



CANADIAN ZINC
C O R P O R A T I O N

November 08, 2001

Mr. Louie Azzolini
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
PO Box 938, 200 Scotia Centre, 5102 – 50th Ave.
Yellowknife, NT
X1A 2N7

By Fax: 1-867-920-4761

Dear Mr. Azzolini:

Re: Responses to Technical Review and Public Comments of Environmental Assessment Reports - Prairie Creek Mine

- **Metallurgical Pilot Plant Program**
(Water Licence Application MV2001L2-0003; MVEIRB File EA01-002)
- **Underground Decline and Exploration Drilling**
(Land Use Application MV2001C0023; MVEIRB File EA01-002)

We are pleased to provide Canadian Zinc's responses to the submission from the Canadian Parks and Wilderness Society (CPAWS) dated October 22, 2001 concerning the above-noted Environmental Assessments currently before the Board.

Much of the information presented by CPAWS, and CZN's position relating to these matters, has been put before the Review Board in previous submissions. While we do not wish to burden the Review Board with a constant re-visiting of the same issues, we do feel compelled to respond as these same issues have once again been put before the Review Board for consideration at this late stage of the process. We have tried to keep our responses as brief as possible. Should the Board wish for further elaboration on specific issues we would be pleased to provide it upon request or would refer the Board to the previous submissions where these issues were addressed in greater detail.

Context

- CZN is very aware and respectful of the formal national and international designations afforded to the South Nahanni River and the Nahanni National Park Reserve, and is committed to developing and operating the Prairie Creek mine in such a manner so as not to impair or otherwise impact on their recognized wilderness values
- It is important to note that the Prairie Creek Mine is not located within Nahanni National Park Reserve or within candidate areas for park expansion. It is located on Crown Land 34 km upstream of the boundary of the Nahanni National Park Reserve and 48 km upstream of the South Nahanni River; the confluence of Prairie Creek and the South Nahanni River lies 65 km upstream of the downstream boundary of the Park Reserve, with some 440 km of the South Nahanni River upstream of its confluence with Prairie Creek

- When the Prairie Creek Mine was originally constructed and permitted for operations in 1982, these same values that exist today were key considerations in the comprehensive EA conducted before the NWT Water Board; terms and conditions were set in the Water Licence then issued authorizing operations with the specific and stated intent of ensuring that "the quality of Prairie Creek water entering Nahanni National Park is unaltered"
- There are many examples of similar mining operations being conducted in an environmentally responsible manner without impairing the wilderness values of such adjacent areas; for example, the Cantung mine operated for 24 years from 1962 to 1986 adjacent to the Flat River a tributary of the South Nahanni River further up in the watershed with no identified impacts on water quality or other wilderness values of the NNPR; visitors continued to enjoy an unimpaired pristine wilderness experience throughout this period with a mine operating in the watershed
- A determination that no development should take place within the watershed of a National Park or Park Reserve would represent a major policy change for the Federal Government. In its "Green Plan", the Federal Government adopted the Brundtland Commissions recommendation on working towards setting aside 12 per cent of Canada's landmass as protected areas. When complete, the national parks system itself will protect about 3% of Canada's land mass. Obviously a determination that the watersheds of these protected areas must also be off-limits to development in order to further protect these already protected areas would significantly increase the effective percentage of protected areas well beyond that ever intended or planned for. Every square centimeter of land in Canada is within a watershed. The South Nahanni Watershed, for example, is 7 times the size of NNPR. If this ratio is typical, simple arithmetic will tell us that the goal of 12% very suddenly becomes 84%; as an example, consider the impact of a small protected area at the mouth of the Mackenzie River putting the whole of the 1.7 million square kilometer watershed off limits to any development.
- As the Review Board concluded in the above-note Report of Environmental Assessment, environmental assessment is an inappropriate tool for such policy resolution
- As the Review Board also concluded in its Report of Environmental Assessment on the Phase I Mineral Exploration Program dated May 5, 2001, CZN is in possession of valid interests in the form of mining claims, mineral leases and surface leases, and has valid and legitimate expectations of being able to undertake the developments it has proposed on land to which title is granted for such purposes

Existing Infrastructure and Activities

- The existing facilities are just that – existing. The presence, use and operation of these facilities are authorized by existing tenure and subject to existing legislation.
- The existing facilities have been inspected on a regular basis by DIAND personnel as to compliance with the terms and conditions of existing tenure and existing legislation.
- CZN has worked closely with DIAND to address any issues arising out of the regular inspections and has undertaken considerable effort at cleaning up and maintaining the property; for example, CZN spent \$100,000 in clean-up activity in 2000, including such activity as securing of reagent, explosive and waste oil storage and clean-up of miscellaneous debris and equipment storage. A similar level of activity was carried on in 2001 as well.
- The current applications are for specific programs of activities to be carried out separately and independently of the ongoing care and maintenance of the existing facilities, which will continue irrespective of the proposed developments, as provided for under the terms and conditions of existing tenure and legislation.

Cumulative Effects

- The cumulative effects assessments provided in support of the current applications under EA were in fact significantly “bolstered” from that submitted in 2001 in support of the land use application for the Phase I 6-7 hole exploration program which was subsequently approved and for which the permit has been issued
- CZN notes that EC considered the current cumulative effects assessment to be satisfactory given the scope of the current applications, and that other expert advisors and responsible authorities have not supported CPAWS position that the CEA is lacking in scope and depth of information.

Tailings Pond

- CZN proposed to use the existing tailings pond for process water from the pilot plant and as a contingency measure for minewater from the decline for the simple reason that it appeared to be the most environmentally responsible option, providing for complete containment and no direct discharges to the environment; typically, properties undergoing advanced exploration activity, such as that proposed by CZN, do not have the advantage of an existing tailings pond to serve this purpose and discharge to the environment following treatment to meet discharge criteria. This latter option remains available should the tailings pond not be deemed suitable to receive the proposed discharges
- CZN has committed to having the tailings pond assessed by qualified geotechnical engineers prior to discharging pilot plant process water and/or minewater into it. In the event that use of the tailings impoundment is rejected based on the assessment report, CZN is prepared to carry out the developments without utilizing the tailings impoundment and mitigating impacts to water quality through treating discharges using appropriate standard and proven technology, and discharging to meet water quality criteria as set under the Water Licence.
- As a point of clarification, Section 36(3) of the Fisheries Act does not state that any releases to the environment should contain zero emissions as stated by CPAWS.

In fact the Section 36 (3) of the Fisheries Act states:

Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

A deleterious substance is defined as:

any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water, or

any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water,

Subsection (4) states:

No person contravenes subsection (3) by depositing or permitting the deposit in any water or place of

(a) waste or pollutant of a type, in a quantity and under conditions authorized by regulations applicable to that water or place made by the Governor in Council under any Act other than this Act; or

- (b) a deleterious substance of a class, in a quantity or concentration and under conditions authorized by or pursuant to regulations applicable to that water or place or to any work or undertaking or class thereof, made by the Governor in Council under subsection (5).

The Metal Mining Liquid Effluent Regulations were made subject to Subsection (5) prescribing the levels of deleterious substances or classes thereof authorized to be deposited by mining operations into water inhabited by fish notwithstanding subsection (3).

Flood Potential

- CZN has committed to include a re-evaluation of the PMF potential of Prairie Creek in the above-noted geotechnical assessment of the tailings impoundment

Fuel Storage Tanks and Reagents

- The fuel tanks and reagent inventory are part of the existing facilities and covered under existing tenure and legislation
- As a point of clarification, the reagent storage area was constructed with a clay liner and contoured to prevent the release of contaminants to the receiving environment and is inspected and maintained on a regular basis as part of the ongoing care and maintenance activity at the site

Berm Water Disposal (Fuel Storage Tank Farm)

- CZN takes great care in decanting water which collects inside the tank farm berm to ensure that minor amounts of hydrocarbons which may collect on the surface continue to be retained within the berm.
- CZN has committed to monitoring the water contained within the fuel storage tank farm berm and treating as necessary to meet prescribed discharge limits prior to discharging such water to the receiving environment
- As a point of clarification, and as described in the discussion on the Fisheries Act above, the mere presence of visible and measurable hydrocarbons in a body of water does not necessarily constitute a deposit of a deleterious substance under the Fisheries Act as stated by CPAWS; it takes very minor amounts of hydrocarbons to produce a visible sheen on a body of water and if this were the case, every operator of a two-stroke outboard motor would be in violation of the Fisheries Act, not to mention every car owner whose motor drips oil which is then carried away by rain water and runoff into storm sewers or ditches.

Water Quality Testing

- CZN has committed to abide by the terms and conditions of its permits and licences, including such monitoring as is necessary to verify that discharges to the receiving environment meet the prescribed discharge criteria

No Hunting Zone

- CZN supports the establishment of a No Hunting Zone around the mine property as a means of ensuring worker safety
- CZN does not allow personal firearms on the property for recreational or hunting purposes; as a result, increases in the numbers of site personnel have no impact on increased hunting pressure

Security Deposit

- The presence, use and operation of the existing facilities are authorized under existing tenure and subject to existing legislation.
- Any security deposit deemed necessary in association with a given permit or licence should specifically reflect the security needs as they pertain to the development in question

Other

- CZN notes that the Technical Review comments provided by EC indicate that the CWS has not identified any concerns with migratory birds in connection with the proposed projects
- CZN notes that the Technical Review comments provided by RWED indicate that they have no major concerns with respect to wildlife and habitat in respect of the operation of the pilot plant or the drilling program
- Drill pads and access roads continue to be used in support of ongoing exploration activity. As a result, reclamation of these areas at this time would be premature.

Thank you for the opportunity to comment on these matters. We trust our thoughts are constructive.

Yours very truly,

CANADIAN ZINC CORPORATION

Original Signed By

J. Peter Campbell
VP Project Affairs