



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

Tel: 867-669-0506 Fax: 867-873-6610
www.mvlwb.com

Staff Report

Applicant: Canadian Zinc Corporation Ltd.	
Location: Prairie Creek Mine, NT	File Number: MV2001L2-0003 MV2019L2-0006 MV2019C0011
Date Prepared: March 20, 2020	Date of Board Meeting: April 2, 2020
Subject: Board update regarding non-compliant effluent discharge in 2019, outstanding security and status of management plans.	

1. Purpose

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board) non-compliance events associated with Water Licence (Licence) MV2001L2-0003 and Licence MV2019L2-0006, outstanding security required by Licence MV2019L2-0006 and Land Use Permit (Permit) MV2019C0011, and the status of associated management plans.

2. Background

- September 9, 2019 – Issuance of Licence MV2019L2-0006 and Permit MV2019C0011;
- November 27, 2019 – Security adjustment request received;
- December 6, 2019 – Affected parties notified of security adjustment request;
- December 8, 2019 – Security for Licence MV2019L2-0006 and Permit MV2019C0011 due;
- December 17, 2019 – Security adjustment request presented to the Board; the Board subsequently denied the request;
- January 22, 2020 – Non-compliance letter regarding Permit MV2019C0011;
- January 23, 2020 – Non-compliance letter regarding Licence MV2019L2-0006;
- February 17, 2020 – Non-compliance letter regarding Licence MV2001L2-0003;
- February 27, 2020 – Replies to non-compliance letters;
- **April 2, 2020 – Update presented to the Board;**
- September 8, 2024 – Expiration of Permit MV2019C0011; and
- September 8, 2026 – Expiration of Licence MV2019L2-0006.

3. Discussion

On September 9, 2019, the Board issued Licence MV2019L2-0006 and Permit MV2019C0011 (attached) for CZN to conduct mineral exploration activities at the Prairie Creek Mine, including the development of an underground decline, and treatment of mine water emanating from an existing portal. The authorizations expire on September 8, 2026 and September 8, 2024, respectively. The issuance indicated the Effluent Treatment Plan, Minewater Treatment Contingency Plan, Waste Management Plan, and Spill Contingency Plan required resubmission in accordance with comments made during the review, and that the plans would be considered approved pending confirmation of conformity by Board staff.

The September 9, 2019 issuances replaced previous authorizations; Licence MV2019L2-0006 replaced MV2001L2-0003 while Permit MV2019C0011 replaced MV2012C0008. The September 9, 2019 authorizations increased security from the previous authorizations as follows:

- MV2019L2-0006 increased security to \$210,648.00 from \$70,000.00.
- MV2019C0011 increased security to \$236,338.00 from \$30,000.00.

On November 27, 2019, CZN submitted a security adjustment request (attached). CZN provided the following reasons for the request:

- CZN disagreed with the Board's conclusion that CZN is currently responsible for the treatment of water from the mine workings.
- CZN indicated they were considering the Board's recommendation to amend the Mining Licence MV2008L2-0002 to include the activities in Licence MV2019L2-0006.
- CZN's indicated non-compliant effluent discharge is related to water from "old mine" workings and CZN wished to discuss responsibility for water treatment with the Government of the Northwest Territories (GNWT).

On December 6, 2019, Board staff notified affected parties that CZN cannot submit a security adjustment request unless approved by the Board. In the same letter, Board staff indicated the information would be presented to the Board for consideration of whether to allow CZN to submit a security request (attached). Security for Licence MV2019L2-0006 and Permit MV2019C0011 were due December 8, 2019.

On December 17, 2019, the Board issued a Decision Letter denying the security adjustment request stating CZN did not provide new evidence for the Board to consider (attached). The Board indicated they would consider security adjustments if CZN decided to apply for an amendment of Licence MV2008L2-0002 to include the mineral exploration activities under Licence MV2019L2-0006; CZN has not applied for such an amendment to date. The Board also communicated that in order to request a deferral of the security increase CZN would be required to provide a proposed timeline with supporting rationale; CZN has not submitted proposed timelines for a deferral to date.

In the December 17, 2019 Decision letter, the Board also noted CZN's desire to discuss the responsibility of water treatment at the Prairie Creek Mine with the GNWT, and that if discussions resulted in new evidence the Board would consider adjusting security as a result.

On January 22, 2020, GNWT Department of Lands Dehcho Region (GNWT-Lands) issued a non-compliance letter (attached) to CZN communicating the security deposit for Permit MV2019C0011 was outstanding (due December 8, 2019). The letter indicated no work can be conducted under Permit MV2019C0011 while security is outstanding.

On January 23, 2020, GNWT Department of Environment and Natural Resources (GNWT-ENR) issued a non-compliance letter (attached) to CZN communicating the exceedance of effluent discharge criteria (EQC) from August to October 2019, and the outstanding security deposit under Licence MV2019L2-0006

(due December 8, 2019). The letter indicated no work can be conducted under Licence MV2019L2-0006 until the entire security is paid. The letter also indicated that formal legal action was not being pursued at this time.

On February 17, 2020, GNWT-ENR issued a non-compliance letter to CZN communicating the exceedance of EQC at SNP 3-4 in July 2019 under Licence MV2001L2-0003 (attached). The letter indicated formal legal action was not being pursued at this time.

On February 27, 2020, CZN replied to GNWT-ENR and GNWT-Lands in separate letters (attached). With regards to the exceedance of EQC, CZN stated water from “old mine” workings developed by the former owner, Cadillac Explorations, exceeded criteria for zinc, while water from the underground decline developed by CZN met discharge criteria. CZN also indicated the following: they have initiated discussions with GNWT-ENR regarding the responsibility of water from the “old mine” workings; their tenure on the property is on a limited liability basis defined by surface lease 95F/10-5-5 (attached) established with Indigenous and Northern Affairs Canada on December 30, 2003; they plan to request a 90-day extension for posting security under MV2019L2-0006 in order to hold discussions with GNWT-ENR on the responsibility of water from “old mine” workings; and they plan to request an amendment to MV2019C0011 Condition 49 to stipulate the security deposit is required prior to the commencement of activities, rather than within 90 days from the effective date. Lastly, CZN requested the security held under Licence MV2001L2-0003 (\$70,000.00) and Permit MV2012C0008 (\$30,000.00) be refunded or transferred to MV2019L2-0006 and MV2019C0011.

In March 2020, CZN resubmitted the Effluent Treatment Plan, Minewater Treatment Contingency Plan, Waste Management Plan, and Spill Contingency Plan for Board staff conformity, as per the September 9, 2019 issuance. Board staff note the EQC exceedances discussed in the January 23, 2020 and February 17, 2020 letters came to light after the September 9, 2019 issuance. Board staff are currently reviewing the plans to ensure conformity as per the Board’s Reasons for Decision dated September 9, 2019. Given the non-compliance issues on site, Board staff are of the opinion that approval of the Effluent Treatment Plan and Minewater Treatment Contingency Plan are beyond the scope of Board staff confirmation of conformity. Board staff are of the opinion that these plans require input from the public and should be distributed for public review and could be brought to the Board for decision in order to address the non-compliance issues.

4. Conclusions

CZN has not posted security for authorizations MV2019C0011 and MV2019L2-0006 (\$236,338.00 and \$210,648.00, respectively) to date.

EQC exceedances occurred in summer 2019 under the current authorization MV2019L2-0006 and the previous authorization MV2001L2-0003 prior to its expiry in September 9, 2019.

The Board could direct Board staff to distribute the Effluent Treatment Plan and Minewater Contingency Plan for public review and bring these Plans to the Board for approval.

5. Recommendations

Board staff request Board direction, specifically that Board staff are to distribute the Effluent Treatment Plan and Minewater Contingency Plans for public review and present these Plans to the Board for Decision.

6. Attachments

- [Licence MV2001L2-0003](#)
- [Permit MV2012C0008](#)
- [Licence MV2019L2-0006](#)
- [Permit MV2019C0011](#)
- [MV2019C0011 Security Adjustment Request](#), dated November 27, 2019
- [Notification to Affected Parties](#), dated December 6, 2019
- [Decision Letter Denying Security Adjustment Request](#), dated December 17, 2019
- [MV2019C0011 GNWT Non-Compliance Letter](#), dated January 22, 2020
- [MV2019L2-0006 GNWT Non-Compliance Letter](#), dated January 23, 2020
- [MV2001L2-0003 GNWT Non-Compliance Letter](#), dated February 17, 2020
- [CZN's Reply to GNWT Non-Compliance Letter for MV2019C0011](#), dated February 27, 2020
- [CZN's Reply to GNWT Non-Compliance Letter for MV2019L2-0006](#), dated February 27, 2020
- [CZN Surface Lease 95F/10-5-5](#), included in Annex A of attached file

Respectfully submitted,



Andrew Wheeler
Regulatory Specialist



Jacqueline Ho
Regulatory Specialist