

January 14, 2009

Alistair MacDonald Environmental Assessment Officer Mackenzie Valley Environmental Impact Review Board 5102 50th Avenue, Yellowknife, NT X1A 2N7

Dear Mr. MacDonald

RE: Environmental Assessment EA0809-002, Prairie Creek Mine
Comments Regarding Request for Ruling on Scope of Assessment

The Mackenzie Valley Environmental Impact Review Board ("the Review Board") in their Note to file of December 18, 2008 has directed parties interested in this EA0809-002 to address the following questions in their submission on the request for ruling:

- 1. Should the scope of development for EA0809-002 include all physical works and activities associated with the proposed winter road?
- 2. Should the scope of development for EA0809-002 include all facilities and activities at the proposed mine site?

QUESTION #1

With reference to our response to Question #1, we refer the Review Board to the attached letter, dated January 9, 2009 to Canadian Zinc Corporation ("CZN") from our legal advisors, Fasken Martineau (the "Fasken Letter"). We submit the Fasken letter as the bulk of CZN's response to Question #1.

In summary, as stated in the Fasken Letter, CZN's legal advice is that the undertaking of the Winter Road in conjunction with the construction and operation of the Prairie Creek Mine is exempt from the application of Part 5 of the Mackenzie Valley Resource Management Act, pursuant to s.157.1 of that act. Therefore, the Winter Road, as an undertaking in conjunction with the Prairie Creek Mine, is not within the jurisdiction of the Review Board and therefore cannot be scoped into EA0809-002.

PROJECT SPLITTING

CPAWS and DFN claim CZN is 'project splitting' and attempting to avoid assessment of the road. The facts are that the road already exists, that an assessment and permitting process was completed previously for the road, and the MVRMA Part 5 exemption was specifically written to

exempt existing undertakings from new assessment. On page 8, CPAWS and DFN refer to the Review Board guidelines (page 27) that indicate that project components should not be assessed separately. However, no assessment under the act will occur with regard to the Winter Road – and so there will be no danger of split assessment. Additionally, an assessment was completed previously (1980-82) in combination with the total development. The guidelines are written for new projects that have not undergone prior assessment. The dependence, linkage and proximity arguments are irrelevant as the road was assessed before and is grandfathered. The EIA guidelines (Section 3.9 titled 'Scoping the Issues') also state that "efforts are made early on to identify the most relevant issues, because of the need to focus resources on assessing the important issues". Re-assessing a component that has already been assessed and that has been ruled by the Supreme Court of the NWT to be exempt from assessment would not be focussing resources appropriately.

SIGNIFICANT ALTERATIONS

CPAWS and DFN state that there are significant alterations to the undertaking and that, therefore, s.157.1 does not apply. The Court has held that the Winter Road undertaking is grandfathered. The use of transfer stations – may or may not change the "volume, type, timing and duration of traffic" on the Winter Road – does not change the nature of the Winter Road undertaking. The nature of the undertaking, as stated by the Court in *Canadian Zinc* remains the "hauling materials and equipment from the mine to the highway and vice versa." (para. 62).

Additionally, the size of the ore reserve has no bearing on truck traffic. The Mill is not being expanded. It will process minerals at the same rate. The same quantities of minerals will require annual transport. In any event, CZN did not 'manufacture' additional ore reserves, they were already present, Cadillac were simply not aware of the greater quantity, but they would have discovered them during the mining process, and their extraction of them would not have been constrained by the existing permits. The same is true of the life span of the mine.

Similarly, there will be no significant increase in road use as the same amount of ore needs to leave the mine. In any event, many of the potential impacts CPAWS and DFN discuss will be less than they would have been 20 years ago because of the implementation of additional mitigation factors.

QUESTION #2

In addressing this question, comments are made on the scope of development, scope of assessment and scope of issues separately.

SCOPE OF DEVELOPMENT – MINE SITE

In simple terms, CZN recognizes that the mine should be included in the scope of development. If it were not so, CZN would in effect be saying there is no scope for an EA. Clearly this is not CZN's intent. As set out in CZN's letter dated July 18, 2008 to the Mackenzie Valley Land and Water Board ("the Water Board") at the preliminary screening stage it was stated:

"...the Prairie Creek Mine undertaking as proposed contains certain enhancements and improvements (in the interest of superior environmental protection)."... "The enhancements and improvements could be argued to be "significant alterations" to the previously permitted undertaking, and as such could take the application outside of the exemption.." ... "... if Part 5 applies to the mine Water Licence and LUP applications, it is because of the enhancements and improvements noted above, and due consideration should be given to this and the previous environmental assessments, existing permits, approved management plans and precedents relating to the Prairie Creek Property."

As is well known, most of the mine is already built and was previously permitted. CZN believes further assessment of some of the components of the mine built in the early 1980's is not required or not necessary because the function of such components has not changed and standards of operation, from an environmental perspective, are not materially different today. These components include the Mill, Administration Building, Maintenance Shops, Sewage Treatment Plant, Airstrip and Accommodation Trailers. CZN does not believe the buildings themselves should be included in the assessment. CZN accepts that waste and water management plans have changed from the plans previously permitted by Cadillac and should be part of the EA. The remaining components of the existing and proposed mine are discussed below.

SCOPE OF ASSESSMENT - MINE SITE

There are other components of the mine for which the function has also not changed, but the standards of operation, from an environmental perspective, are potentially different today. However, some of these components have been the subject of recent assessment by the Review Board. The fuel tank farm containment and the tanks and pipe work were assessed, and the necessary adjustments made, as part of the existing Water Licence MV2001L2-003. The flood profile for the main site protection dike was re-evaluated and found to be satisfactory. These components have been determined to be suitable for any site operations, and this suitability does not change if such components are now used for mine operations.

There are no changes being proposed to the Polishing Pond and the Catchment Pond. The Polishing Pond currently polishes treated water, and this will not change. The Catchment Pond currently receives all site runoff before discharge to the environment, and will have the same function during mine operations.

CZN does not believe it is necessary, or appropriate, to repeat assessments recently undertaken by the Review Board during a previous EA, or by the Water Board during permitting and Water Licence administration, or by CZN's consultants during and subsequent to these stages. Also, there are no differences being proposed to the use of the Liard Highway for the transport of mineral concentrates and supplies, and air travel primarily for crew changes, compared to Cadillac's permits, and therefore CZN does not believe they need to be further assessed.

SCOPE OF ISSUES – MINE SITE

Please refer to our November 3, 2008 letter (copy attached) for our detailed comments on the scope of issues. However, we again draw your attention to the EIA guidelines, specifically Section 3.9 titled 'Scoping the Issues' which states that: "efforts are made early on to identify the most relevant issues, because of the need to focus resources on assessing the important issues". CZN believes the most relevant and important issues for this EA revolve around water management specifically; the Water Storage Pond, placement of mine and mill waste underground in a backfill mix, the Waste Rock Pile, the water treatment plant and long-term water quality.

CZN is proposing a development that is materially no different from that previously permitted by Cadillac in terms of the potential for impacts to wildlife. This was extensively studied in 1980, and further studies and management and mitigation plans (Bear Encounter Protocol, Wildlife Sighting Log, Flight Impact Management Plan) have been adopted since. It should also be noted that CZN has been engaged in active site activities every year since 1996, including very extensive exploration and underground development operations in 2006 and 2007 and the potential for impacts to wildlife during future operation will not be significantly greater than in recent site operation. CZN recognizes wildlife protection is important, but given the prior studies, recent experience and mitigations already in place, does not see a priority for further mine site assessment of wildlife issues, apart from consideration of legislative requirements related to the *Species at Risk Act* (SARA), and the *Migratory Birds Act*.

Emission sources from mine operations will be primarily the new power generating set and incinerator models. There are territorial and federal requirements that emissions from these sources must comply with. CZN will select, and design the configuration of, appropriate units, and provide predicted emissions data from them to demonstrate that they will be compliant with requirements. However, this need not be an EA issue since it can be done at the permitting stage.

SUMMARY

In summary, in response to Question #2, CZN submits that the scope of development for assessment should not include all facilities and activities at the mine site for the reasons given above and because of the need to focus resources on assessing the most relevant and important issues that have not been previously assessed and are not exempt from assessment.

Yours truly,

CANADIAN ZINC CORPORATION

David P. Harpley, P. Geo.

VP, Environment and Permitting Affairs

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January 9, 2009

File No.: 259474.00006/14918

Canadian Zinc Corporation 1710 – 650 West Georgia Street Vancouver, BC V6B 4N9

Attention: Alan Taylor

COO & Vice President, Exploration

Dear Sirs/Mesdames:

Re: Jurisdiction to Include Winter Road in the Environmental Assessment EA0809-002 for the Prairie Creek Mine.

You have asked us to look at whether the Mackenzie Valley Environmental Impact Review Board (the "Board") has the jurisdiction to include the Winter Road which is the subject of MV2003F0028 (the "Winter Road") into the Environmental Assessment EA0809-002 of Canadian Zinc Corporation's ("CZC") Prairie Creek Mine.

Summary

It is clear from the Supreme Court of the Northwest Territories' decision in *Can. Zinc Corp. v. Mackenzie Valley Land & Water Bd.*, 2005 NWTSC 48 ("*Canadian Zinc*") that the undertaking of the Winter Road in conjunction with the construction and operation of the Prairie Creek Mine is exempt from the application of Part 5 of the *Mackenzie Valley Resource Management Act*, S.C. 1998, c. 25 ("*MVRMA*") pursuant to s.157.1 of that act. Therefore, the Winter Road, as an undertaking in conjunction with the Prairie Creek Mine, is not within the jurisdiction of the Review Board and therefore cannot be scoped into EA0809-002.

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Context

This issue is in the context of the fact that Canadian Parks and Wilderness Society ("CPAWS") and Dehcho First Nations ("DFN") have filed a Request for Ruling dated November 3, 2008, part of which was dismissed by the Board in its Review of Board Directives dated November 26, 2008. The Board reformulated the Request for Ruling such that the issue of the Winter Road is expressed as follows:

1. Should the scope of development for EA0809-002 include all physical works and activities associated with the proposed winter road?

The CPAWS and DFN submissions on their Request for Ruling stand with respect to the reformulated question by the Board on the issue of the Winter Road.

The History of the Winter Road

The Winter Road was previously developed through 1980-1982 in conjunction with the construction and operation of the Prairie Creek Mine. Cadillac was originally granted Land Use Permit N80F249 on March 8, 1980 authorizing a 170 km winter access road connecting the Mine with the Liard Highway near Lindberg's Landing just east of Blackstone, expiring July 1, 1981. The Road was originally constructed beginning in the summer of 1980. The permit was later extended to June 30, 1982 and again to June 29, 1983. While in use, the Winter Road was used for the transport of over 800 truck loads of equipment and supplies between the Liard Highway and the Prairie Creek Mine.

A number of environmental studies have been carried out in connection with the Road, including studies undertaken in conjunction with the original permitting in 1980-81. Such studies included fisheries and aquatic resources, vegetation, wildlife, surficial geology, terrain stability, soils and hydrology along the whole of the access road corridor. Additional work was undertaken in 1994/1995 in conjunction with permitting at that time. Further work was done in 2007/2008 in conjunction with the application for a Water Licence for road repairs and the issue of Department of Fisheries and Oceans authorization for such work. These numerous and extensive studies, carried out over a period of more than 25 years, included field assessments and descriptions of fisheries and aquatic resources, as well as wildlife populations and wildlife habitat, have been used as the basis to determine that the environmental impacts of the winter access road are expected to be negligible.

In May 2003, CZC applied to the Mackenzie Valley Land and Water Board ("MVLWB") for a land use permit to use the same winter access road for which Cadillac had received



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the permit that expired in 1983. Following a written hearing, where both CPAWS and DFN made detailed written submissions, the MVLWB decided that s.157.1 did not apply and that decision was challenged by CZC in a judicial review before the Supreme Court of the NWT in *Canadian Zinc*. The Court ruled that the Winter Road is grandfathered from the application of Part 5 of the *MVRMA* (further discussion of this decision below). It should be noted that both CPAWS and DFN were Intervenors in that judicial review and made detailed submissions to the Court.

Following the decision of the Supreme Court the MVLWB issued Land Use Permit MV2003F0028 in 2007. CZC now holds a current Land Use Permit which is valid until April 2012. Therefore CZC does not require a new Land Use Permit for the winter road at this time. The scope of the permit is stated as "Rehabilitation, maintenance and use of a winter road". The land use operation described in the application is the use of a winter road. The operation of the road is not time limited but is limited to those times of the year where operations do not result in ruts in the ground.

In June 2007 CZC made application to the MVLWB for a Water License to carry out certain repairs to the Winter Road. In September 2007, CPAWS and DFN both made submissions to the MVLWB that the proposed repairs constituted significant alterations to the Winter Road and requested that the MVLWB refer the application for the Water License to environmental assessment. By decision dated January 2008 the MVLWB ruled that the repairs did not constitute a significant alteration and that the application was exempt from EA. The Water License was issued in March 2008..

The Decision of the Supreme Court of the NWT in Canadian Zinc

The issue before the Supreme Court was whether the Winter Road that was the subject of MV2003F0028 was grandfathered from the application of Part 5 of the *MVRMA* by virtue of s.157.1 of that act. Section 157.1 states:

157.1 Part 5 does not apply in respect of any licence, permit or other authorization related to an undertaking that is the subject of a licence or permit issued before June 22, 1984, except a licence, permit or other authorization for an abandonment, decommissioning or other significant alteration of the project.

The Court held that the undertaking was the Winter Road as used for transport between the Prairie Creek Mine and the Liard Highway. It is not merely the road, but neither is it the whole of CZC's operations – it is the Winter Road as used to supply the Prairie Creek Mine and to transport material from the Prairie Creek Mine. The Court held:



[53] In my view, to be consistent with the CEAA and the context and purpose of the legislation as described in *Tungsten*, the definition of undertaking must parallel the wording used in the CEAA and not focus solely on the physical "thing", that is, the winter access road. It must include the proposed operation of the road. The undertaking is not merely the winter access road, but includes the activity for which the road will be used and the circumstances surrounding its use. It is not, however, the complete operation carried on by CZC.

. . .

[58] In my view, the Board erred in considering the undertaking to be CZC's whole enterprise, its mining operation.

There were differences in exactly what was to be carried on the Winter Road, and differences with how the transportation was to be managed, however, the Court held that those differences were irrelevant and did not alter the undertaking. The Court held at para. 62 that "Basically, however, the activity on the road, both under Cadillac's permit and CZC's proposed permit, involves hauling materials and equipment from the mine to the highway and vice versa." Having come to that conclusion, the Court found at para. 69 that "in this case there is sufficient connection in terms of subject matter and substance between CZC's proposed undertaking - the operation of the winter access road - and Cadillac's undertaking."

In this present Request for Ruling, CPAWS and DFN have suggested that the use of the Winter Road for full scale mining operations might not be grandfathered. However, the use of the Winter Road for that purpose is again totally in line with the original purpose of the Winter Road. There can be no doubt that the Court would similarly find that the undertakings are the same and therefore that any present day or future application for the Winter Road is grandfathered. The Court would be compelled to find, as it did in Canadian Zinc, that:

[70] The permit sought by CZC is related to the operation of the winter access road. A permit had been issued to Cadillac before June 22, 1984 in respect of that same undertaking. **Therefore, s. 157.1 governs and Part 5 does not apply.** [emphasis added]

It is only through Part 5 that the Review Board has any authority or jurisdiction. The Court has held that this undertaking – the Winter Road to the Prairie Creek Mine – is grandfathered from the application of Part 5 of the MVRMA. The Review Board is bound by the decision of the Supreme Court. Therefore, scoping the Winter Road into EA0809-002 is beyond the jurisdiction of the Review Board.



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It should be noted that the Court was not deaf to the environmental concerns raised by CPAWS and DFN in *Canadian Zinc*. However, the Court held at para. 72 that: "In any event, CZC has acknowledged that the [Water] Board may impose conditions within its jurisdiction on the granting of the permit. The concerns raised by the interveners can and should be addressed, as the [Water] Board sees fit, in the [Water] Board's determination as to whether or what terms and conditions should be attached to the permit sought."

The Intervenors in *Canadian Zinc* were the same parties that have brought this Request for Ruling before the Review Board and previously made a similar application to the MVLWB in connection with the Water Licence. CPAWS and DFN were unsuccessful before the Supreme Court of the NWT. They must live with the results of that case and cannot now – through a Request for Ruling – attempt to try the same case again. The matter is *res judicata* – a rule that a final judgement of a Court on the merits is conclusive as to the rights of the parties.

Significant Alterations

CPAWS and DFN state that there are significant alterations to the undertaking and that, therefore, s.157.1 does not apply. The Court has held that the Winter Road is grandfathered. The same Winter Road will be used during the construction and operation of the Prairie Creek Mine. It is the position of CZC that there will be no significant alterations of the Winter Road undertaking.

The proposed changes to the design and operation of the Prairie Creek Mine may change the "timing and duration of traffic" on the Winter Road, however, these changes do not change the undertaking. This very issue was examined by the Court in *Canadian Zinc* and the Court held at para. 62 that: "There is evidence that there are some differences between the type of materials and equipment Cadillac hauled on the road and what CZC intends to haul on the road. . . . Basically, however, the activity on the road, both under Cadillac's permit and CZC's proposed permit, involves hauling materials and equipment from the mine to the highway and vice versa." This remains the case and the relevant facts are the same as were considered by the Court.

The proposals to use the transfer stations are the subject to separate LUP applications which will be the subject of environmental assessment by the Review Board.



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Conclusion

The Supreme Court of the Northwest Territories' decision in *Canadian Zinc* held that the undertaking of the Winter Road in conjunction with the construction and operation of the Prairie Creek Mine is exempt from the application of Part 5 of the *MVRMA* pursuant to s.157.1 of that act. The Review Board is bound by the decision of the Supreme Court. Therefore, the Winter Road, as an undertaking in conjunction with the Prairie Creek Mine, is not within the jurisdiction of the Review Board and may not be scoped into EA0809-002.

CPAWS and DFN attempted previously to have the Winter Road subject of an environmental assessment pursuant to the Act. They were unsuccessful before the Court. Their present submission attempts again to have the Winter Road be the subject of an environmental assessment. In our opinion if the issue were again before the Court that the Court would similarly find that the Winter Road is grandfathered and CPAWS and DFN would not be permitted to subvert the judgement of the court and the intentions of Parliament by an attempt to piggyback an assessment of the Winter Road onto the environmental assessment of the Prairie Creek Mine.

Yours truly,

FASKEN MARTINEAU DUMOULIN LLP

Kevin O'Callaghan (signed electronically)

KGO/fxm



November 3, 2008

Alistair MacDonald Environmental Assessment Officer Mackenzie Valley Environmental Impact Review Board 5102 50th Avenue, Yellowknife, NT X1A 2N7

Dear Mr. MacDonald

RE: Environmental Assessment EA0809-002, Prairie Creek Mine Comments Regarding Scope

Canadian Zinc Corporation ("CZN") is pleased to provide these comments on the suggested scope for environmental assessment ("EA") EA0809-002. We provide what we believe to be relevant information, comments on submissions made by government agencies, and answer the scoping questions posed.

COMMUNITY VIEWS

In the recent scoping sessions held in the Communities, two clear and consistent themes emerged:

- Protection of water quality is paramount; and,
- Jobs and economic activity are sorely needed in the Deh Cho region, and the Mackenzie Valley Environmental Impact Review Board ("MVEIRB") was strongly encouraged to undertake a very focussed and efficient EA.

As such, we believe that the community sessions have demonstrated that there is considerable local community support for the Project and there is not significant public concern.

Consequently, CZN believes the MVEIRB should base the ultimate scoping decision on these themes. The Prairie Creek Mine already exists and the mine and winter road were previously permitted. A considerable amount of further investigation and assessment has occurred since (refer to CZN's letter of October 17, 2008). The site is, and will continue to be, closely scrutinized by the pertinent agencies and inspectors. These facts provide a rationale for the MVEIRB to focus the scope of EA on those elements of the proposed development that are different and have not been assessed previously.

During preliminary screening of CZN's applications, letters of support for the project were received from the Liidlii Kue First Nation ("LKFN", Fort Simpson, population 1,163 (2001 census)) and the Acho Dene Koe First Nation (Fort Liard, population 530). The majority of residents of the communities of Nahanni Butte (population 107) and Wrigley (population 165) are also in favour of the project provided the environment is protected. CZN has recently entered into Memoranda of Understanding ("MOU") with the LKFN and the Nahanni Butte Dene Band ("NBDB"), and will continue to have an open dialogue with the Bands and the Deh Cho First Nations leadership on issues associated with the development during EA process, permitting phase and construction and operations.

REGULATORY PROCESS

There has been much review and discussion over the last few years about the regulatory processes in the north, and how they can be streamlined and made more efficient. The most recent review by Neil McCrank, Special Advisor to the minister, had a number of recommendations. In terms of process improvements, comments made included: "Much discussion surrounded the length of time required to move applications through the regulatory process"; and, "There is obviously a need for a more efficient process". We do not present these remarks to be confrontational, but to serve as a basis to ask 'How can the process be made more efficient?' We suggest an answer is contained in the Review Board's EIA guidelines. Section 3.9 titled 'Scoping the Issues' states that: "efforts are made early on to identify the most relevant issues, because of the need to focus resources on assessing the important issues". Therefore, CZN respectfully recommends that the MVEIRB focus on the important issues, which from the community meetings are those relating to water quality.

As you are also aware, there is another regulatory process after EA associated with permitting, presuming the MVEIRB recommends that the project proceed and the Minister of Indian and Northern Affairs Canada ("INAC") agrees. CZN has seen in past EA's, and sees again in scoping submissions, a tendency for some government agencies to recommend the assessment of all of their issues within their regulatory mandate at the EA stage rather than separating them into those appropriate for EA and those appropriate for the permitting stage. We feel this is unfortunate as it 'clogs' the process, and inevitably lengthens it.

Another issue that unduly lengthens the process is that of "cumulative effects". Some would like the definition of a cumulative effect to cover repetitive actions of the same project. The intent appears to be to make the definition so broad that it becomes a 'catch-all', so that if issues are not deemed worthy of assessment at the development-specific level, they can still be assessed as part of cumulative effects. This is not what cumulative effects assessment is intended to be, and again, the consequence would be an inappropriately lengthened process. Appendix H of the EIA guidelines provides the relevant definition, as follows: "The Review board uses the term "cumulative effects" to refer to the effects of a proposed development in combination with other human activities. This is distinct from the combined effects of a single project, where different impacts from the same project may interact in a synergistic or additive way. Effects that arise in conjunction with other impacts from the same development should be included in the appropriate subject area in the development-specific (non-cumulative) part of the assessment". In CZN's

opinion, the only true potential cumulative effect from the proposed development is that of water quality and the South Nahanni River in terms of discharges from both Prairie Creek and the Cantung Mine. There are no other significant industrial projects in the watershed.

CZN'S GENERAL VIEWS

The Prairie Creek Mine Project is unique in that the site already has the major portion of the infrastructure development that will be used in operations, and was fully permitted in 1982 after an EA process managed by INAC. The footprint of the development already exists, and has been the subject of six further EA's since 2001. CZN believes the new EA process should focus on the specific changes proposed to the previously permitted development.

In 2005, the Supreme Court of the NWT ruled that CZN's new permit application for a winter road was grandfathered and is exempt from EA (Part 5 of the Mackenzie Valley Resource Management Act ("MVRMA")) because a permit existed prior to 1984 (unlike the De Beers Gatcho Kue pre-existing winter road that did not have a permit prior to 1984), and the proposed development was considered to be the same undertaking. CZN received and holds a current Land Use Permit ("LUP") to operate the winter road, the use of which is administered by INAC inspectors and the Mackenzie Valley Land and Water Board ("MVLWB"). The original road permit was for mine construction and the annual movement of concentrates out of the mine, and supplies into the mine. CZN plans to use the road for this same undertaking. Therefore, use of the winter road should not form any part of the coming EA. Some reviewers have claimed that, by not applying for a new road permit, CZN is 'project splitting' and attempting to avoid assessment of the road. The facts are that an assessment and permitting process was completed previously for the road, and the MVRMA states that it does not have to be repeated. Notwithstanding this, CZN is open to consultations with local First Nations in terms of accommodations that can be made in terms of minimizing the impacts of road operations. CZN is also investigating ways to minimize impacts associated with creek crossings within the scope of the existing road LUP.

CZN has the option to apply for the same mine project previously permitted by Cadillac, and thus avoid EA based on the grandfathering provision. However, CZN has applied for permits based on the inclusion of modern waste and water management plans. The project was referred to EA based on these "improvements", and CZN is not opposing the referral.

CZN believes the scope of the EA should focus on the specific improvements and changes proposed. This would include the Water Storage Pond, placement of mine and mill waste underground in a backfill mix, the Waste Rock Pile, a water treatment plant and two transfer facilities along the winter road. CZN does not believe it to be appropriate or necessary to include existing mine components, most of which were built by Cadillac, in the scope. Components of the mine already built, and/or that have been assessed in previous EA's, includes the airstrip, mill, flood protection dikes, tank farm, power generation system, incinerator, administration building, accommodation trailers, sewage treatment plant and runoff collection system.

COMMENTS ON SUBMISSIONS

INAC

CZN is in general agreement with the majority of the October 14, 2008 INAC submission. There are a few items we wish to comment on. INAC expects the EA will include impacts to wildlife and wildlife habitat (Scoping Question 1, page 2). CZN is proposing a development that is materially no different from Cadillac's in terms of the potential for impacts to wildlife. This was extensively studied in 1980 (see Ker Priestman project descriptions and the Beak study reports provided separately). Since that time, further studies (2006) and management and mitigation plans (Bear Encounter Protocol, Wildlife Sighting Log, Flight Impact Management Plan) have been adopted with the direct involvement of the territorial government ("GNWT") regional biologist. The mine covers a relatively very small area in an isolated valley. CZN realizes wildlife protection is important, but given the prior studies and mitigations already in place, does not see a need for further environmental assessment, apart from consideration of legislative requirements related to the *Species at Risk Act* (SARA), and the *Migratory Birds Act*.

Comments on socio-economic and cultural issues are given below under the heading 'GNWT'. CZN understands traditional knowledge is an important consideration, and important to First Nations, however CZN feels traditional knowledge is most relevant to the design of a project before construction. As the Prairie Creek mine is already built, we are unsure of the relevance of traditional knowledge to this EA.

Regarding Scoping Question 2, CZN agrees with INAC's position that "the Review Board scope the development to focus on the proposed changes and additions to the existing infrastructure". INAC then lists the infrastructure components that should be emphasized, and the list includes the Polishing Pond, Catchment Pond, and use of the Liard Highway and air travel. Changes are not being proposed to these components. The Polishing Pond currently polishes treated water, and this will not change. The Catchment Pond receives all site runoff before discharge to the environment, and will have the same function during mine operations. No differences to the use of the Liard Highway and air travel for crew changes are being proposed compared to Cadillac's plans. The power plant and incinerator are also listed as existing infrastructure components. The changes proposed for these are to replace the old inefficient units with new lower emission models. This is undeniably a positive environmental step. CZN is in the process of confirming the appropriate incinerator for the expected waste stream. Comments on emissions are given below under the heading 'GNWT'.

Regarding Scoping Question 3, INAC refers to paragraph 117(2)(a) of the MVRMA and consideration of cumulative effects. INAC's view is that "the winter road and any future plans for exploration Canadian Zinc has in the Prairie Creek area are within the scope of the cumulative effects assessment". However, INAC qualifies this by stating "conditions or mitigation cannot be retroactively applied to the winter road due to its grandfathered status". Firstly, paragraph 117 is included in Part 5 of the MVRMA, and therefore the winter road is exempt from consideration of cumulative effects. Secondly, CZN already holds permits for exploration in the area of the mine, and conditions or mitigation cannot be retroactively applied

to these either. Thirdly, future use of the winter road is not cumulative on past uses because it is the same development or undertaking.

Environment Canada ("EC")

CZN is also in general agreement with most of the October 20, 2008 EC submission, but has comments. EC state that: "the scoping of the assessment should be done in a much broader context; taking into account such overarching factors as the cumulative effects likely to result from the project, as well as climate change effects". CZN accepts there is a potential cumulative effect from water discharge from the mine, but feels this is the only potential cumulative effect that should be assessed in the EA. CZN also accepts there may be some climate change effects on the mine, and has addressed these in the water management plan.

EC state that: "the legislative framework and environmental conditions have changed considerably in the last 26 years". We note that, while there is no expiry date for the Part 5 exemption in the MVRMA, CZN will be required to comply with all applicable legislation at the permitting stage. We agree that environmental conditions have changed, hence our development of new waste, water and closure plans.

CZN undertakes to fulfill all obligations relating to the *Species at Risk Act* ("SARA"). Important SARA species in the area of the mine or potentially in the area include caribou, grizzly bear, wolverine and peregrine falcon. These species were considered during the Phase 3 drilling EA (the Project Description was part of EA0405-002 and should be added to the public record for this EA). CZN will review this and new data relating to SARA species, and develop any appropriate mitigation plans in consultation with EC and the GNWT.

Regarding scope of the project and cumulative effects, we reiterate that use of the road is exempt. We also do not agree that the voluntary remediation of the relatively small quantities of soils contaminated with hydrocarbons (estimated to be 75 m³ at Cat Camp and 20 m³ at Grainger Camp by EBA Engineering Consultants Ltd in 2007) constitutes a potential cumulative effect, or is a sufficiently significant issue worthy of consideration in the EA.

EC state that: "An assessment of air quality from equipment use, incineration, and dust generation should be included in the scope". The changes CZN is proposing include the replacement of old, inefficient gensets and an incinerator with low emission models. Further comment is given below under the heading 'GNWT'.

EC state that: "the proponent should demonstrate that the existing baseline data are sufficient in comparability and length of record". The Prairie Creek project is quite unique in that extensive baseline studies were completed prior to the 1982 Water Licence, and have been added to and updated since prior to the proposed operations. As such, the existing baseline study record is considerably more comprehensive and longer than the norm for projects at this stage.

DFO

CZN is in general agreement with the majority of the October 20, 2008 Fisheries and Oceans Canada ("DFO") submission. Our only comment is in relation to cumulative effects and activities along the winter road. As stated above, road activities are considered to be development specific (non-cumulative), and exempt from EA.

Parks Canada

CZN is in general agreement with Parks Canada's October 20, 2008 scoping submission. CZN has a few comments. In its remarks on the scope of EA, Parks Canada recommends that all physical works and activities be included, specifically the use of existing infrastructure. While we understand this position, we also feel the results of previous studies should be taken into account in order not to, in MVEIRB's own words, 're-invent the wheel'.

Parks Canada's reference to ecological integrity as a basis for assessment is interesting, and probably appropriate. CZN's intends that its plans do in fact preserve such integrity outside of an appropriately-sized area of localized 'effect'. However, there may be some predicted loss of integrity outside of the localized area, and in that case, it will be appropriate to determine the magnitude of the loss and its significance.

Regarding Parks Canada's 'minor' issues in Appendix 2, CZN believes it has addressed some of these issues already in past assessments (wildlife, non-native species), and looks forward to consulting with them in future to resolve others in a collaborative fashion.

GNWT

CZN found the October 20, 2008 scoping submission by the GNWT to be lacking in its understanding of project history. The submission largely ignores previous assessments, and the important Supreme Court ruling on the winter road. The submission is not considered to be appropriate for this point in the regulatory process because it is a mixture of assessment, scoping views, and detailed advice relevant to the permitting phase.

GNWT discuss Woodland caribou in the context of road access and hunting pressure. They state that: "the proponent needs to have a comprehensive plan for monitoring and mitigating the potential effects the development may have on the Nahanni complex caribou herd". In terms of assessment, CZN already has a grandfathered road permit. Further, impacts on caribou, and monitoring and mitigation, were reviewed and implemented recently as part of the Phase 3 drilling EA. A survey was completed, a Flight Impact Management Plan was prepared, and an electronic wildlife sighting log was adopted, all after review by the GNWT regional biologist. Terms and conditions specific to wildlife protection were incorporated into the winter road and Phase 3 drilling land use permits. None of this is mentioned by GNWT in their submission. GNWT mention the 'development'. The development is already built, the footprint will not change. CZN has no problem reviewing monitoring and mitigation plans and adjusting them as

necessary, and this too can be incorporated into permit terms and conditions. However, we do not believe there is a basis or need for further study of caribou in the EA.

GNWT refer to wildlife safety and the winter road, and suggest a need for a wildlife management plan, safety measures, and a wildlife reporting system, amongst other items. Again, the fact that a road permit already exists is ignored. Also, it appears the author is not aware of CZN's approved Controlled Road Use Plan, on file with the MVLWB. The plan addresses most of the issues raised. The plan was reviewed by GNWT. Their responses are attached and illustrate that the subject matter has been covered before.

GNWT discuss SARA listed species, and state that they must be considered during EIA. Caribou, wolverine, Dall's sheep and grizzly bear were considered during the Phase 3 drilling EA. Birds are the responsibility of Environment Canada, so will not be discussed here.

GNWT refer to a wildlife management plan (existing) and the need for a waste management plan (for food and garbage), and that these plans should be reviewed or developed in collaboration with the GNWT Environment and Natural Resources regional biologists. CZN has no problem with this; it is the path CZN has already taken with project activities and camp operations. However, we believe this is more appropriately a permitting stage discussion and not an issue worthy of consideration for EA. CZN has the same opinion in connection with medical/health services, potential negative social/health impacts, hazardous waste management, waste oil, asbestos and an on-site bioremediation cell.

GNWT cite the presence of the Cantung and Howards Pass projects within the range of the Nahanni Complex caribou herd, and the potential release of lead and zinc, as reasons for including wildlife cumulative effects in the EA. Cantung is approximately 190 km from Prairie Creek, and Howards Pass is further. The footprint of the Prairie Creek mine is small relative to the region and already in existence, and the winter road is already permitted. Lead and zinc concentrates will be transported in sealed bags in winter time. Therefore, we do not see the rationale for inclusion of wildlife cumulative effects in the EA.

Regarding socio-economics, there is no doubt that operation of the Prairie Creek mine will bring much needed jobs and economic benefits to the region. Many of the questions posed by GNWT and requests for more detail are answered in the text of the Project Description Report (PDR). CZN is continuing with education scholarships and supporting training programs. The recently signed MOU signed with the LKFN has provisions for education and training, as does the MOU between the NBDB and CZN.

Regarding cultural/heritage resources, CZN has conducted two searches of the Prince of Wales Northern Heritage Centre database previously, and no records of resources in the area were found. None have been brought to CZN's attention, or their presence suggested. We note that this information was provided in previous EA's, and no further studies were required by the MVEIRB.

Regarding project emissions and air quality, gas emission sources from mine operations will be primarily the power generating sets and the incinerator. CZN is aware that there are territorial and federal requirements that emissions from these sources must comply with. CZN will select, and design the configuration of, appropriate units, and provide predicted emissions data from them to demonstrate that they will be compliant with requirements. In terms of particulate emissions on the mine site, CZN considers this to be an operations management and worker health issue. Mitigation strategies will be included in operating plans and all Workers Compensation Board ("WCB") requirements will be met.

Regarding trucking weights, corridor contamination impacts and terrain, CZN is aware there may be issues with use of the Liard Highway and has initiated dialogue with the Department of Transport. However, we do not agree that corridor contamination impacts 'will likely occur', or that there is a 'high probability of leaching contaminants' from the Liard Transfer Facility. Mitigation and management plans will be specifically aimed at avoiding such issues. CZN already has an approved Controlled Road Use Plan for the winter road, and this plan will be modified at the permitting stage to include the Liard Highway.

SCOPING QUESTIONS AND OTHER COMMENTS

CZN's views on the scoping questions are appropriately addressed by the October 14, 2008 submission from INAC, apart from those items in the submission that CZN comments on above. Please refer to CZN's letter of October 17, 2008 for a description of documents CZN recommends be included on the public record for this EA.

As stated above, the main concern in the Communities proximal to the mine site is the protection of water quality. CZN plans to present a detailed assessment of water quality and related issues in the Developer's Assessment Report. We are confident that this assessment will address the concerns expressed and provide re-assurance that the proposed mine development plans will not significantly impact the environment during operations and after mine closure, and in fact we expect the assessment will demonstrate that environmental protection will be improved from the current status.

In closing, CZN welcomes an appropriate, efficient and procedurally fair EA process that focuses on the review of the new waste and water management plans, and closure plan. We believe the scope of EA should not include aspects of the mine or the project that were previously permitted, already built, or assessed and approved in past EA's.

Yours truly,

CANADIAN ZINC CORPORATION

David P. Harpley, P. Geo.

VP, Environment and Permitting Affairs



MAR 21 30

Mr. Williard Hagen Interim Chair Mackenzie Valley Land and Water Board PO BOX 2130 YELLOWKNIFE NT X1A 2P6

Dear Mr. Hagen:

Land Use Permit MV2003F0028 Winter Road, Prairie Creek Mine to Liard Highway

The Department of Environment and Natural Resources (ENR) has reviewed your letter dated March 1, 2007, regarding questions on:

- 1) Could a "no-hunting" corridor be established for the winter road? If so, what would be the process and timeframe to establish such a corridor?
- 2) What other strategies could the Government of the Northwest Territories (GNWT) employ to mitigate potential impacts to wildlife along the winter road?
- 3) Does the GNWT have any specific recommendations regarding protection of wildlife habitat that could be relevant in setting Land Use Permit conditions?

ENR understands that Canadian Zinc Corporation (CZN) is reopening a previously permitted and used winter road corridor that underwent an environmental assessment in the early 1980s. After only two years of use, the road was closed but remains today, after 25 years, visible on the landscape predominantly covered with early successional species. Construction, use and restoration of the winter road will occur from December to March for the period of the license. A 37 kilometre segment of all-weather road will also be upgraded for use, predominantly in conjunction with the winter road season but possibly for other project related activities year-round, with rehabilitation occurring August to September.

Question 1

The GNWT has the ability to limit hunting along roads for two separate reasons. The first reason would arise from concerns over public safety. For example the no hunting corridor along the Ingraham Trail, which is established by GNWT's Department of Municipal and Community Affairs under the *Area Development Act*. As there is no human habitation along the proposed winter road, human safety is not believed to be the primary concern in this case.

.../2



The second reason is for wildlife management through section 18(2) of the *Northwest Territories Wildlife Act*, which provides for the designation of a portion of one or more wildlife management units as (f) a special management area. As such the GNWT through the *Wildlife Act* does have the legal authority to restrict hunting along roads for the purpose of wildlife management.

Special management areas are designated by regulation under the *Wildlife Act*. The creation of regulations for the *Wildlife Act* is a complex process and ENR would only begin this process, if a wildlife management concern was clearly identified. This concern could either come from technical staff within ENR or as a request from local communities. Due to the Interim Measures Agreement the process would require extensive consultation with the Dehcho First Nation and local communities.

Consultation on new regulations would require a minimum of three to four months, and possibly longer depending on the outcome of the discussions. The timeframe for writing the new regulations would be an additional three to four months. Thus the entire process would take six months to several years. It needs to be noted that depending on the issues raised in consultation the recommendation at the end of the consultation process could be to not create a special management zone.

Question 2 and 3

The winter road corridor is known to traverse habitats utilized by a number of wildlife species including caribou, moose, grizzly bear, black bear, wolverine, bison and Dall's sheep. The corridor also encompasses the transition from boreal woodland caribou habitat to mountain caribou habitat.

Wood bison, boreal and mountain caribou are listed under the federal *Species at Risk Act* whereas grizzly bear and wolverine are species listed by Committee On the Status Of Endangered Species In Canada, as requiring special management attention due to their vulnerability to disturbance and sensitivity to landscape change.

Roads, both all-weather and winter, have the potential to affect wildlife and wildlife habitat in the following ways:

- · Direct mortality through vehicle collisions;
- Increased hunting pressure through facilitated access into the project area;
- Reduced habitat use in the zone of influence around the road because of vehicular traffic;
- Habitat fragmentation from the creation a linear corridor through previously contiguous habitat.

CZN, for the most part, recognizes these potential impacts and provides a number of mitigation strategies to address and reduce them to acceptable levels. These include:

- Implementing a Controlled Road Use Plan including appropriate speed limits and coordination of vehicle traffic on the road;
- Controlling access to the road (although it was not clear to whom access would be denied);
- Maintaining a record of all wildlife sightings on the road.

Along with the proposed "No Hunting Zone" addressed in question 1, these mitigations are a first step towards addressing the potential impacts to wildlife and wildlife habitat concerns that often result from road corridors. ENR would suggest that these measures be augmented in the ways outlined below to ensure that they are adequate for all wildlife species but also species at risk in particular and that these be developed in conjunction with our Dehcho Regional Biologist:

- CZN should include in their Controlled Road Use Plan:
 - A mechanism for truck and other vehicle operators to report to each other wildlife sightings so that vehicle speed can be sufficiently reduced and proper attention given to passing wildlife;
 - A protocol for operators to follow when wildlife is encountered that emphasizes that wildlife have the right-of-way and should be allowed free passage with minimal disturbance;
 - Management of the volume of traffic by considering the pulsing of traffic (i.e. having convoys) rather than a continuous disturbance from a stream of traffic.
- Along with a record of all wildlife sightings along the road, observations should be noted on wildlife response to the traffic and Global Positioning System location should be included where possible.
- As upgrading of the all-weather road will occur in late summer/early fall, disturbance of wildlife, mountain caribou and Dall's sheep are perhaps of most concern. A reconnaissance of the area should be undertaken prior to activities commencing. In the event that animals move into the area, activities should stop temporarily to allow free passage and minimal disturbance of wildlife.

Lastly, ENR strongly urges CZN to commence baseline wildlife studies along the road corridor and other project areas to support future development activities at this site. This type of work would greatly enhance the understanding of wildlife activities in the area and how it has changed from when initial studies were undertaken in the early 1980s.

Should you have any questions regarding the above, please contact Mr. Jason McNeill at 920-8071.

Sincerely,

R.P. Bailey (Deputy Minister



September 7, 2007

Tyree Mullaney Regulatory Officer Mackenzie Valley Land and Water Board P.O. Box 2130 Yellowknife, NT X1A 2P6

VIA EMAIL

Dear Ms. Mullaney,

CANADIAN ZINC CORPORATION, MV2003F0028 <u>Plan Submission and Review – Controlled Road Use Plan, Winter Road</u> Prairie Creek Mine to Liard Highway.

The Department of Environment and Natural Resources (ENR) has reviewed the above Controlled Road Use Plan based on its mandated responsibilities under the *Wildlife Act*, the *Forest Management Act (FMA)* and the *Environmental Protection Act (EPA)* and has the following comments. ENR has also included comments on behalf of the Department of Transportation (DoT).

Project Description

The Mackenzie Valley Land and Water Board (MVLWB) approved the Canadian Zinc Corporation's (CZC) Type A Land Use Permit application for a period of five years commencing April 11, 2007 and expiring April 10, 2012. The Permit allows for the "rehabilitation, maintenance, and use of a winter road connecting Prairie Creek Mine site to the Liard Highway". As per condition 26(1)(q), subsection 57, CZC has submitted their Controlled Road Use Plan for consideration. The Controlled Road Use Plan should include, but not be limited to: "Methods and techniques to be used during operation of the road to minimize impacts to wildlife and wildlife habitat".

Specific Comments / Recommendations

ENR and DoT have the following specific recommendations, concerns and comments regarding CZC's Controlled Road Use Plan:

- The proponent should specify authorized road uses and users, and should also detail the consequences of unauthorized road use.
- The proponent indicates that appropriate maximum speeds and driving guidelines for each segment of the road will be determined prior to the road opening. If specific speed limits cannot be determined at this time, it is requested that the range for speed limits be provided in conjunction with a generic set of guidelines. There is also no indication of the seasonal variability of speed limits, nor of signage requirements along the road.
- The proponent states that "it is assumed that road users are aware of and familiar with CZC's Fuel Spill Contingency Plan". ENR requests that the proponent provide details on how the Contingency Plan will be made available to all road users, and ensure that the Monitor is fully aware of CZC procedures as outlined in the Contingency Plan.
- The Fort Liard, Nahanni Butte, and Fort Simpson airports could play an important role as staging airports in the case of an airborne rescue. If these airports are included in the response procedures, it is important that the proponent correspond with DoT to ensure that its emergency plans are modified to include CZC contacts and radio frequencies.
- The proponent indicates that Fort Nelson, BC and Fort Simpson, NT emergency services will be used in the case of an accident. ENR and DoT request that the proponent include confirmation from the health authorities and RCMP in these communities that they are aware that they might be called on in an emergency, and that they agree to respond in the case of an emergency. If this confirmation has not yet been received, ENR and DoT suggest contacting the Deh Cho Regional Health Authority and the RCMP for advice on proceeding with emergency response plans. For further information on the provision of ground ambulance services on NWT roads, please consult:

http://www.maca.gov.nt.ca/resources/P313 FINAL Report November%2014%2006.pdf

- The proponent states that "in the event of an accident of any kind, drivers are required to contact the nearest check-point immediately". ENR and DoT request clarification on contingency procedures should a driver prove unable to contact the nearest checkpoint.
- Allocation of costs of emergency response are not specified. ENR and DoT request clarification on this matter, and also on allocation of costs and procedures for unauthorized road users.
- DoT is in the process of restructuring their Weigh Scale Network. The installation of a Weigh Scale in Fort Liard is being considered. Data from

the Weigh Scale Network could be shared with CZC to give then advanced warning of incoming traffic.

- The proponent has provided a list of unacceptable practices, however it is not clear as to how and where this information will be presented to road users. Will this information be presented on signs at the mine site and at the gatehouse? If unacceptable practices are encountered, what type of consequences will be given?
- ENR is pleased to note that the GNWT will be notified of any wildlife encounters and that wildlife monitoring information will be passed along to the Regional Biologists. Kilometer markers, communication between traffic, and a well-structured wildlife-sighting log would also prove valuable in collecting information on sightings.
- It would be worthwhile to include background information on this project, as well as a brief description of when initial construction activities are proposed, estimated time frame for winter road use (Dec-April), and a map of the proposed route.
- It is also requested that a map designating the various segments along the road be included.

Should you have any questions regarding the above, please contact Claire Singer, Environmental Regulatory Analyst at 920-6591.

Sincerely,

Claire Singer

Environmental Regulatory Analyst

Environmental Assessment and Monitoring

Environment and Natural Resources

C. Nic Larter
Regional Biologist
ENR – Deh Cho Region

Michel Lafrance Regional Superintendant Transportation – Fort Simpson Region

Ken Lambert Regional Environmental Protection Officer ENR – Deh Cho Region

Erika Nyyssonen Industrial Technologist – Mining Environmental Protection