

**FAKED**  
Oct 19, 2001

## Facsimile

### Mackenzie Valley Environmental Impact Review Board

**To:**

Peter Campbell, Canadian Zinc Corp., Vancouver	(604)	688-2043 -
Pauline Campbell, Nahanni Butte Dene Band, Nahanni Butte	(867)	602-2910 -
Sharon Pellissey, James Sergeant, RMO, and SAO, Pehdzeh Ki FN.	(867)	581-3229 -
Rita Cli, Liidli Koe First Nation, Fort Simpson	(867)	695-2665 -
Bruce Leclaire, SAO, Village of Fort Simpson	(867)	695-2005 -
Alison de Pelham, Deh Cho First Nations, Fort Simpson	(867)	695-2038 -
Greg Yeoman, CPAWS, Yellowknife		873-9593 -
Alexandra Borowiecka, Ecology North, Yellowknife		920-2986 -
Legal Counsel	(403)	282-6182 -
Brett Hudson (as coordinator for all GNWT departments)		873-0114 -
Paula Pacholek (as coordinator for DOE branches/programs)		873-8185 -
David Tyson, DFO		669-4941 -
Iannick Lamirande, NRCan, Ottawa	(613)	995-5719 -
Doug Tate, Nahanni National Park Reserve	(867)	695-2446 -
A\Executive Director, MVLWB, Yellowknife		873-6610 -
Ranjitt Soniassy, DIAND / <i>Murray Tappell</i>		669-2701 -

**From:** Luciano Azzolini, EAO

**Pages:** 5 including this cover

**Date:** Friday, October 19, 2001

**File:** EA01-002 Metallurgical Pilot Plant and Deline

**Subject:** Information Requests

Please see the attached information requests (IR's). Completion of the Report of Environmental Assessment for the Metallurgical Pilot Plant and Decline environmental assessment (EA01-002) is dependent on the Canadian Zinc Corporation's satisfactory submission of responses to the IRs. Please note, that Nahanni National Park and the Canadian Parks and Wilderness Society – NWT Chapter, are requesting the Review Board's authority to issue Information Requests. Once a determination is made, they may be issued to the Canadian Zinc Corporation as is, or as amended, by the Review Board after the close of the public registry.

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From.....

MVEIRB  
P.O. Box 938  
Yellowknife, NT X1A 2N7  
Phone (867) 873-9189  
Fax (867) 920-4761

**Review Board Information Request #1**  
**EA01-002 Canadian Zinc Corporation Metallurgical Test Plant and Underground Decline**  
**and Drilling Exploration Program**

**To:** Canadian Zinc Corporation

**Date:** October 20, 2001

**From:** Louie Azzolini, Environmental Assessment Officer

**Phone:** 867-873-9189  
**Fax:** 867-920-4761  
**e-mail:** ea01@mveirb.nt.ca

**Subject:** Commitments Table

**Objective:** To have a comprehensive list of all of Canadian Zinc's (CZN) commitments to implement mitigative measures.

**Time Limit:** Provide response after all other IRs have been answered. If the Canadian Zinc Corporation makes any new commitments after this table has been submitted, an updated table must be submitted.

**Reference:** No reference.

**Preamble:** It is necessary to consolidate all of CZN's commitments as the environmental assessment report and Information Request responses by CZN presume future direction from the Mackenzie Valley Land and Water Board will enable the regulatory management of impacts to the Review Board's satisfaction. It would be preferable for the Review Board to have a comprehensive list of all CZN's commitments to enable the Review Board independent assessment and determination of likely, significant adverse impacts.

**Request:** Provide a comprehensive list of all of CZN's commitments. The list should be presented in the form of a table with sections that separate the commitments according to the items in the scope of the assessment (i.e. water quality and quantity, wildlife and wildlife habitat, etc.).

For each commitment, CZN should explain:

- The impact that the commitment was meant to mitigate; and
- Describe the commitment.

The table should be accompanied by a statement that CZN will adhere to all of the commitments in the table and should also be accompanied by the signature of an individual within the company with the authority to make this commitment on behalf of the company.

**Review Board Information Request #2**  
**EA01-002 Canadian Zinc Corporation Metallurgical Test Plant and Underground Decline**  
**and Drilling Exploration Program**

**To:** Canadian Zinc Corporation

**Date:** October 20, 2001

**From:** Louie Azzolini, Environmental Assessment Officer

**Phone:** 867-873-9189  
**Fax:** 867-920-4761  
**e-mail:** ea01@mveirb.nt.ca

**Subject:** Water Management and Water Quality

**Objective:** To address concerns regarding site water management.

**Time Limit:** As soon as possible.

**Reference:** **Item 7.9 of the Terms of Reference "Water Quality and Quantity"** directs CZN to report the impacts on the quality and quantity of surface and ground waters. This analysis shall include predictions of the chemical, physical and toxic characteristics of any discharges that may effect the immediate or downstream environment as well as predictions on water usage and discharge quantities.

**Preamble:** On October 12, 2001, Indian and Northern Affairs Canada (INAC) acting as an expert advisor to the Review Board identified outstanding water management concerns relating to the use of the existing tailings facility, the decline program sump water releases, and possible impacts of the water environment on the development (flooding).

For the following Information Requests please provide the credentials of those providing professional opinions. Where engineering views are provided an engineering stamp certifying the conclusions or views shall be provided.

**2.1 Request**  
Provide an engineer's certification that the current tailings facility is appropriately engineered for the purpose of the proposed development. That certification should serve to hold the engineer liable for conclusions of views provided.

**2.2 Request**  
As an adequate assessment of seepage from the pond cannot be made with two water level measurements, one in 1994 and the next in 2001. Please provide additional evidence to support CZN's claim that there is no seepage from the tailings facility.

### 2.3

#### **Request**

The relationship of Probable Maximum Precipitation (PMP) to Probable Maximum Flood (PMF) is best calculated using local precipitation and streamflow data collected over a long term. CZN's statement that regional climatological data were used to determine the PMP indicates that long-term records of local precipitation are lacking for the Prairie Creek area. Rainfall data are available from several stations in the area, including from Cadillac Mine from 1970 to 1982 and Tungsten from 1966 to 1990. Also, there are 10 additional years of streamflow data from the Prairie Creek flow gauge and, presumably, 20 additional years of regional climatic data from which an updated PMF can be calculated.

Prepare an updated Probable Maximum Flood calculation and have a qualified engineer certify the ability of the current tailings facility to withstand the impact associated with a PMF.

### 2.4

#### **Request**

Laboratory analysis of water from the 870 portal, as sampled by a variety of people from 1980 to 1999, shows elevated levels of aluminum, arsenic, cadmium, copper, iron, mercury, lead, selenium, silver, and zinc that exceed the CCME Guidelines for the protection of freshwater aquatic life. The Environmental Assessment Report explains that minewater will go to a settling pond and then be released to Harrison Creek if appropriate. It is noted that minewater is coming from the 870 portal at a rate of approximately 80 litres per minute, and draining into a sedimentation pond which empties into Harrison Creek. While CZN emphasizes that the 870 portal and mine workings are not related to the current application, there are concerns about the cumulative impact of minewater discharges from the existing portal, from the new decline, and from site runoff, all of which could potentially be directed to Harrison Creek. Should the quality of this water be poor or marginal, the cumulative effect of all of these wastewater streams would have a significant impact on the water quality of Harrison Creek and Prairie Creek. Although the results of an analysis of water samples from the 870 level were provided, there is still uncertainty with regard to the variability of the quality of this drainage at different times of year, and the potential effect of the combination of this wastewater with drainage of unknown quality from the new decline.

Provide a realistic scenario of the cumulative water quality impacts on Harrison Creek that could result from the combination of 870 portal water, site runoff, and water from the decline sump entering Harrison Creek. Provide a comparison of the cumulative results to existing CCME Guidelines, and draw attention to where CCME guidelines might be exceeded, and likely impacts on the environment of those exceedences.

### 2.5

#### **Request**

Erosion of the riprap armour is occurring at the base of the berm at the tailings facility. During the 28 August 2001 site visit, DIAND officials noted the instability of some of large armour boulders. The specific reasons or periods of

occurrence of the erosion and instability are unknown.

Provide an engineering certification regarding the integrity of the tailings facility armour specific to the proposed use of the facility and any PMF occurrence.

**Louie Azzolini**

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**From:** Louie Azzolini**Sent:** Friday, October 19, 2001 2:50 PM**To:** Bill Beaton Northern Projects Inc. (E-mail); Brett Hudson (E-mail); Chris Reid (E-mail); Chuck Blyth (E-mail); CPAWS (E-mail); Deh Cho First Nations (E-mail); DFO David Tyson (E-mail); Don Antoine (E-mail 2) (E-mail); Don H. Jack (E-mail); Doug Tate (E-mail); EAO2; Ecology North (E-mail); Eddie Kolausok (E-mail); Gary Potts (E-mail); Hay River Dene Reserve (E-mail); Iannick Lamirande (E-mail); J. Peter Campbell (E-mail); John Donihee (work) (E-mail); Julie Dahl (E-mail); Karl Lauten (E-mail); Mark Lange DFO (E-mail); Paul Kraft (E-mail); Paula Pacholek [Yel] (E-mail); Petr Cizek (E-mail); Ranjit Soniassy (E-mail); Roland Semjanovs (E-mail); Sierra Legal Defence Fund (E-mail 2); William (Bill) Carpenter (E-mail); WWF Tony Y. (E-mail); Zoe Posynick (E-mail)**Subject:** EA01-002 Metallurgical Pilot Plant and Deline - Information Requests

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**Phone:** 867-873-9189

**Fax:** 867-920-4761

**e-mail:** [ea01@mveirb.nt.ca](mailto:ea01@mveirb.nt.ca)

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