

Nahanni National Park Reserve
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May 11, 2001

Mackenzie Valley Environmental Impact Review Board
P.O. Box 938, 5102 - 50th Ave.
Yellowknife, NT
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Attn: Luciano Azzolini, EAO

**RE: Draft Work Plan and Terms of Reference for an EA of Canadian Zinc Corporation
Proposed Developments (File #'s MV2001C0022, MV2001C0023, MV2001L2-0003).**

Dear Mr. Azzolini;

Please find attached to this letter comments from Nahanni National Park Reserve concerning the Draft Work Plan and Terms of Reference for the Environmental Assessment of the Canadian Zinc Corporation Surface Exploration, Underground Decline and Metallurgic Plant Operation Development.

Sincerely

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Nahanni National Park Reserve

Comments on

“Draft Work Plan & Draft Terms of Reference for the Environmental Assessment of the Canadian Zinc Corporation Surface Exploration, Underground Decline and Metallurgic Plant Operation Development”

May 11, 2001

Section 2 - Chronology of Events

✓ There is no mention of the fact that on April 15, 2001, Pehdzeh Ki First Nation referred the development proposals to the MVEIRB.

Section 3 - Background

3.2.3 Review Board Functions

✓ Reference is made to **two(2)** EA's. Are there not three(3) EA's associated with this proposed development (mineral exploration, underground decline, and metallurgic pilot plant)?

Section 4 - EA Work Plan

✓ Table 1 provided an estimated timeline for completing the two (three?) EA processes. Mining developments subject to other environmental regimes in Canada require much longer time frames for a detailed analysis and understanding of the environmental implications. The timeline presented here indicates that only three weeks will be required by the proponent to complete the EA and that an EA decision will be made within little more than two months. Is this timeframe realistic in light of the potential environmental implications of the proposed projects?

Section 5 - Milestones and Responsibilities

5.1.12 EA Decision and Written Reasons

✓ The final sentence in the first paragraph should refer to the 2 referring bodies, not only NNPR.

Section 7 - Scope of Development

7.2 Accessory Developments and Activities

Exploratory Drilling

- ✓ The development proposes drawing water from a local water supply/aquifer for drilling purposes. What quantity of water will be drawn and from what source?

Underground Decline and Drilling

- ✓ The development proposes to release water from the settling pond into Harrison Creek. What quantities of water will be released and at what rates of flow?

Metallurgical

- ✓ The development proposes to use between 2000-4000 m³ of water, of which half will come from an on-site aquifer using existing on-site wells. Where will the other half (1000-2000 m³) come from?

Section 8 - Scope of Assessment

8.1 Previous Screenings and Reports

- ✓ In the second paragraph, it is stated that there is a completed EA report for the Prairie Creek Mine. If the information in this report is to be used to complete the assessment for the current projects, this information will need to be reviewed to ensure it is current. What is the date of the Prairie Creek Mine EA report? Depending on the age of this EA report, changes may be required. This would be particularly important with respect to the proper storage of fuel, since environmental contamination from petroleum products has been recognized as a widespread concern and consequently, storage requirements have been significantly upgraded.
- ✓ Table 3 states that existing information for Accidents and Malfunctions is acceptable, however the information provided in the applications was very general. Will the contingency plans be made available for review? This could be very important, especially with the associated CZN project Cat Camp Fuel Cache Retrieval and Clean-up Development.
- ✓ Table 3 states that cumulative impacts have been addressed for the drill project. However, the cumulative impacts for the drill project must be assessed together with the test mill and the decline and drill project. In addition, the impacts resulting from recently approved, and past projects must be considered in the cumulative effects assessment.

Section 9 Environmental Assessment

✓ The Terms of reference state that certain information is required for the MVEIRB to properly execute its duties under the MVRMA. Existing documentation is being used to address some of the items required by the Board. However, because this information will not be included in the EA report, the reviewers will not get a complete understanding of the proposed projects and the potential impacts.

✓ One item of particular concern is the environmental record of the company. Have there been accidental releases of petroleum products in the past? This information is very important to Parks Canada to understand the possible downstream impacts to Nahanni National Park Reserve.

✓ A second items of particular concern is that the proponent will not be required to provide “plans for environmental management plan, follow-up and monitoring”. These plans are essential to ensure that the company conducts its business in an environmentally sound manner that will provide protection to the natural resources. Failure to provide clear information and specific detail on environmental management, follow-up and monitoring could result in the failure to conduct business in the best way possible.

9.2 Alternatives

Analysis of alternatives to the project including, but not limited to, the “do nothing” scenario, and other ways to meet the project need should be included.

✓ An analysis of the alternative means of carrying out the project including, but not limited to, alternative locations (i.e. test mill location, waste rock disposal location), alternative combinations of facilities and activities as appropriate should also be included.

✓ The Terms of Reference should require the identification and application of criteria to determine the technical and economic feasibility of the alternatives (e.g. natural, social, economic and cultural environment).

Identification of potential adverse environmental effects of each feasible alternative means would also need to be included.

The rationale for the preferred alternative should be presented.

9.3 Environmental Impacts

Bolded words indicate suggested additions to the original Terms of Reference under the Environmental Impacts section.

For each of the following environmental components outlined below, the following should be discussed along with methodologies for assessing them:

- The elements and functions of the environment which are affected, where, how much, for how long, and with what overall effect
- The degree of uncertainty in predicting these effects
- Mitigation with the methods, equipment, procedures, and policies needed to facilitate the mitigation. This would also include the person who is responsible for the implementation of the mitigation measures and the system of accountability. The effectiveness of the proposed measures, the risk of mitigation failure and the potential severity of the consequences should also be discussed. The reasons for rejecting other mitigation measures should be discussed.
- Residual effects remaining after mitigation should be identified and the significance of these effects discussed with respect to magnitude; geographic extent; timing, duration and frequency; degree to which effects are reversible; ecological and social/cultural context; and, probability of occurrence.

9.3.1 Air Quality and Climate

- (dust particulate exhaust fumes, **test mill emissions** and other air contaminants)

9.3.4 Water Quality and Quantity

- This analysis shall include the impacts on water quality and quantity; catchment areas, **and downstream effects**.
- Prediction of chemical, physical and toxic characteristics of the final discharge.
- Plans for structural monitoring of the sumps and tailings pond.
- Consideration of natural water phenomena and accidents in the design of mitigation measures.

9.3.6 Wildlife and Wildlife Habitat

- The environmental assessment report will also include an analysis of habitat fragmentation as a result of the roads (including tote roads) and the resulting impact to wildlife.

9.4 Cumulative Impacts

Cumulative impacts should be discussed for the 3 applications under review, other projects/activities being carried out by the proponent, and any other existing, proposed, or reasonably foreseeable projects. The following should be included:

- Methods for cumulative effects assessment
- Time and spatial boundaries and rationale
- Location and timing of all projects included in the assessment
- Discuss and attempt to quantify the cumulative impacts of all projects on the environment
- Discuss and attempt to quantify the contribution of the 3 proposed projects to existing stressors
- Identify mitigation measures for the cumulative effects
- Identify uncertainties to evaluate the accuracy of the assessment of cumulative effects and any proposed mitigation

Follow-up Programs

This section of the EA should provide information on proposed monitoring programs and actions to be taken to respond to monitoring results, including plans for a formal follow-up program to verify the predictions contained in the EA and adjust for unforeseen circumstances.

The monitoring program should be incorporated at all phases of the project to ensure that regulatory requirements are met, adverse impacts are avoided or minimized, and beneficial impacts are maximized as predicted in the EA. Description of the monitoring program should include, but not be limited to:

- Objectives
- Schedule
- Aspects to be monitored
- Frequency, duration and geographic extent of monitoring
- Approaches and methods for analysis
- Reporting and response mechanisms for adjusting the project design, if necessary, based on results
- Procedures to assess the effectiveness and quality of the monitoring program

Follow-up is an ongoing verification of the accuracy of the environmental assessment and the effectiveness of mitigation. The report should discuss the need for this and how it would be structured.