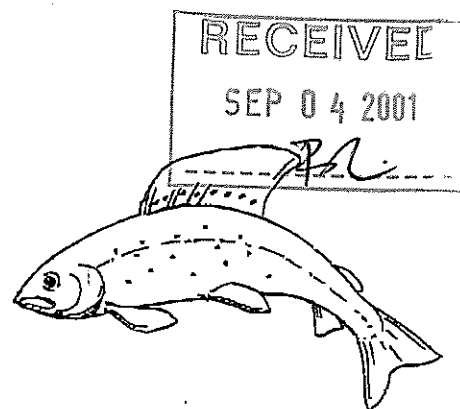




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Fish Habitat Management  
Suite 101, 5204 – 50<sup>th</sup> Avenue  
Yellowknife, Northwest Territories  
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**TO/A:**

Mr. Louie Azzolini  
Environmental Assessment Officer  
Mackenzie Valley Environmental Impact Review Board  
Box 938  
200 Scotia Centre, 5102-50<sup>th</sup> Ave  
Yellowknife, NT X1A 2N7  
Fax (867) 920-4761

page 1 of 3

**MESSAGE**

Enclosed please find DFO-FHM comments on the following:

DFO-FHM File No. SC00188

MVEIRB File No. EA01-002

Environmental Assessment Roles – CZN Surface Exploration, Underground Decline, and Metallurgic Plant Operation developments.

**FROM/DE:**

J. David Tyson  
Area Habitat Biologist  
Western Arctic Area

Telephone: (867) 669-4919  
Facsimile: (867) 669-4940  
Email: tysond@dfo-mpo.gc.ca



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Your file *Votre référence*  
EA01-002  
EA01-003  
Our file *Notre référence*  
SC00188

31 August, 2001

Mackenzie Valley Environmental Impact Review Board  
Box 938  
200 Scotia Centre, 5102-50<sup>th</sup> Ave  
Yellowknife, NT X1A 2N7

Attention: Mr. Vern Christensen

**RE: Environmental Assessments – Canadian Zinc Corp., Surface  
Exploration, Underground Decline, and Metallurgic Plant Operation  
developments.**

Dear Mr. Christensen:

The Department of Fisheries and Oceans, Fish Habitat Management – Western Arctic Area (DFO) has reviewed the responses of Canadian Zinc Corporation (CZN) to the information requests. This information was review again in light of observations made during the sight visit of 28 August, 2001.

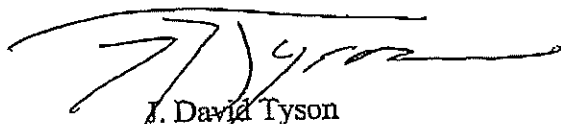
DFO observations of the stability of the proposed tailings facility do not concur with the assessment presented by CZN in their response to DIAND IR #1 and GNWT IR #3. In it's response, CZN claims that the facility has been in place for 20 years "...without incurring significant erosion of the rip-rap armour by Prairie Creek...". In fact, DFO observed erosion in two places along the lower one-third portion of the tailings facility. At the upstream end of the above stretch, Prairie Creek flows directly into the armoured wall of the facility and is deflected almost 90 degrees to the right. The facility then forms the right upstream bank of Prairie Creek for the rest of the length of the facility. It is at the point of deflection of Prairie Creek that the facility displays significant erosion. It is apparent that an outer layer of the armouring has collapsed into Prairie Creek. Large boulders, presumably originally placed as a base to the armour layer, are laying exposed and separated in the creek at the toe of the slope. The extent of erosion on the facility wall can be seen through the contrast in coloration between the lighter, newly exposed rock and the darker, weathered rock. In addition, light coloured rocks from the eroded layer of armouring can seen strewn along the stream bed, downstream of the point of erosion. Additional slumping of the armouring was also observed midway along the facility's downstream embankment.

**Canada**

The information provided by CZN regarding the proposed tailings facility is apparently derived of site visits conducted in 1994 by BGC Engineering Inc. The erosion of the rip-rap appears more recent. Because the proposed tailings facility is showing signs of erosion from Prairie Creek, DFO does not feel that tailings or any other product can be reliably contained in the facility at this time. Any material or discharge placed into the facility would create an immanent environmental liability. Maintenance and/or enhancement of the facility armouring will be required prior to the facility being considered for use as a tailings containment area or for the containment of any other mine/exploration product. As the armoured surface of the facility forms the right upstream bank of Prairie Creek and thus constitutes fish habitat, any work involving the armouring would require a subsection 35(2) *Fisheries Act* authorization.

If you have any questions, please contact me at (867) 669-4919 or by fax at (867) 669-4940.

Sincerely,



J. David Tyson  
Area Habitat Biologist  
Fish Habitat Management  
Department of Fisheries and Oceans- Western Arctic Area

copy. Julie Dahl, Area Chief, Habitat, DFO-FHM

Canada