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Environnement Canada

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Our file: 4780 006
Your file: EA0809-002

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Via email amacdonald@mveirb.ca

Re: Scoping Comments on Canadian Zinc Corporation's Prairie Creek Mine Proposal

Thank you for the opportunity to provide input to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) regarding the scope of the proposed Prairie Creek Mine Environmental Assessment. Environment Canada (EC) is a Responsible Minister as defined under Part 5 of the *Mackenzie Valley Resource Management Act* (MVRMA) for this assessment, and will be providing specialist advice in relation to the protection and conservation of the environment pursuant to its mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act* 1999, Section 36(3) of the *Fisheries Act* 1985, the *Metal Mining Effluent Regulations* 2002, *Migratory Birds Convention Act* 1994, and the *Species at Risk Act* (SARA).

Proposed Scope of Project

Canadian Zinc Corp. (CZN) has proposed to limit the scope of the Environmental Assessment (EA) to those components of the proposed operations which differ substantially from those which were permitted in 1982, relying on Section 157.1 of the MVRMA. Specifically, they suggest the EA should only focus on the particular improvements being proposed, including the water storage pond reconfiguration, use of paste backfill for tailings disposal, the water treatment plant, emplacement of the waste rock pile in a draw above Harrison Creek, and the use of two transfer facilities. It is the proponent's contention that the use of the winter road should be exempt from being considered in this environmental assessment.

While Environment Canada (EC) acknowledges the court decision (Canadian Zinc Corp. vs the Mackenzie Valley Land and Water Board and the Canadian Parks and Wilderness Society and the Dehcho First Nations, May 6, 2005, Supreme Court of the NWT) in favor of "grandfathering" the winter road, thus, exempting it from an EA, the department none-the-less has serious concerns with limiting the scope of the assessment in this way. The scope of the project may be limited to those aspects which are new or changed, but the scoping of the assessment should be done in a much broader context; taking into account such overarching factors as the cumulative effects (SS117(2) MVRMA) likely to result from the project, as well as climate change effects, which weren't contemplated in

the original environmental evaluation. In addition, the legislative framework and environmental conditions have changed considerably in the last 26 years.

EC recommends that the scope of the project include, but not be limited to:

Species at Risk

The following comments are made pursuant to the *Species at Risk Act* (SARA), which came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that species on other Schedules of SARA and under consideration for listing on SARA, including those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), also be considered during an environmental assessment in a similar manner.

Environment Canada recommends that the Terms of Reference for the Developer's Assessment Report request that the developer identify all Species at Risk that could be encountered or affected by the project and that any potential adverse effects of the project to the species, its habitat, and/or its residence noted. All direct, indirect, and cumulative effects should be considered. The Terms of Reference should also request that the developer outline strategies for mitigation and monitoring of potential adverse effects to Species at Risk. Environment Canada acknowledges that MVEIRB typically includes such Species at Risk requirements in the Terms of Reference. However, given the complexities of how this current environmental assessment relates to past assessments of the Prairie Creek Mine, Environment Canada would like to re-emphasize the need to address the Species at Risk requirements in the Terms of Reference.

The Developer has suggested that several components of the mining project need not be assessed in the current environmental assessment because they were previously permitted. Environment Canada cautions that such an approach may not be adequate in ensuring that all obligations relating to SARA are addressed. Previous environmental impact assessments may not have assessed potential impacts to current Species at Risk.

Furthermore, previous Species at Risk assessments, mitigation, and monitoring may not be up to current standards. Consideration should also be given as to whether there is an increase or change in usage of an existing component. For example, impacts of an airstrip or road may have been assessed based on the predicted level and timing of usage in the previous assessment. If the usage of the airstrip/road increases or there is a change in the time of year when the airstrip/road is being used, there could be new impacts to wildlife that were not previously assessed.

Migratory Birds

Environment Canada recommends that the Terms of Reference request that the developers identify potential adverse effects to migratory birds, and strategies for mitigation and monitoring.

Cumulative Effects

The Cumulative Effects (CE) of activities associated with the proposed project should be assessed in the current legislative and environmental context, and should also include use of the road, and consideration of Species at Risk. There are a number of collateral or supporting activities that CZN will undertake that should be included in the CE assessment, including the old Cat and Grainger camps, which CZN has promised to take over and remediate, and all exploration activity in the area.

Water Management:

All aspects of water management will need to be scoped into the EA, in order to identify volumes and predict water quality. The scope of the Developer's Assessment Report (DAR) should include an evaluation of the effects on the downstream receiving environment, and the spatial extent should be determined by the predicted extent of measureable changes to Prairie Creek under a range of predicted scenarios. It will be critical that the company demonstrate how their proposed treatment processes can minimize the extent affected, and contingency treatment plans should be included. We note that the company has not been successful in consistently meeting the licence criteria to date for zinc, and has had periodic exceedances for a number of parameters, and recommend that a thorough evaluation of effluent treatment be provided.

To arrive at effluent quality predictions, the source constituents will have to be identified and predicted; accordingly the mining and processing will need to be scoped into the assessment.

Air Quality:

An assessment of air quality from equipment use, incineration, and dust generation should be included in the scope.

Transportation:

Contaminant deposition along the mine haul roads and the transportation corridor should be assessed.

Waste Rock Pile:

This is a new component, and the assessment should include effects on surface water quality and quantity, on wildlife, and on closure.

Accidents and Malfunctions:

The scope of the assessment should include consideration of the potential accidents, malfunctions and unplanned events that could occur in any phase of the project, the likelihood and circumstances under which these events could occur, the environmental effects that may result from such events and mitigation measures to help lessen any potential impacts.

Waste Management:

This should include full details on impacts and mitigation for the landfill, a landfarm (if proposed), sewage treatment, and incineration management.

Follow-up/Monitoring Program:

The purpose of a follow-up program is to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures. Environment Canada recommends that the environmental assessment describe the follow-up program and its associated requirements. This program framework should be compatible with other regulatory monitoring requirements, such as the Environmental Effects Monitoring program required under the Metal Mining Effluent Regulations, and the licence Surveillance Network Program and aquatic monitoring requirements. The proposed monitoring must demonstrate the ability to detect change and inform adaptive management, and include all environmental components.

To this end, the proponent should demonstrate that the existing baseline data are sufficient in comparability and length of record.

Impacts of the Environment on the Project:

How will the project be affected by climate change? The scope should also include consideration of the effects of seismicity, precipitation and freezing conditions on the operations of the project. This should include aspects of infrastructure closure planning.

Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 669-4735 or by email at anne.wilson@ec.gc.ca.

Yours truly,

Original signed by

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Environment Canada

cc: (Carey Ogilvie, Head, EA-North, Environment Canada, Yellowknife)
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