	None	<p>Comment None</p> <p>Recommendation 3) With respect to the Environmental Protection Act Section 5 (1b) all spills, regardless of amount, must be cleaned up,</p>		Noted. The following draft conditions address this

		and contaminated materials disposed of at an approved facility, or in an approved manner. Additionally, as indicated in Section 5(1c) all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.		comment: CLEAN UP SPILLS; FINAL CLEANUP AND RESTORATION; and ENGAGEMENT PLAN.
6	None	Comment None Recommendation 4) Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.		Noted. Draft condition FUEL NEAR WATER was included in the draft permit that was circulated for review.
7	None	Comment None Recommendation 5) All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).		Noted. Draft condition DRIP TRAYS was included in the draft permit that was circulated for review. Section 4.1 of the Spill Contingency Plan notes that drip pans/trays will be placed under equipment when not in use.
8	None	Comment None Recommendation 6) It is recommended spill kits be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to industry-accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent inadvertent releases.		See also ENR-5 and 6. Section 4.1 of the Spill Contingency Plan references activities at the mine site. Revisions to the Plan should specifically identify the proposed

				location(s) of spill kits at the staging area.
9	None	<p>Comment None</p> <p>Recommendation 7) ENR recommends, for the operator's convenience and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms, and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.</p>		<p>Noted. Draft condition SPILL REPOSE was included in the draft permit that was circulated for review.</p> <p>See also ENR-8.</p>
10	Topic: Wildlife: NWT Listed and Pre-listed Species at Risk	<p>Comment Sections 76 and 77 of the Species at Risk (NWT) Act require the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a Land Use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk. The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the NWT Wildlife Act. As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal Species at Risk Act, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation. The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species: . Boreal Caribou - Threatened in the NWT . Barren-ground Caribou - Threatened in the NWT . Grizzly Bear - Special Concern in NWT . Little</p>		<p>Acknowledged. Draft condition HABITAT DAMAGE is included in the draft permit.</p>

		<p>Brown Myotis (bat) - Special Concern in the NWT . Northern Myotis (bat) - Special Concern in the NWT . Wood Bison - Threatened in the NWT . Western Toad - Threatened in the NWT Potential impacts to the species at risk listed above from the project include sensory disturbance, attraction to operations, destruction of habitat, risk of injury, risk of mortality, risk of contact with or ingestion of toxic substances, reduced habitat quality, disruption or barriers to movements or migration.</p> <p>Recommendation 1) ENR is satisfied that with application of the recommendations contained within other sections of this letter to the Board and within our recommendations submitted to the Proponent, as well as application of the wildlife mitigation and/or monitoring measures outlined in the Proponent’s Land Use Permit and Water Licence application and supporting documents, potential impacts to the species at risk listed above can be avoided or minimized.</p>		
11	<p>Topic: Cumulative Effects Tracking</p>	<p>Comment Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.</p> <p>Recommendation 1) The Proponent should submit the bounding coordinates or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The Mackenzie Valley Land and Water Board’s Standards for Geographic Information Systems (GIS) Submissions should be followed when submitting spatial data.</p>		<p>Refer to CZN response to GNWT - Lands - Dehcho Region comment ID 4.</p> <p>Draft condition LOCATION OF ACTIVITIES is included in the draft permit and requires CZN to conduct an initial inspection with an Inspector of the land-use area prior to commencement. The Mackenzie Valley Land Use Regulations require the submission of a Final Plan to close a permit;</p>

				these bounding coordinates will also be confirmed by an Inspector during regular site inspections during the active phase of the permit, and at the time of the final inspection.
12	Topic: Wildlife Abodes	<p>Comment Subject to sub-section 51(2) of the Wildlife Act, it is illegal to break into, destroy, or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so. Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.</p> <p>Recommendation 1) The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.</p>		<p>Acknowledged. Draft condition HABITAT DAMAGE is included in the draft permit.</p> <p>Draft condition INSPECT LOCATIONS requires CZN to conduct an initial inspection with an Inspector of the land-use area prior to commencement. CZN could be encouraged to continue pre-activity surveys throughout the duration of the staging activities.</p>
13	None	<p>Comment None</p> <p>Recommendation 2) If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.</p>		<p>Acknowledged. Draft condition HABITAT DAMAGE is included in the draft permit.</p>
14	None	<p>Comment None</p> <p>Recommendation 3) If a bear den and exclusion</p>		<p>See GNWT-ENR-13</p>

		zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.		
15	None	Comment None Recommendation 4) It is recommended that, if encountered, beaver lodges, muskrat push-ups, and hibernacula are not disturbed or damaged.		See GNWT-ENR-13
16	Topic: Wildlife Attractants and Waste Management	Comment Subject to sub-section 66(1) of the Wildlife Act no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals, or wildlife in danger. Subject to sub-section 65(1) of the Wildlife Act, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A - Part 2 of the Wildlife General Regulations sets out the species prescribed as fur-bearers. Recommendation 1) The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.		This is already identified in the Waste Management Plan; this Plan is also required in the draft conditions.
17	None	Comment None Recommendation 2) The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.		As GNWT-ENR 16.
18	None	Comment None Recommendation 3) The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.		As GNWT-ENR 16.
19	None	Comment None Recommendation 4) The Proponent should remove all waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.		Noted. Draft conditions REMOVE GARBAGE; WASTE CHEMICAL DISPOSAL; and WASTE PETROLEUM DISPOSAL were included in the draft permit that

				was circulated for review.
GNWT - Lands - Dehcho Region: Danielle Rogers				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Fuel Container Storage	<p>Comment In the application it is stated that 4 empty 1000L tanks would be stored on the staging area. In the engagement letters, the equipment list states 2 empty 1000L tanks would be stored on the staging area.</p> <p>Recommendation Clarify if it will be 2 or 4 tanks to be stored on the staging area.</p>	<p>Aug 10: Does it matter? They're empty. Assume 4.</p>	<p>Draft condition RESPONSIBILITY FOR REMEDIATION COSTS would apply for the removal of all fuel tanks.</p> <p>The scope of the draft Permit does not allow for the storage of fuel.</p>
2	Waste Management Plan: 2.5 Domestic Sewage	<p>Comment In the Waste Management Plan it states that no sewage will be generated during staging. However, there will be a Porta Potti located within the staging area. Is the Porta Potti to be used during the winter road construction or during the staging of the equipment.</p> <p>Recommendation Provide information on how Sewage from the Porta Potti will be disposed.</p>	<p>Aug 10: The Potti is for road construction.</p>	<p>Acknowledged.</p> <p>Draft condition SEAGE DISPOSAL – PLAN was included in the draft permit that was circulated for review.</p> <p>Revision to the Waste Management Plan could be required to reflect the potential for waste production during the staging activities.</p>
3	Land Use Permit Application:	<p>Comment In the application under Brush and Tree disposal it states; Very little. This will be left windrowed to be incorporated in the</p>	<p>Aug 10: Incorporated into future road</p>	<p>Draft conditions BRUSH DISPOSAL/TIME</p>

	9. Proposed Disposal Methods, Brush and Trees	subsequent. Recommendation Please provide what the cleared brush and trees will be incorporated in.	construction windrows.	AND MINIMIZE AREA CLEARED were included in the draft permit that was circulated for review. Staff suggests that an Inspector review proposed plans and locations with CZN during an initial inspection, for example, prior to commencement, as required by draft condition INSPECT LOCATIONS.
4	Land Use Permit Application: 16. Location of Activities	Comment The location provided is one point and the proposed area is 20m x 40m. Recommendation Please provide the 4 corner coordinates for the proposed area.	Aug 10: 61 deg 4' 7.23" N, 123 deg 17' 40.78" W 61 deg 4' 6.53" N, 123 deg 17' 41.05" W 61 deg 4' 6.41" N, 123 deg 17' 38.13" W 61 deg 4' 7.09" N, 123 deg 17' 38.00" W	Noted.
5	Draft Land Use Permit: 26(1)(a) Location and Area	Comment Private Property and Avoid Cabins conditions are asking for recommendations for a buffer distance in meters. Recommendation Inspectors recommend a 300 meter buffer between Private Property and Cabins, unless otherwise authorized in writing by the board.		These distances have been included in the draft conditions.
GNWT - Lands: Darren Campbell				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
2	General File	Comment (doc) GNWT Lands PAB Division Recommendation		Noted.

1	Security	<p>Comment Because the staging land use permit is intended to be issued before any permits and licences for the all-season road are issued, the staging land use permit needs to include a security deposit. GNWT notes that the applicant has provided an equipment list and description of its activities, but has not provided a security estimate.</p> <p>Recommendation The LWB include a condition in the permit requiring a security deposit, with the amount to be based on the information provided in the application and accompanying materials.</p>		<p>Board staff note that GNWT has expressed a desire for security but did not submit an amount.</p> <p>A draft estimate has been prepared by staff amounting to \$15,892.88.</p>
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GNWT - Lands: Tracy Covey

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Introduction to Comments	<p>Comment GNWT Territorial Land Administration (TLA) is making its comments on the basis that general information provided by CZN, as well as Plans, will also apply to lands managed and administered by TLA, and to which TLA instruments also will apply.</p> <p>Recommendation None.</p>		Noted.
2	Introduction to Comments	<p>Comment General Comment #1: In CZN’s 12 July 2019 Application, Page 2, Sec. 8, it is stated that “Owing to the sparsely vegetated nature of the debris fan, and minimal clearing, no restoration is necessary or proposed following removal of the staged equipment.” TLA COMMENT: A Restoration Plan should be provided, along with the other Plans currently under review. (It is premature for the proponent to declare in advance of this project that “no restoration is necessary”; in fact, a contingency plan is strongly recommended.)</p> <p>General Comment #2: In the Spill Contingency Plan (July 2019), Page 2, first bullet, and in the Waste Management Plan (July 2019), Page 2, Sec. 1.3, first bullet, it is stated that it is CZN’s policy to “comply with and adopt the spirit of all applicable laws, regulations and</p>	<p>Aug 10: Re #1, there is nothing to restore. It is basically a rocky parking lot. Re #3, operations would be part of road construction, different permit.</p>	<p>Draft conditions have been included in the draft permit to address these comments: PROGRESSIVE RECLAMATION; FINAL CLEANUP AND RESTORATION; and SECURITY DEPOSIT.</p> <p>The Spill Contingency Plan could be revised to explain the measures or operational procedures that will be in place</p>

				Road project, Board staff suggest these numbers be included in a revised Spill Contingency Plan, for Inspector and Board staff confirmation of conformity, prior to commencement of activities. This is included in the draft decision letter.
4	Spill Contingency Plan (July, 2019 version)	<p>Comment Section 6.1.&nbsp;How often will spill response personnel be trained and re-trained?&nbsp;</p> <p>Recommendation Provide a response.</p>	<p>Aug 10: Equipment is being staged. There is nothing to spill</p>	<p>The <i>Guidelines for Spill Contingency Planning</i> require this information be included in a Spill Contingency Plan. Though the staging activities are not extensive, the Plan can be revised to respond to this comment. Training about spill contingency plans specific to the staging activities could be provided during site orientation. Furthermore, as mobilization of equipment will involve its use, as provided for in</p>

				the draft scope, there is a potential for spills.
5	Spill Contingency Plan (July, 2019 version)	Comment Safety Data Sheets note Diesel and Ethylene Glycol. Will any other hazardous chemicals (i.e., lubricants?) be in use or stored at the staging area? Recommendation Provide a response.	Aug 10: No	Noted.
6	Waste Management Plan (July, 2019 version)	Comment Contact information for the mine site/licenced operation (in the field) is missing and should be provided (contact phone number(s) and email address(s) for mine site and field supervisor). Recommendation Provide contact information.	Aug 10: Same as SCP	Board staff agree with GNWT-Lands. As the activities at the staging area are tightly intertwined with the All Season Road project, Board staff suggest these numbers be included in a revised Waste Management Plan, for Inspector and Board staff confirmation of conformity, prior to commencement of activities. This is included in the draft decision letter.
8	Waste Management Plan (July, 2019 version)	Comment 1.4.1. Notes that the territorial lands act {1985) applies to CZN.; In fact, like other new proposed activities in the NWT, post-Devolution, this project is subject to the Northwest Territories Lands Act. Recommendation Just reminder to follow the correct lands act.		Noted.
9	Waste Management Plan (July,	Comment Section 2.3, last paragraph. “Hazardous waste will be stored and managed in accordance with the Guidelines for		Noted. Reference to these Guidelines

	<p>use permit needs to include a security deposit. GNWT notes that the applicant has provided an equipment list and description of its activities, but has not provided a security estimate. &nbsp;</p> <p>&nbsp;</p> <p>Recommendation Recommendation: The LWB include a condition in the permit requiring a security deposit, with the amount to be based on the information provided in the application and accompanying materials.</p>		
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August 7, 2019

Julian Morse
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O. Box 2130
Yellowknife, NT
X1A 2P6

Dear Mr. Morse,

**Re: Canadian Zinc Corp. (CZN)
Land Use Permit Application – MV2019T0021
Staging Area
Request for Comment**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the application at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board and the proponent.

Topic 1: Industrial and Solid, Liquid or Sewage Waste Disposal

Comment(s):

If the Proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the Proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.

Recommendation(s):

- 1) Should the Proponent intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR requests that the Proponent demonstrate in

the Waste Management Plan, and to the Board, that the receiving communities' Solid and Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of any industrial waste streams originating from outside municipal boundaries. The Proponent should also demonstrate to the Board that the community has been consulted, and has consented in writing, regarding the use of its infrastructure for disposal of the waste streams and quantities in question, and the disposal of such wastes will not contravene the Waters Act or the *Environmental Protection Act* and related Regulations and Guidelines.

Topic 2: Hazardous Waste Management

Comment(s):

All Proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT.

The Guideline for the General Management of Hazardous Waste in the NWT defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulations, and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to:

- a) incinerator waste and/or residuals (including bottom ash and fly ash);
- b) any liquid or solid wastes contaminated with refined petroleum products;
- c) bilge wastes;
- d) vehicle or vessel servicing wastes
- e) drilling wastes;
- f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures);
- g) tailings; and
- h) any hydrocarbon, lead, mercury or other forms of contaminated soils.

The Guideline for the General Management of Hazardous Waste in the NWT and the Transportation of Dangerous Good Regulations may be found at the following sites:

http://www.enr.gov.nt.ca/sites/enr/files/guidelines/general_management.pdf

<http://www.tc.gc.ca/eng/tdg/clear-menu-497.htm>

Recommendation(s):

- 1) If the Proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environment Division, ENR to register or for more information contact Mr. Lee Ross, Hazardous Waste Management Specialist, Environmental Protection and Waste Management Division by email (Lee.Ross@gov.nt.ca) or by phone (867) 767-9236 extension 53187.

Topic 3: Fuel Storage and Spill Contingency Planning and Reporting

Comment(s):

ENR acknowledges the proponent's Spill Contingency Plan.

In addition, the Proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.

Recommendation(s):

- 1) To assist in spill contingency planning, information is provided in EPA *Spill Contingency Planning and Reporting Regulations* found here:

<https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>

If clarification or further information is needed please contact the Environment Division, ENR directly to aid in the development of the Plan

- 2) In accordance with the *Spill Contingency Planning and Reporting Regulations Section 10*, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.
- 3) With respect to the *Environmental Protection Act Section 5 (1b)* all spills, regardless of amount, must be cleaned up, and contaminated materials disposed of at an approved facility, or in an approved manner. Additionally, as indicated in *Section 5(1c)* all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.
- 4) Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.

- 5) All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).
- 6) It is recommended spill kits be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to industry-accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent inadvertent releases.
- 7) ENR recommends, for the operator's convenience and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms, and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.

Topic 4: Wildlife: NWT Listed and Pre-listed Species at Risk

Comment(s):

Sections 76 and 77 of the *Species at Risk (NWT) Act* require the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a Land Use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk.

The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the *NWT Wildlife Act*.

As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal *Species at Risk Act*, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation.

The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- [Boreal Caribou](#) – Threatened in the NWT
- [Barren-ground Caribou](#) - Threatened in the NWT
- [Grizzly Bear](#) – Special Concern in NWT
- [Little Brown Myotis](#) (bat) – Special Concern in the NWT
- [Northern Myotis](#) (bat) – Special Concern in the NWT
- [Wood Bison](#) – Threatened in the NWT
- [Western Toad](#) – Threatened in the NWT

Potential impacts to the species at risk listed above from the project include sensory disturbance, attraction to operations, destruction of habitat, risk of injury, risk of mortality, risk of contact with or ingestion of toxic substances, reduced habitat quality, disruption or barriers to movements or migration.

Recommendation(s):

- 1) ENR is satisfied that with application of the recommendations contained within other sections of this letter to the Board and within our recommendations submitted to the Proponent, as well as application of the wildlife mitigation and/or monitoring measures outlined in the Proponent’s Land Use Permit and Water Licence application and supporting documents, potential impacts to the species at risk listed above can be avoided or minimized.

Topic 5: Cumulative Effects Tracking

Comment(s):

Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

Recommendation(s):

- 1) The Proponent should submit the bounding coordinates or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The Mackenzie Valley Land and Water Board’s *“Standards for Geographic Information Systems (GIS) Submissions”* should be followed when submitting spatial data.

Topic 6: Wildlife Abodes

Comment(s):

Subject to sub-section 51(2) of the *Wildlife Act*, it is illegal to break into, destroy, or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so.

Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

Recommendation(s):

- 1) The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.
- 2) If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.
- 3) If a bear den and exclusion zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.
- 4) It is recommended that, if encountered, beaver lodges, muskrat push-ups, and hibernacula are not disturbed or damaged.

Topic 7: Wildlife Attractants and Waste Management

Comment(s):

Subject to sub-section 66(1) of the *Wildlife Act* no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals, or wildlife in danger.

Subject to sub-section 65(1) of the *Wildlife Act*, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the *Wildlife General Regulations* sets out the species prescribed as fur-bearers.

Recommendation(s):

- 1) The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.

- 2) The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.
- 3) The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.
- 4) The Proponent should remove all waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.

Comments and Recommendations Directed to the Proponent

The following comments are directed to the applicant of the Land Use Permit and are provided based on ENR's mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act*. The following comments and recommendations are for the information, consideration, and appropriate action of the Proponent and as they are applicable to project activities.

Legislative and Regulatory Requirements

Topic 1: Forest Management

Recommendation(s):

- 1) In order to comply with the *Forest Protection Act* (Sections 10 and 19(1)), the Proponent should adhere to the *Forest Fire Prevention and Suppression Guidelines*. The intent of the Guidelines is threefold. First, industrial operations must be conducted so that they do not contribute to the fire load. Second, industrial operations must be able to control and extinguish any fires that occur as a result of their operations. Finally, industrial operations must be able to respond to wildfires that may affect human life and other property as a result of their operations. The guidelines may be accessed at the following website:

http://www.enr.gov.nt.ca/sites/enr/files/industrial_guidelines_forest_fire_prevention_suppression.pdf

- 2) The *Forest Management Act* and Regulations prohibits anyone from cutting, using or transporting timber, or damaging standing timber unless:
 - Authorized with a Timber Permit;
 - Authorized by license; or
 - Exempted from holding a Permit or license.

The Proponent is requested to contact the local/regional ENR office for further information on obtaining a Forest Management Authorization, if required.

- 3) If the Proponent plans to burn brush or other materials during the official fire season (May 01 – September 30), they will require a Permit to Burn from ENR, as per the *Forest Protection Act* (Section 10(1) and 21).
- 4) The Proponent should be aware of Part 1 Clause 18 of the *Exemption List Regulations* under the *Mackenzie Valley Resource Management Act* in which a burn authorized under a Permit to Burn is exempt from Preliminary Screening if it is not greater than an area of 25 m².
- 5) If the site brush and tree cover is not merchantable then it should be piled up accordingly (and not mixed with soil) so that it can be burned or spread out at a later date. If merchantable wood is involved, either merchantable firewood or saw timber, it should be cleanly set to one side of the operation and made available for recovery. The Proponent should contact the local ENR office to determine what forest management authorization will be required, if any.

Topic 2: Wildlife Abodes

Comment(s):

Subject to sub-section 51(2) of the *Wildlife Act*, it is illegal to break into, destroy or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so.

Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

Recommendation(s):

- 1) Contact ENR prior to start-up of project activities to determine if there are any known dens, push-ups, lodges, beaver dams or hibernacula within the project area.
- 2) Prior to start-up of project activities, conduct surveys of lakes or other water bodies proposed to be used for water withdrawal or winter access roads to determine the presence of muskrat push-ups, beaver lodges or beaver dams. If one or more of these features is found contact ENR to discuss mitigation options.

3) Further guidance on different setback distances and timing windows for wildlife abodes are provided in Table 6 of the Northern Land Use Guidelines: Northwest Territories Seismic Operations Vol.9 (a) at:

[http://www.lands.gov.nt.ca/sites/lands/files/resources/nlug_seismic_2015_english - 16 sept 2015.pdf](http://www.lands.gov.nt.ca/sites/lands/files/resources/nlug_seismic_2015_english_-_16_sept_2015.pdf)

Proponents should also check whether there are setback distances and timing restrictions for wildlife abodes within the regional land use plan for their project area.

Topic 3: Advice for NWT Listed and Pre-listed Species at Risk

Comment(s):

Sections 76 and 77 of the *Species at Risk (NWT) Act* requires the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a Land Use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk.

The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the *NWT Wildlife Act*.

As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal *Species at Risk Act*, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation.

The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- [Boreal Caribou](#) – Threatened in the NWT
- [Barren-ground Caribou](#) - Threatened in the NWT
- [Grizzly Bear](#) – Special Concern in NWT
- [Little Brown Myotis](#) (bat) – Special Concern in the NWT
- [Northern Myotis](#) (bat) – Special Concern in the NWT

- [Wood Bison](#) – Threatened in the NWT
- [Western Toad](#) – Threatened in the NWT

Potential impacts to the species at risk listed above from the project include sensory disturbance, attraction to operations, destruction of habitat, risk of injury, risk of mortality, risk of contact with or ingestion of toxic substances, reduced habitat quality, disruption or barriers to movements or migration.

Recommendation(s):

- 1) ENR is satisfied that with application of the recommendations contained within other sections of this letter to the Board and within our recommendations submitted to the Proponent, as well as application of the wildlife mitigation and/or monitoring measures outlined in the Proponent's Land Use Permit and Water Licence application and supporting documents, potential impacts to the species at risk listed above can be avoided or minimized.
- 2) For information on NWT species at risk in the project area please consult:
 - <http://www.nwtspeciesatrisk.ca/SpeciesAtRisk>
 - <http://www.nwtspeciesatrisk.ca/ToolsForDevelopers>
 - [Species at Risk in the NWT - 2016 Edition](#)

The Proponent should be aware of the prohibitions that may apply to the species that occur in your area. Check the *Species at Risk (NWT) Act* regulations webpage (<http://www.nwtspeciesatrisk.ca/ToolsForDevelopers>) to see if there are any applicable regulations or agreements with land owners that must be followed for NWT-listed or pre-listed species at risk.

- 3) For information and legislative requirements related to federally-listed species at risk, consult the Species at Risk Public Registry (www.sararegistry.gc.ca) or contact Environment and Climate Change Canada or the Department of Fisheries and Oceans.
- 4) Ensure that employees and contractors are aware of the species at risk that might occur in the project area. This includes species that are pre-listed or listed under the *Species at Risk (NWT) Act*, species listed under the federal *Species at Risk Act*, and species designated as at risk by COSEWIC.
- 5) If species at risk are encountered during project undertakings, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.

- 6) Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, monitoring should include recording the locations and dates of any observations of species at risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the Proponent to avoid contact with or disturbance to the species, its habitat, and/or its residence.
- 7) Submit sightings of species at risk and monitoring information to ENR's Wildlife Management Information System (WMIS) and to other appropriate regulators and organizations with management responsibility for the species as may be necessary at:

<http://www.enr.gov.nt.ca/programs/wildlife-research/wildlife-management-information-services>

Further information on the WMIS can be found at:

<http://www.enr.gov.nt.ca/programs/wildlife-research/wildlife-management-information-services>

Topic 4: Cumulative Effects Tracking

Comment(s):

Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

Recommendation(s):

- 1) The Proponent should submit the bounding coordinates, or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The MVLWB's "Standards for Geographic Information Systems (GIS) Submissions" should be followed when submitting spatial data.

Topic 5: Nesting Birds

Comment(s):

- Conducting activities involving vegetation clearing, ground disturbance or demolition of buildings and other structures during the nesting season increases the risk of contravening paragraph 51(1)(a) of the *Wildlife Act* which prohibits

destroying, disturbing, or taking the eggs of a bird or a nest when it is occupied by a bird or its eggs, or destroying, disturbing, or taking the nest of a prescribed bird at any time.

- Protection of nests is essential to ensuring reproductive success and survival of both adults and young.
- The Canadian Wildlife Service of Environment and Climate Change Canada (ECCC) is the responsible management authority for migratory birds protected under the Migratory Birds Convention Act, 1994.

<https://ec.gc.ca/nature/default.asp?lang=En&n=496E2702-1>

- GNWT is responsible for the management of non-migratory birds including raptors.
- Critical breeding periods for NWT raptors can start as early as the 1st week of April and last up until 3rd week of September, depending on the species and location.

Recommendation(s):

- 1) Follow ECCC's Avoidance Guidelines related to incidental take of migratory birds in Canada available at:

<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1>)

- 2) Consult ECCC's *General Nesting Periods of Migratory Birds in Canada* for current information on general nesting periods of federally protected migratory birds that occur within the NWT. Available at:

<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1>

- 3) Contact ENR, Wildlife Division for information on critical breeding periods for raptors and/or known raptor nest sites in the project area.
- 4) Conduct vegetation clearing and any new ground disturbance outside of the nesting season for birds in the project area.
- 5) If active nests are encountered during project activities implement protective buffer zones described in the regional land use plan, Table 6 of the Northern Land Use Guidelines – Seismic) or ECCC's Recommended *Buffer Zones and Setback Distance* available at:

Topic 6: Wildlife Disturbance and Harassment

Comment(s):

Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife.

Schedule A – Part 1 of the *Wildlife General Regulations*, sets out the species prescribed as big game, and Schedule B sets out prescribed wildlife for the purpose of paragraphs 52(a) and (b) of the *Wildlife Act*.

Disturbance to wildlife from sources such as noise, light, vibrations, and human presence can result in energetic stress, avoidance of key habitat, loss of reproductive fitness, injury or mortality of wildlife. Activities that may cause sensory disturbance to wildlife include vehicle traffic, stationary machinery, noise from blasting, excavation, crushing, seismic testing, vegetation clearing, and lighting or flaring.

Recommendation(s):

- 1) The Proponent should be aware that no wildlife should be disturbed, chased, or harassed by human beings on foot, in a motorized vehicle, or by aircraft. Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife. However, subject to section 55 of the *Wildlife Act* a person may chase wildlife away from a camp or work site if doing so is necessary to prevent injury or death to a person or damage to property.
- 2) Consult the setback distances, flight altitude guidelines and timing windows for wildlife provided in Tables 6 and 7 of the Northern Land Use Guidelines: Northwest Territories Seismic Operations Vol.9 (a) as they are applicable to variety of land use activities:

http://www.lands.gov.nt.ca/sites/lands/files/resources/nlug_seismic_2015_english_-_16_sept_2015.pdf

- 3) Consult the approved Land Use Plan, if applicable, that applies to the project area for further guidance on setback distances and timing windows to minimize disturbance to wildlife.
- 4) Wildlife shall be given the right of way at all times.
- 5) Suspend activities temporarily if one or more individuals of a big game species are spotted within five hundred (500) metres of the work site.

Topic 7: Reporting Wildlife Sighting

Comment(s):

Proponents are encouraged to record wildlife sightings and to submit these records to ENR's WMIS. Wildlife sightings data provides useful information for assessing changes in species distribution and the timing and location of different life history events such as migration, denning, nesting, calving, etc.

Recommendation(s):

- 1) Submit information about wildlife sightings (species, date, time, location, number of individuals, sex, behaviour, etc.) to WMIS at WMISTeam@gov.nt.ca. For further information on the WMIS consult:

<http://www.enr.gov.nt.ca/programs/wildlife-research/wildlife-management-information-services>

- 2) Contact the regional ENR office to obtain blank wildlife sightings forms.

Topic 8: Reporting Wildlife Defence/Property Kills and Wildlife Incidents

Comment(s):

Subject to paragraph 57(a) of the *Wildlife Act*, any big game or other prescribed wildlife that is killed to prevent injury or death to a person or damage to property must be reported to ENR as soon as is practicable. Section 7 of the *Wildlife General Regulations* describes what information must be included in the report.

Subject to section 58 of the *Wildlife Act* and sub-section 8(1) of the *Wildlife General Regulations*, any person who accidentally kills or seriously wounds big game or other prescribed wildlife with a motorized vehicle on a highway must report the event to an officer within 24 hours after the incident.

Recommendation(s):

- 1) Report all sightings of bears in and around the project location to your local ENR office. Any defence of life and property kills must be reported to the appropriate ENR office immediately. Please contact the following Regional Office as required:
 - Dehcho Region Wildlife Emergency Line at (867) 695-7433
- 2) Ensure all field personnel have completed a bear safety training course to decrease the risk of attracting bears to work sites and threats to human safety, learn how to respond to bear encounters, and decrease the risk of wildlife mortality resulting from kills in defence of life and property.
- 3) Consult the “Safety in Grizzly Bear and Black Bear Country” brochure, available at:

http://www.enr.gov.nt.ca/sites/enr/files/resources/safety_in_grizzly_and_black_bear_country_english.pdf
- 4) Report to an ENR officer as soon as is practicable any wildlife that is killed to prevent injury or death to a person or damage to property.
- 5) Report to an ENR officer any big game or other prescribed wildlife that is killed or seriously wounded by a motorized vehicle on a highway within 24 hours after the incident.
- 6) Reports must include at minimum the name of the person who killed or injured the wildlife, an explanation of the incident, the time, date and location of the incident, the species or quantity involved, and any other information requested by the wildlife officer.
- 7) Contact the regional ENR office to obtain blank wildlife incident forms.

Topic 9: Wildlife Attractants and Waste Management

Comment(s):

Subject to sub-section 66(1) of the *Wildlife Act* no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals or wildlife in danger.

Subject to sub-section 65(1) of the *Wildlife Act*, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the *Wildlife General Regulations* sets out the species prescribed as fur-bearers.

Recommendation(s):

- 1) Waste being stored on-site prior to being transported to a municipal landfill site, or disposed by other methods, must be stored in a manner that minimizes the attraction of wildlife, as it is a violation of *Section 66(1) of the Wildlife Act*. An animal proof, sealed container must be used for storing waste onsite to minimize wildlife being attracted to odours. For reference please refer to the following guidance document “Safety in Grizzly and Black Bear Country”

http://www.enr.gov.nt.ca/sites/enr/files/resources/safety_in_grizzly_and_black_bear_country_english.pdf

- 2) Project personnel should not intentionally feed wildlife or purposefully encourage wildlife to habituate to human presence.

Topic 10: Spill Contingency Planning

Recommendation(s):

- 1) In accordance with the *Spill Contingency Planning and Reporting Regulations Section 10*, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.
- 2) With respect to the *Environmental Protection Act Section 5 (1b)* all spills regardless of amount must be cleaned up, and contaminated materials disposed of at an approved facility, and as per *Section 5(1c)* all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.
- 3) ENR recommends, for increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.

ENR reminds the Proponent that references to applicable statutes and regulations are to be considered as advice only, and should not be construed as permission to contravene any other applicable statutes and regulations not mentioned in this letter.

Comments and recommendations were provided by ENR technical experts in the Environmental Protection and Waste Management Division, the Wildlife Management Division and the Dehcho Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Environmental Stewardship and Climate Change Division.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Clancy', written in a cursive style.

Patrick Clancy
Environmental Regulatory Analyst
Environmental Assessment and Monitoring Section
Environmental Stewardship and Climate Change Division
Department of Environment and Natural Resources
Government of the Northwest Territories



Julian Morse, Regulatory Specialist
Jen Potten, Regulatory Coordinator
Mackenzie Valley Land and Water Board
PO BOX 2130
YELLOWKNIFE, NT, X1A 2P6

AUG 07 2019

SENT VIA ONLINE REVIEW SYSTEM

Dear Mr. Morse and Ms. Potten:

Re: Canadian Zinc Corporation – Staging Area Land Use Permit MV2019T0021 Application.

Thank you for providing the opportunity to comment on the above-noted application. The Government of the Northwest Territories Department of Lands (Lands) submission is intended to assist the Mackenzie Valley Land and Water Board (MVLWB) in making its preliminary screening determination under ss. 125(1) of the *Mackenzie Valley Resource Management Act*, and to provide recommendations for the MVLWB's consideration in developing land use permit conditions, should the project proceed to the regulatory phase.

All Departments within Lands with interests related to the project have reviewed the application and provide the following comments in ORS spreadsheet format, including recommendations for the MVLWB's consideration. The Land Use Inspector has provided comments on the ORS in a separate submission.

Should the MVLWB or any reviewers have questions about this submission, please contact Darren Campbell, Project Assessment Analyst, by email at Darren.Campbell@gov.nt.ca or by phone at 867-767-9180 (Ext. 24024) or Melissa Pink, Manager, Project Assessment Branch, by email at Melissa.Pink@gov.nt.ca or by phone at 867-767-9180 (Ext. 24021).

.../2

Sincerely,



Lorraine Seale
Director
Securities and Project Assessment
Department of Lands

Attachments: Comments in ORS format

Land Use Permit Security Worksheet

Application Number: MV2019T0021

Input
Amount Multiplier

Camp (C1)			
DRAFT			
Temporary Structures			
Input number of tent frames or weatherhaven (3.5m x 4.2m)	0	\$200.00	\$0.00
Input number of trailers (3.5m x 15.2m)	2	\$300.00	\$600.00
Input total square metres of other temporary structures (i.e. core shacks)	0	\$2.50	\$0.00
Fixed Structures			
Input total square metres of fixed structures	0	\$25.00	\$0.00
Solid Waste			
For non-burnable material, input # of person days per season	10	\$1.00	\$10.00
For burnable material, input # of person days per season	10	\$0.50	\$5.00
Total C1			\$615.00

Regulated / Hazardous Materials (R1)			
Based upon on site volume			
Explosives; up to 500 kg (~pallet) dry explosives input 1, if none, input 0	0	\$500.00	\$0.00
Additional Explosives; input total kg >500	0	\$0.50	\$0.00
Drilling Muds (oil based); enter number of 63 m ³ (or equivalent) containers	0	\$1,000.00	\$0.00
Used Oil, Lubes and Antifreeze: enter number of pieces of heavy equipment	5	\$500.00	\$2,500.00
Other;			

Total R1			\$2,500.00

Hydrocarbon Storage and Transfer (H1)			
Based upon on site volume			
Gasoline and Diesel			
Enter total volume of gasoline&diesel <25,000 L	0	\$0.50	\$0.00
Enter total volume of gasoline&fuel > 25,000 L	0	\$0.25	\$0.00
Total Gasoline and Diesel			
	0	25%	\$0.00
When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0			
Aviation Fuel			
Enter total volume of aviation fuel < 25,000 L	0	\$0.50	\$0.00
Enter total volume of aviation fuel > 25,000 L	0	\$0.25	\$0.00
Total Aviation Fuel			
	0	25%	\$0.00
When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0			
Total H1			\$0.00

Land Disturbance (L1)			
Disturbed Surface Area			
<i>(Developed surface area that may require restoration through the use of scarification, reseeding, fertilizing or other similar techniques)</i>			
Enter number of hectares disturbed	1	\$1,000.00	\$1,000.00
Other Land Disturbances			
Creek Crossings; enter number of creek crossings	1	\$500.00	\$500.00
Off-Road Activities; if any activities are likely, enter 1	1	\$500.00	\$500.00
Sump Factor; enter total area occupied by sumps in m ²	0	\$10.00	\$0.00
Well Factor; enter number of wells.	0	\$25,000.00	\$0.00
Total L1			\$2,000.00

Land Use Permit Security Worksheet (continued)

Application Number: MV2019F0021

**Input
Amount Multiplier**

Equipment (E1)			
Based upon type of equipment			
Enter number of pieces of heavy equipment (i.e. dozer, forklift, large gensets)	5	\$1,000.00	\$5,000.00
Enter number of drills	0	\$1,000.00	\$0.00
Enter number of light vehicles (trucks, atvs, snowmobiles, boats)	1	\$250.00	\$250.00
Enter number of small generators or pumps	1	\$100.00	\$100.00
Enter number of empty fuel storage tanks	4	\$500.00	\$2,000.00
Total E1			\$7,350.00

Security Calculation			
Preliminary Calculation			
Enter amount from C1			\$615.00
Enter amount from R1	DRAFT COPY		\$2,500.00
Enter amount from H1			\$0.00
Enter amount from L1			\$2,000.00
Enter amount from E1			\$7,350.00
Preliminary Calculation, total of above		A	
Multipliers			
Site Access Multiplier. If the project has all weather road access enter 1, if ice road access enter 1.5, if air access enter 2		B	1.5
Performance Multiplier. If applicant has successfully completed the terms of a LUP enter 0.85, otherwise enter 1		C	0.85
Environmental Risk Factor. If location has high environmental value or unusual environmental risk enter 2. If location is previously disturbed enter 0.75. Otherwise enter 1.		D	1
Calculated Security			
Multiply preliminary calculation (A) by performance multipliers (B, C and D)		E	\$15,892.88
Existing Securities			
List existing associated permits and amount of overlapping security			
Permit: _____			
Overlapping Securities, total of above	F		\$0.00
Final Security Determination			
Subtract overlapping securities (F) from calculated security (E)			\$15,892.88

Comments
C1 - Solid Waste - The application indicates 5-10 persons, but no duration of activities. Used 10 people for 2 weeks - 1 week mobilization and 1 week demobilization. 10X14 = 140 person days/season.
R1 equipment = 5: an excavator, a dozer, a crew carrier; one 22 ton skidder; and a service truck. The camp trailers may have glycol in their pipes, but have not been included here. Skid steer is a lighter piece of equipment as reflected in E1 equipment.
H1 fuels - Application notes fuel tanks are empty (see also E1; and condition MAXIMUM FUEL ON SITE). The application did not indicate the equipment will be drained prior to storage; staff suggests the short duration of storage means the equipment will NOT be drained. Any fuel in the equipment is captured in E1 equipment.

Environmental Risk Factor was set at 1, rather than 0.75, because of proximity to the Liard River and the staging area is proposed to be located on an existing, well used public access corridor.