



February 19, 2002

Hon. Robert Nault, P.C., M.P.
Minister of Indian Affairs and Northern Development
10 Wellington Street, North Tower
Hull, Quebec
K1A 0H4

By fax: 1-613-996-1759
1-819-953-4941

Dear Minister Nault:

**Re: Mackenzie Valley Environmental Impact Review Board
Report of Environmental Assessment (EA01-002) – January 22, 2002
Underground Decline/Exploratory Drilling and Metallurgical Pilot Plant Developments**

We have reviewed the above-noted report as received at our offices by fax on February 7, 2002, 11 months after the original applications were made to the MVLWB on March 5, 2001; 9 months after referral to the MVEIRB on April 11, 2001; and 6 months after the date of August 15, 2001 set out in the original Work Plan issued by the MVEIRB for the EA decision to be made.

The proposed developments are for standard and accepted advanced exploration activity, typical of such activity undertaken at other mining properties elsewhere in Canada and the rest of the World, which in most other jurisdictions would likely take in the order of a month to receive the necessary approvals to proceed.

Clearly there is a serious problem in the length of time being taken under the Mackenzie Valley Resource Management Act to approve simple permits and licences which needs to be addressed urgently.

While we are pleased that the Review Board has finally recommended **Approval** of the developments, we note that in doing so the Review Board has concluded that the proposed developments are **“likely to have a significant adverse effect on the environment”**, as a result of which the Review Board has made a number of recommendations to prevent or mitigate these predicted impacts and suggestions to address other considerations.

We believe this fundamental conclusion of the Review Board to be flawed. It clearly ignores the mitigation measures built into the development plans and those which subsequently came out of the EA process in the form of further commitments made by Canadian Zinc, and instead appears to be based on an evaluation of the proposed developments assuming no mitigation. As an analogy, it is like concluding that an automobile would be a significant hazard if it didn't have brakes; when in fact it does. Voicing such an irrelevant conclusion is simply misleading to the public and only serves to detract from the credibility of the EA process.

1...2

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

207

- 2 -

We believe that the Review Board needs to modify its basic approach to Environmental Assessment such that it is approving a development which is **not** likely to have a significant adverse effect on the environment given the proposed and recommended mitigation measures. This would be seen as more consistent with responsible stewardship and good environmental practice.

We also note that the Review Board has made a distinction between its "recommendations" in Attachment 1 and its "suggestions" in Attachment 3, as detailed in Appendix A to the report, which revolves around a legal interpretation of Sec. 128 (1) of the MVRMA. In essence a measure has been "recommended" in order to reduce a significant impact below the level of significance or prevent an impact from becoming significant in the first place. A recommendation, if adopted, is expected to be implemented and is therefore binding. A "suggestion" is considered a matter "worthy of consideration" but which does not address a significant impact and as such is not binding.

We find that in a number of recommendations and suggestions, the Board has set out measures which do not appear to have the effect of reducing a significant impact below the level of significance or preventing an impact from becoming significant in the first place. Accordingly, we feel that all "suggestions", as well as any "recommendations", which are not clearly directed at preventing an impact, be rejected from further consideration in the licencing process.

As to the remainder of the Report, we find that while the Review Board is required under section 121 of the MVRMA to give written reasons for its decisions, the Report of EA is essentially a recitation of an EA "he said-she said" with the Board's conclusions/recommendations at the end, some of which are sufficiently vague as to bring into question their intent or purpose. There is little attempt to reconcile opposing positions, and limited "reasons" justifying many of the decisions made. Further, we feel that the Review Board has, in a number of cases, over-stepped its authority in making recommendations that exceed its mandate.

These are clearly of concern, since if the direction is unclear, or a legislative mandate exceeded, the risk of over-restrictive or inappropriate terms and conditions being imposed in subsequent permits and licences increases.

We also find there to be numerous inconsistencies and contradictions throughout the report which hamper interpretation of the Review Board's direction. As we have indicated in previous correspondence, we believe the key to clarifying such uncertainties is a much more iterative process.

While we feel it beyond the scope of this response to review in detail all of the inconsistencies and contradictions identified in the text of the Report, we have attached our comments on the individual recommendations and suggestions as set out in Attachments 1 and 3.

We would request that the Report of EA be carefully reviewed with the foregoing comments in mind to ensure that the intent of the legislation is honoured.

/...3

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

- 3 -

We appreciate the opportunity to comment and trust our thoughts to be constructive. As always, we would be pleased to work with your staff, as well as with the Mackenzie Valley Boards, to ensure that the permitting process meets our operational needs while at the same time ensuring adequate protection of the environment.

Yours very truly,

CANADIAN ZINC CORPORATION



Malcolm J. A. Swallow
President & CEO

cc: Bob Overvold - Regional Director General, DIAND (Fax: 1-867-669-2703)
Mackenzie Valley Land and Water Board (Fax: 1-867-873-6610)
Mackenzie Valley Environmental Impact Review Board (Fax: 1-867-920-4761)
Hon. Jim Antoine - Minister of RWED, GNWT (Fax: 1-867-873-0306)
Nahanni Butte Dene Band (Fax: 1-867-602-2910)

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

Attachment 1

Recommended Measures Made by the Review Board to prevent significant adverse impacts

1.
 - There is no recommendation #1; this presumably is a typographical error
2. *That CZN provide the MVLWB a geotechnical assessment and an engineering certification as to the suitability of the tailings facility. 38*
 - CZN made this commitment during the EA process (See Commitment 1, Attachment 2)
 - It should be clear that this commitment is intended to take the form of a condition of the Water Licence, to be complied with prior to use of the tailings pond; not a condition to be complied with prior to the Water Licence being issued
3. *That CZN provide the MVLWB an assessment and an engineering certification as to the suitability of the tank farm facility. 38*
 - CZN has maintained throughout the EA process that the fuel storage tank farm, which has been in place for 20 years, is an existing facility the presence and operation of which is regulated under the existing Surface Lease issued under the Territorial Lands Act and Regulations and subject to regular inspection by DIAND inspectors; CZN has requested no change to these facilities in conjunction with the applications before the Board and only proposes to continue to use the diesel fuel presently contained within the storage tanks as has been the case in past years
 - CZN believes the Review Board erred in belatedly including the fuel storage tank farm facility in the Scope of the Development and that this recommendation is inappropriate
 - The requirement for such assessment should be at the direction of DIAND in conjunction with its inspection responsibilities under the Surface Lease
4. *That CZN prepare a MVLWB approved contingency and monitoring plan for the waste rock/ore piles that includes, but not necessarily limited to, the catchment basin into which the water flows. 38*
 - Monitoring plans for the waste rock and site drainages were provided and committed to by CZN over the course of the EA (see commitments #11, 19, 23, & 25 in attachment #2)
 - CZN has also committed to meeting discharge criteria to be set in the Water Licence for discharges to the receiving environment (see commitments #4 & 22 in attachment #2)
 - CZN will also comply with the Surveillance Network Program appended to the Licence detailing monitoring to be undertaken to verify the above; CZN recommends development of such a Program be iterative to ensure that such requirements are practical and manageable in the field
 - It is unclear what more is being requested here and its purpose; this recommendation appears to be unnecessary

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

5. That the MVLWB obtain from Parks Canada and Environment Canada their minimum water quality monitoring program objectives and requirements for its Water Licencing purposes. The water quality monitoring program should include the on site settling pond and the point where Harrison Creek discharges to Prairie Creek. 39

- It is not clear what the MVEIRB views as Parks Canada's and Environment Canada's legislative mandate is for providing "minimum water quality monitoring program objectives and requirements" for Water Licencing purposes
- The implication of this recommendation is that Parks Canada and Environment Canada have the final determination in setting water quality monitoring objectives and requirements for the Water Licence; CZN questions the appropriateness of such a recommendation
- Parks Canada's mandate under the Parks Act falls within the Park Reserve which should have no bearing on site monitoring requirements, while Environment Canada's mandate comes from the Metal Mining Liquid Effluent Regulations issued pursuant to the Fisheries Act which clearly set out such requirements

6. That the MVLWB give serious consideration to including the water quality parameters and established objectives found in the report entitled "Protecting the Aquatic Quality of Nahanni National Park Reserve, N.W.T.", Environment Canada, December 1998 on page 71 in its water licence conditions. 39

- It seems inappropriate to issue a "binding" recommendation to give "serious consideration" to something, particularly when the referenced report and the application of its proposed objectives were not a subject of discussion during the EA process
- The short term and long term objectives as proposed in the referenced report are for in-stream targets at the mouth of Prairie Creek, and not intended to regulate discharges to the receiving environment
- These objectives have been proposed with the objective of maintaining ambient water quality conditions of the South Nahanni River, not to prevent significant adverse impacts as discharge criteria are intended to do; a change in water quality does not of itself constitute an impact
- Numerous exceedances of the proposed STO's, LTO's and Canadian Water Quality Guidelines are noted in the report as resulting from natural conditions
- It is also worth noting that the proposed STO's and LTO's are generally below CWQG's although exceptions occur where STO's exceed CWQG's due to elevated natural levels in the South Nahanni system
- It is unclear from this recommendation how the MVEIRB sees these objectives being included in the Water Licence or whether in fact it is appropriate to do so.

7. That CZN submit the following information as part of its regulatory submission to the MVLWB:

- a. Detailed metal scans of the liquid effluents from the pilot plant;
- b. A plan for the ultimate treatment and disposal of the liquid effluents; from the pilot plant and
- c. A plan for the disposal of the tailing wastes generated by the pilot plant. 39

- Plans for treatment and disposal of effluents were presented by CZN over the course of the EA; effluent characterization from previous metallurgical testwork was provided as an indication of effluent quality to be produced from the pilot plant
- Clearly, information as set out in (a) cannot be supplied until the pilot plant is in operation
- It is unclear what more is being requested here and its purpose; this recommendation appears to be unnecessary

8. That CZN conduct testing of water collected inside the tank farm berm for petroleum product contamination/ toxicity, before discharge it to any surface water, and that if the analysis shows that there are petroleum products in any amount, that CZN treat the water before discharging it into Harrison and Prairie Creek. 39

- As in recommendation 3 above, regulation of existing facilities is beyond the scope of this EA should remain under the jurisdiction of DIAND inspectors
- Any regulation of storm water discharges, such as the rainwater and snowmelt which collects within the tank farm berm should be consistent with those applied at other similar facilities, such as tank farms located in local communities and other industrial and commercial enterprises
- Of key concern is the reference to "any" amount of petroleum products requiring treatment; zero discharge is not a reasonable or practical goal, and one which is not applied uniformly elsewhere;
- if regulation is to be applied, reasonable discharge limits to "prevent significant adverse impacts" must be applied

9. That CZN provide the MVWLB an accurate verifiable estimate of the discharge volume from the 870 m portal. 39

- CZN has maintained throughout the EA process that 870 portal is part of the existing infrastructure, which has been in place for 30 years, the presence of which is regulated under the existing Surface Lease issued under the Territorial Lands Act and Regulations and subject to regular inspection by DIAND inspectors; CZN has requested no change to or use of this area in conjunction with the applications before the Board
- CZN believes the Review Board erred in including the 870 portal in the Scope of the Development
- Any regulation of this area should be at the direction of DIAND in conjunction with its inspection responsibilities under the Surface Lease
- For clarification, CZN did provide an estimate of discharge volume from the 870 portal during the EA based on actual measurements taken over the period of July through September 2001; CZN also made a commitment to continue measuring flow from the 870 portal (see Commitment 10, Attachment 2)

10. That CZN implement a water quality testing regime for water coming out of the mine portals, flowing into the catchment pond and accumulating in the fuel storage berm area before discharging the water into the receiving environment. 39

- CZN made a commitment to monitor discharges to the receiving environment on a monthly basis during the development (see commitment 11, attachment 2)
- As above, regulation of the tank farms should be at the direction of DIAND in conjunction with its inspection responsibilities under the Surface Lease

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

11. That CZN submit evidence to the MVLWB that has the financial assets and/or a financial institution letter of credit and have the ability to carry out the requirements of the Water Licencing for the proposed development. 39

- It is not clear what is intended here or how this recommended measure will "prevent adverse impacts from becoming significant"
- What measure constitutes "evidence... [of] ...financial assets... and... the ability to carry out the requirements of Water Licencing..."
- This recommendation seems inappropriate, with no reasons given to support it

12. That CZN develop and implement a bear response plan with RWED and NNPR to enable personnel to adequately respond to problem bear situations. 42

- CZN has had no incidents of problem bear situations since its involvement with the property in 1992
- CZN has obligations under GNWT hunting and wildlife regulations to report any such incidents; NNPR has no mandate for such involvement outside the Park Reserve
- The standard clause in Land Use Permits states that "The Permittee shall use food handling and garbage disposal procedures that do not attract bears", and the Permittee is required to contact the local Renewable Resources Officer "If bears are encountered during this land use operation
- Further regulation as proposed in this recommendation seems inappropriate and unnecessary and is not required to further prevent a significant adverse impact
- CZN has made a commitment to continue its program of safety orientation training for all personnel, including nuisance animal prevention and animal attack avoidance (see commitment #18, attachment 2)

13. That CZN prepare and submit a plan to RWED and NNPR to protect the mineral lick located near the minesite to ensure that wildlife can continue to use it with a minimum amount of disturbance. 4 2

- This recommendation is not relevant to the developments as proposed in the applications before the Review Board
- The recommendation to maintain a mineral lick within the plantsite area seems contrary to the Review Board's concerns about habituation of wildlife in the area
- This recommendation seems inappropriate and unnecessary and does not serve to prevent a significant adverse impact; as such it should not be the subject of regulation

14. CZN update its Probable Maximum Flood (PMF) calculations for flood elevations using at least the data available from 1975 to 1990, including data from the weather station at the Virginia Falls hydrometric gauge. 50

- CZN made this commitment during the EA (see commitment 2, Attachment 2)

15. CZN have a professional engineer certified to practice in the Northwest Territories ascertain and report on the geotechnical stability of the tailings facility using the most recent and appropriate waters data from Water Survey of Canada. 50

- This is essentially the same recommendation as in #1 and #14 above

Other*Section 6.4.3.2 – p. 37*

The Review Board finds CZN provides a reasonable argument for use of the tailings facility, particularly as a means of managing water from the subject developments, and of reducing risks of impact to the environment. The Review Board also finds CZNs proposal environmentally responsible.

The Review Board also accepts that there is uncertainty about the surface and subsurface integrity of the tailings facility and that there remain substantive water balance and engineering questions sufficient to warrant the treatment of the tailings facility as a significant environmental risk for the purposes of the subject development until demonstrated otherwise.

The Review Board accepts that the subject tailings facility was never used for the disposal of wastes since its construction. The Review Board notes that evidence confirming the tailings facility was not leaking was not provided and the water balance provided by CZN proved inconclusive.

Therefore, the Review Board concludes that it must apply the precautionary principle and conclude that any releases to the tailings facility must be treated in the same manner as releases directly to the environment.

Section 6.4.4. p. 38

The Review Board finds that the proposed use of the tailings facility will likely cause a significant adverse impact on the environment and recommends the following measures.

- *That CZN provide the MVLWB a geotechnical assessment and an engineering certification as to the suitability of the tailings facility.*
- These comments demonstrate the contradictory nature of the text of the Report, particularly in light of recommendations #1 and #15, and CZN commitment #1, all of which provide for an engineering certification of the tailings facility for the intended use
- Presumably if the tailings facility is shown to be suitable for use, then the proposal to use it for disposal is preferable in terms of preventing impacts by virtue of avoiding discharges to the environment; as this is an engineered containment facility it is therefore reasonable to expect that discharges to it need not be of the same quality as discharges directed to the receiving environment
- In the event the Review Board's conclusion that discharges to the tailings facility must be treated in the same manner as those to the receiving environment is accepted, there would be no justification in going to the expense of demonstrating the tailings pond as being suitable for the intended use and CZN would elect to eliminate use the impoundment facility from its development plans
- This outcome of this conclusion seems contrary to the concept good environmental practice

Attachment 3

Suggestions Made by the Review Board

Review Board Suggestions Page Number Reference

The Review Board has made a distinction between its "recommendations" in Attachment 1 and its "suggestions" in Attachment 3, as detailed in Appendix A to the report, which revolves around a legal interpretation of Sec. 128 (1) of the MVRMA. In essence a measure has been "recommended" in order to reduce a significant impact below the level of significance or prevent an impact from becoming significant in the first place. A recommendation, if adopted, is expected to be implemented and is therefore binding. A "suggestion" refers to a matter "worthy of consideration" but which does not address a significant impact and as such is not binding.

In a number of recommendations and suggestions the Review Board has set out measures which do not appear to have the effect of reducing a significant impact below the level of significance or preventing an impact from becoming significant in the first place. Accordingly, we feel that all "suggestions", as well as any recommendations which are not clearly directed at preventing an impact, be rejected from further consideration in the licencing process.

1. The MVLWB consider the imposition of a security deposit of sufficient magnitude to finance the reclamation of the present minesite 42

- It would seem beyond the mandate of the MVEIRB to make this "suggestion" and the legislated powers of the MVLWB to require this amount as it would exceed the aggregate of the costs of: "abandonment of the undertaking or land use operation, restoration of the site of the undertaking or land use operation and any ongoing measure that may remain to be taken after the abandonment of the undertaking or land-use operation" as provided for on the MV Land Use Regulations and NWT Waters Regulations
- The reference to this suggested measure as being needed to prevent adverse impacts comes from Section 6.6.2 on page 42 regarding Wildlife and Wildlife Habitat in which the Review Board's conclusion was that it did "not find any evidence that the proposed development will have any significant adverse impact on wildlife or its habitat.", bringing into question the basis for this suggestion
- In section 6.11.1 on p. 52 the Review Board concludes: "The Review Board finds that CZN's A&R plans should adequately cover those activities carried out by CZN and its contractors, and used in support of the proposed developments.", and "The Review Board concludes that reclamation and closure requirements will not result in significant adverse environmental impacts.", also bringing into question the basis for this suggestion

2. That CZN prepare and submit to RWED and NNPR a suitable wildlife movements and interactions monitoring program effective for the duration of the developments. 42

- This recommendation seems inappropriate and unnecessary and does not serve to prevent a significant adverse impact; as such it does not seem a matter for regulation
- In any event, the wildlife sighting log which CZN has maintained as discussed in #3 below should serve this purpose

3. That CZN maintain a wildlife-sighting log. 42

- This recommendation seems inappropriate and unnecessary and does not serve to prevent a significant adverse impact; as such it does not seem a matter for regulation
- For clarification, however, CZN has maintained a wildlife-sighting log in past years and intends to do so in the future.

4. That CZN incinerate garbage daily. 42

- The standard clause in Land Use Permits states that "The Permittee shall use food handling and garbage disposal procedures that do not attract bears", and the Permittee is required to contact the local Renewable Resources Officer "If bears are encountered during this land use operation
- Further regulation as proposed in this suggestion seems inappropriate and unnecessary and does not serve to further prevent a significant adverse impact

5. That CZN provide contractors education about proper waste management, especially drillers who are working away from the mine site as food wastes attract wildlife and could result in serious injury or death to mine employees. 42

- The standard clause in Land Use Permits states that "The Permittee shall use food handling and garbage disposal procedures that do not attract bears", and the Permittee is required to contact the local Renewable Resources Officer "If bears are encountered during this land use operation
- Further regulation as proposed in this suggestion seems inappropriate and unnecessary and does not serve to further prevent a significant adverse impact
- CZN has made a commitment to continue its program of safety orientation training for all personnel, including nuisance animal prevention and animal attack avoidance (see commitment #18, attachment 2)

6. That CZN store chemicals that can attract wildlife such as reagents, and even old batteries coolants (glycol) indoors in a secure facility as they could taint the local food supply and/or cause sever injury or death to wildlife. 42

- No such incidents of injury or death to wildlife have been recorded to date to justify this suggestion;
- Such regulation, if considered necessary, should take a more generic form, such as simply stating that such materials be stored in a manner so as not to have a detrimental affect on wildlife

7. That CZN install an electric bear fence around the main accommodation and kitchen complex to ensure worker and wildlife safety, and that the fenced in area including, if feasible, an area for waste incineration 43

- CZN has been active on-site since 1992 without a bear fence and without any incidents of problem bear situations; the Prairie Creek minesite is not a tent camp, it consists of enclosed buildings; the justification for an electric bear fence is no greater than in any NWT community where bears are common in the surrounding area
- Such practices should be determined by circumstances and in response to demonstrated need, but need not be the subject of regulation

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com

8. *That the Federal Minister and the Minister responsible for National Parks decide on the scope and nature of acceptable protection required to ensure the ecological integrity of Nahanni National Park, including the possibility of establishing a buffer zone where land use activities are restricted to those compatible with the park purpose and management plan. The Deh Cho First Nations should be consulted as part of this policy discussion. 47*

- This is clearly beyond the mandate of the EA and has no place going forward as a suggestion into the licencing process

9. *That INAC and/or CZN remove the cache of chemical reagents from the mine site, or, relocate the cache of chemical reagents into a secure enclosed building to prevent their exposure to the elements and undertake a ground cleanup 52*

- As stated previously, CZN has maintained throughout the EA process that the presence and operation of the existing infrastructure, which has been in place for 20 years, is regulated under the existing Surface Lease issued under the Territorial Lands Act and Regulations and subject to regular inspection by DIAND inspectors; these materials have no relation to the developments as proposed in conjunction with the applications before the Board
- CZN believes the Review Board erred in including these materials in the Scope of the Development and that this suggestion be rejected on this basis
- Any requirement for such action should be at the direction of DIAND in conjunction with its inspection responsibilities under the Surface Lease

Suite 1202-700 West Pender Street
Vancouver, BC V6C 1G8
Tel: (604) 688-2001 Fax: (604) 688-2043
E-mail: peter@canadianzinc.com, Website: www.canadianzinc.com