



Łíídljı́ Kúé First Nation

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October 20, 2017

SENT VIA E-MAIL

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Canadian Northern Economic Development Agency
Government of Canada
5019 52nd Street
Yellowknife, NT X1A 1T5

Attention: Matthew Spence, General Director & Kate Hearn, Assistant Deputy Minister

Dear Sirs/Mesdames:

**Re: Comments for Indigenous consultation and potential accommodation
regarding the Report of Environmental Assessment on the proposed Prairie
Creek All Season Road
Your File No. EA1415-01**

Łíídljı́ Kúé First Nation ("LKFN") makes the following comments regarding the Mackenzie Valley Environmental Review Board's (the "Board") *Report of Environmental Assessment and Reasons for Decision on Canadian Zinc's proposed Prairie Creek All Season Road Project EA1415-01* (the "Report").

Based on evidence provided by LKFN and other intervenors in the hearing process, the Review Board found that the proposed Prairie Creek All Season Road Project (the "Project") is likely to cause significant adverse impacts on the environment and Dene rights, and recommended a suite of measures and recommendations designed to prevent or minimize impacts on the environment and Dene rights.

We note that the Board's findings were made even without the full scope of the evidence of significant adverse impacts on the environment and Dene rights that LKFN intended but was unable to provide, due to insufficient resources for LKFN participation.

Despite this deficiency, LKFN is in general agreement with the measures proposed by the Board. However, LKFN believes that further decisions by government and actions by regulators are required to address the many uncertainties that attend the Project. We are particularly concerned that the nature and extent of the Project is

beyond the financial and technical capacity of Canadian Zinc ("CanZinc"). Accordingly, we believe that there are substantial risks associated with granting approvals and permits for the Project unless there are requirements on CanZinc to make advance expenditures or otherwise provide financial guarantees that are required to implement the measures recommended by the Board and to monitor those measures for effectiveness.

Given the history of the Prairie Creek Mine and the nature of this Project, which is proposed, occur within a sensitive and spiritually significant part of LKFN traditional territory, recognized internationally by UNESCO as a World Heritage Site and by Canada and the Dehcho First Nations as a National Park Reserve, we believe such guarantees are absolutely required.

Accordingly, and as detailed further in our Written Response below, it is LKFN's position that the Board's measures and suggestions in the Report must not only be substantially incorporated in the Ministerial responses to the Report, but that further decisions and direction from the Ministers regarding the regulatory permitting process must take into account the need for CanZinc to demonstrate in advance of receiving any regulatory approvals that it has the capacity to fully implement the suite of measures that the Board has proposed in respect of those approvals.

This is particularly significant in respect of the measures which propose the direct participation of LKFN and other affected First Nations in monitoring the impacts of the Project, participating in Indigenous Knowledge studies, informing the further technical design of the Project, and informing adaptive management process in respect of the Project. Such measures will require significant funding commitments to be effective. In our view, such measures will only be fulfilled if CanZinc is required to enter into legally-binding agreements with LKFN and other affected First Nations (either individually or collectively) in advance of any permitting to establish that the necessary funding commitments are in place.

We look forward to having our views fully considered by the responsible Ministers as part of this consultation process, and to hearing back from you as part of that process.

Yours truly,


for Chief Gerald Antoine
Łíídljį Kúé First Nation

c. Grand Chief Herb Norwegian, Dehcho First Nation
Chief Peter Marsellais, Nahanni Butte Dene Band
Larry Innes, OKT LLP

**Łíídlíj Kúé First Nation's
Written Response to the
EA1415-01 Report of the Environmental
Assessment and Reasons for Decision for the
Prairie Creek All Season Road,
Canadian Zinc Corporation**

Łíídlíj Kúé First Nation

October 19, 2017

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1.0 EXECUTIVE SUMMARY

This Written Response is provided in reply to the EA1415-01 *Report of Environmental Assessment and Reasons for Decision for the Canada Zinc Corp Prairie Creek All Seasons Road Project*, dated September 12, 2017 (the “Report”), regarding the Canzinc’s proposed Prairie Creek All Seasons Road (the “Project”), and your letter of the same date inviting comment on it.

In your letter, LKFN was asked to consider and reply to the following questions:

Does the EA address concerns that LKFN identified to date regarding potential adverse impacts of the Project on LKFN’s established or asserted Aboriginal and/or Treaty rights?¹

- Are there any specific activities or components of the Project which, after considering the recommended measures, developer’s commitments, and other content in the REA, you may identify as still having the potential to adversely impact your established or asserted Aboriginal and/or Treaty rights?
- If so, please specify the nature of the outstanding potential adverse impacts and what additional steps you would recommend to address the potential adverse impact.

Part 2 outlines LKFN’s position on the Report in general. Part 3 addresses each of the Measures set out in the Report in the order in which it appears in the report, and Suggestions are also addressed where they are of particular interest to LKFN. For each, the goal and content of each Measure is briefly summarized, and then LKFN’s position on the Measure, including additional requirements which must be attached to the Measure, are set out. Part 4 addresses the Developer’s Commitments and LKFN’s position on how they should be treated. Part 5 is a brief conclusion.

¹ LKFN uses the term “Dene Rights” to capture the full scope of Aboriginal and Treaty rights under s. 35 of the *Constitution Act, 1982* as well as the rights of the Dene as an Indigenous People within the meaning of the *United Nations Declaration on the Rights of Indigenous Peoples*. From time to time, “Indigenous rights” is also used.

LKFN participated in the environmental assessment from its inception to the best of its ability, but without adequate engagement and advanced funding to submit a technical report including Indigenous knowledge. This submission must be understood in that context.

2.0 INTRODUCTION

Łíídlj Kúé First Nation (“LKFN”) are a Dene people, and the descendants of the original peoples of the Project lands. LKFN carries a collective responsibility to protect the ecological integrity of our sacred waters, through which all life begins. It is through our continued practices of our culture and lifestyle that we govern and share resources, and continue relationships which were built in time immemorial. Such laws have sustained us for millennia, and through them we continue to prosper and to meet our obligations to the Creator to protect the land for future generations.

LKFN considers Naha?deh to be a special sacred area, and is extremely concerned about potential impacts to heritage resources, the environment, human safety, and the cultural uses of that place. We have extensive historical use of the Nahanni area, as shown through previous Indigenous Knowledge studies related to our Dehcho Land Use Plan and Nahanni National Park Expansion, including living knowledge and use of areas, features, and resources within the project area. As LKFN noted in the hearing:

Our Elders are the one that has given us great stories and that we are the Dene people of the Dehcho area, and this is our land. Whatever stories that the Elders have given us in the past, we have to take care of our land. And all the young people that's following us, the young generation, they are going to need to -- our land at the end of the time.

LKFN agrees with the Mackenzie Valley Environmental Impact Review Board (the “Board”) determination that the proposed Prairie Creek All Season Road (the “Project”) is likely to cause significant adverse impacts. In general terms, LKFN also agrees with the sixteen recommended Measures outlined by the Board, and supports several of its Suggestions as well.

However, it is the submission of LKFN that it is not enough for the Crown to require those measures of the Proponent. Wherever possible, the measures must be incorporated within the conditions of any license or permits that are granted. Further, no licenses or permits should be granted until sufficient funding arrangements are put into place by CanZinc to ensure that the measures will in fact be carried out. The Developer's Commitments must be treated in the same way.

In addition, it is crucial that LKFN and other affected First Nations who are the traditional stewards of the Project Area be included in all aspects of the Project not only as knowledge-holders and communities entitled to consultation, but as decision-makers involved in the same way as other government regulators. This is necessary to ensure that Dene values are implemented throughout the process, that reconciliation is advanced, and that significant adverse impacts from the Project are actually mitigated to the greatest possible extent.

Without a firm requirement that regulators actively enforce the Measures and Developer's Commitments by including them as preconditions of licensing and requiring funding in advance, and without Dene involvement at all levels, LKFN believes that many of the measures will not in fact be implemented. As LKFN noted in the hearing,

This is our land. And people want to use the land. People want to use the resources. The track record hasn't really been very beneficial for us. And we're not going to be sitting aside and being quiet.... [What] is needed is to protect the land.

The Written Response is aimed to do that. A failure to actively enforce the enforcement and funding of the Measures and Developer's Commitments and include LKFN and other First Nations fully in this project, as required by this Written Response, would allow this track record to continue, and violate LKFN's Dene Rights and its sacred responsibility to protect the land.

In the Written Response below, LKFN repeatedly points out the need for strong enforcement of the Measures and Developer's Commitments through (i) licensing conditions and (ii) the allocation advance funding, as well (ii) full involvement of LKFN and other affected First Nations

in the regulatory process. In addition, requirements specific to ensuring that particular Measures address the concerns of LKFN are raised, where relevant.

3.0 MEASURES

In the following section, the proposed mitigation measures are summarized, LKFN's position is outlined, and alternative measures or actions are proposed, specifically addressing how the Measure can be made truly enforceable, how the LKFN can be involved in the design, implementation, and evaluation of the Measure, and other requirements, as needed.

3.1 HUMAN SAFETY

Measure 5-1: Independent technical review panel

Measure 5-1 seek to prevent accidents and malfunctions caused by the proposed Prairie Creek All Season Road which would result in significant adverse impacts on people and the environment.

Measure 5-1 requires the CanZinc to establish and fund an independent technical review panel to evaluate and approve the final road design, which must be composed of at least three professional engineers and geoscientists who have expertise in northern road design and experience dealing with permafrost and mountainous terrain, after consultation with LKFN and other stakeholders.

LKFN agrees that the panel is necessary, that it should include at least three engineering and geoscientist expertise, be in place prior to the design of the road, and provide assistance, advice, and recommendations on the preliminary and final road design, as well as support during construction. However, LKFN remains very concerned about safety issues along the road: the terrain along which the proposed Project would pass is extreme, the proposed traffic is heavy, and the area is remote from emergency response teams. LKFN believes that the "acceptable" risk levels should be low.

For those reasons, LKFN also requires the following:

- 1) the mandate and terms of reference for the panel must be developed in consultation with LKFN and other affected First Nations;
- 2) LKFN and other affected First Nations should not only be consulted on panel members, but should have the opportunity to participate in the selection process, with the objective being consensus on the best qualified individuals;
- 3) the panel composition must also include an individual with extensive Dene knowledge of the Project area;
- 4) the mandate and terms of reference of the panel must include specific direction to ensure (and, if necessary, fund) the collection of site-specific data respecting ground composition is collected and considered;
- 5) the mandate and terms of reference of the panel must include specific direction to ensure that the road is designed to mitigate impact to karst and permafrost;
- 6) the mandate and terms of reference of the panel must include specific direction to review the risks of the Project in terms of injury, death, or environmental damage due to accidents, consider traffic patterns and measures, and provide an assessment of the risks and consequences of the proposed road, prior to approval of the final road design;
- 7) the panel's reports should be provided to LKFN and other affected First Nations as well as the regulators, for approval of the final road design;
- 8) the panel must establish a plan for monitoring the Project during construction, with LKFN and other affected First Nations involved as monitors; and,
- 9) CanZinc must be required to allocate sufficient funding to establish the panel and to enable the panel to carry out its mandate – including provision of funding to enable LKFN and other affected First Nations to fully participate in that work – before any permits or approvals are granted to enable work any on the Project to proceed.

Measure 5-2: Traffic Control Mitigation and Management Plan

Measure 5-2 seeks to reduce adverse impacts on human safety water quality, and wildlife from accidents and increased harvest along the road.

Measure 5-2 requires CanZinc to create a Traffic Control Mitigation and Management Plan to manage access and traffic on the road during all project phases and all seasons and weather conditions, which is approved by the regulators.

LKFN agrees that a traffic plan is necessary, and that it should include adequate signage, ongoing monitoring, and adaptive management.

In addition, LKFN requires the following:

- 1) CanZinc must be required to generate additional data related to traffic and the risk of injury, death, or environmental damage, especially on higher-risk portions of the road, and provide it to the independent technical review panel;
- 2) signage developed under the Traffic Control Mitigation and Management Plan must be developed so as to be visible in winter weather as well as summer weather;
- 3) CanZinc must be required to fully engage LKFN and other affected First Nations in the development of the Traffic Control Mitigation and Management Plan at every stage, from inception to approval; and,
- 4) CanZinc must be required to allocate sufficient funding to develop the Traffic Control Mitigation and Management Plan before any permits or approvals are granted to enable work on the Project to proceed.

Suggestion 5-1 & 5-2: Avalanches

Suggestion 5-1 & 5-2 seek to reduce adverse impacts resulting from avalanches.

Suggestion 5-1, aimed at CanZinc, would require updated avalanche hazard maps and a number of measures to plan for emergency response and to incorporate avalanche planning into the final road design. Suggestion 5-2, aimed at regulators, would require the Mackenzie Valley Land and Water Board and Parks Canada to consider the Alpine Solutions recommendations, CanZinc's commitments, and CanZinc's avalanche planning.

LKFN is concerned about having proper avalanche response procedures in place, and supports these suggestions.

In particular, LKFN requires the following:

- 1) regulators must require proper avalanche response planning and ensure that mechanisms to carry out avalanche response procedures are in place as a precondition to licensing of the Project; and,
- 2) CanZinc must be required to allocate sufficient funding to develop the avalanche response plans and procedures before any permits or approvals are granted to enable work on the Project to proceed.

3.2 WILDLIFE AND WILDLIFE HABITAT

Measure 6-1: Wildlife Management

Measure 6-1 is aimed at mitigating significant adverse impacts of the road on wildlife and wildlife habitat due to: its location in a wildlife reserve populated by species at risk; the impact of the road construction, increased traffic on the road, and increased hunting using the road; and the fact that the developer has failed to collect adequate baseline information on which to base predictions regarding wildlife impact and mitigation plans.

Measure 6-1 requires CanZinc to collect baseline data prior to road construction, monitor wildlife and wildlife habitat during the construction and operation of the road, incorporate traditional knowledge in developing and implementing a monitoring program, and develop and implement an adaptive management framework. In particular, baseline studies are required for northern mountain caribou, boreal caribou, collared pika, and bird species at risk, based on the standards of Parks Canada, GNWT, and ECCC within their respective jurisdictions.

LKFN agrees that baseline studies are necessary, and that wildlife monitoring must take place throughout all stages of the Project. However, it is not sufficient to meet the standards of Parks Canada, GNWT, and ECCC; LKFN and other affected First Nations are traditional stewards of the Project area, and must be involved in the same way as other government regulators.

To that end, LKFN requires the following:

- 1) Dene knowledge must inform and be incorporated into the development of the baseline wildlife research, and that such knowledge should be acquired through the development of protocols and processes with LKFN and other affected First Nations;
- 2) CanZinc must be required to fully engage with LKFN and other affected First Nations in the development of the baseline research plan and monitoring plans, including in the choice of appropriate methodology, and in the execution of the actual field research;
- 3) as traditional stewards of the Project area, LKFN and other affected First Nations must be included in the same ways and to the same extent as other government regulators in the development, approval, and implementation of the baseline research and monitoring plans, including through the involvement of Dehcho Ke'hodi (Guardians) in the monitoring plan, in order to ensure that Dene knowledge, values and experience are engaged in respect to the Project; and,
- 4) before any permits or approvals are granted to enable such research to proceed, CanZinc must be required to provide funding to enable LKFN and other affected First Nations to fully participate as Dene knowledge holders in the development of the baseline wildlife research plan and as government regulators in the development, approval, and implementation of the baseline wildlife research and annual monitoring reports.

Measure 6-2: Wildlife Management and Monitoring Plan (WMMP)

Measure 6-2 is aimed at using CanZinc's Wildlife Management and Monitoring Plan to reduce adverse impacts on wildlife and wildlife habitat, so that they are no longer significant.

Measure 6-2 requires the regulators to require, and CanZinc to prepare and implement, a Wildlife Monitoring and Management Plan that meets the requirements of the GNWT and Parks Canada, involves public review and comment, and includes provisions for adaptive management, annual reports, and interlinking with the Traffic Control Mitigation and Management Plan.

LKFN agrees that a Wildlife Management and Monitoring Plan is necessary. However, LKFN has no confidence that the adverse impacts of the Project on wildlife and wildlife habitat can be reduced to the point that they are no longer significant if the matter is left entirely to CanZinc, its consultants, and government wildlife regulators.

For that reason, LKFN also requires the following:

- 1) Dene knowledge and values must be an essential component of the proposed Wildlife Management and Monitoring Plan and the associated adaptive management framework, and should be acquired through the development of protocols and processes with LKFN and other affected First Nations, and demonstrably included in the plan itself;
- 2) the proposed Wildlife Management and Monitoring Plan should include aerial surveys of sentinel and migratory mountain caribou herds;
- 3) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the development, approval, and implementation of the Wildlife Management and Monitoring Plan, including through the involvement of Dehcho Ke'hodi (Guardians) in order to ensure that Dene knowledge, values and experience are engaged in respect to the Project and the Wildlife Management and Monitoring Plan; and,
- 4) before any regulatory approvals associated with the Wildlife Management and Monitoring Plan are granted, CanZinc must be required to provide funding to enable LKFN and other affected First Nations to fully participate to the same extent as other government regulators in the development, approval, and implementation of the Wildlife Management and Monitoring Plan, and the evaluation of annual reports in relation to adaptive management.

Measure 6-3: Reducing the risk of vehicle collisions with wildlife

Measure 6-3 is aimed at reducing the likelihood of significant impacts on wildlife from collision with vehicles along the road.

Measure 6-3 requires CanZinc to identify and communicate wildlife cautions zones along the road, and to incorporate those zones into the Wildlife Management and Monitoring Plan, including a description about how wildlife information will be collected from drivers, a system for identifying caution zones based on past collisions or Traditional Knowledge, use of a remote camera trap system, and annual reporting.

LKFN agrees that wildlife caution zones and crossings are necessary.

In addition, LKFN requires the following:

- 1) Dene knowledge and values must be an essential component of the proposed caution zones and the development of implementation measures such as camera traps, wildlife recording, and reporting mechanisms, and should be acquired through the development of protocols and processes with LKFN and other affected First Nations, and demonstrably reflected in the provisions regarding caution zones which are included in the Wildlife Management and Monitoring Plan; and,
- 2) before any regulatory approvals associated with the Project or the development of caution zones are granted, CanZinc must be require to provide funding sufficient to carry out the measures associated with caution zones, and to enable LKFN and other affected First Nations to fully participate in development and implementation of those measures.

3.4 TRADITIONAL HARVESTING

Suggestions 7-1 – 7-4: Harvest monitoring program

Suggestions 7-1 – 7-4 aim to mitigate potential adverse impacts on traditional harvesting due to new access to the area by way of the Project road.

Suggestions 7-1 – 7-4 contemplate wildlife authorities developing a harvest monitoring program, including baseline studies, engagement with local communities and harvesters, and tracking and reporting on changes to harvest patterns and wildlife pressures due to the Project.

The developer is encouraged to be supportive of this program, examples are tendered, and public education is suggested.

LKFN is interested in the development of a harvest monitoring program, but not one that is carried out by others in ways outside of LKFN control. LKFN has a long history of experiencing monitoring by wildlife authorities in violation of Dene rights, and requires that any harvest monitoring program be carried out under the authority of LKFN, if it chooses to participate, and other affected First Nations.

For that reason, LKFN requires the following:

- 1) government regulators must engage with LKFN and other affected First Nations regarding the development of an Agreement-in-Principle for a wildlife monitoring program that is co-managed by LKFN and other First Nations or managed by LKFN and other First Nations; and,
- 2) before any regulatory approvals associated with the Project or the development of caution zones are granted, CanZinc or regulators must be required to provide funding sufficient to enable LKFN and other participating First Nations to develop a harvest monitoring program. Further provisions must be in place identifying the respective responsibilities of CanZinc and the regulators to fund and support any harvest monitoring programs if it goes ahead.

3.5 WATER QUALITY AND QUANTITY

Measure 8-1: Water baseline data, mitigation, monitoring, and adaptive management

Measure 8-1 is aimed reducing significant adverse impacts on water quality and quantity as a result of inadequate hydrology data, inadequately designed crossings, the sensitive location of the Project, and lack of systematic monitoring and adaptive management. It is designed to improve CanZinc and regulators' understanding of hydrology conditions.

Measure 8-1 requires CanZinc to create and implement a water plan approved by Parks Canada, Fisheries and Oceans Canada, and the Mackenzie Valley Land and Water Board. It requires collecting additional baseline data, identifying and implementing appropriate mitigation, combining monitoring programs and plans to coordinate water monitoring efforts, and planning for adaptive management. This plan is intended to inform the design of Project crossings, including the Sundog Creek diversion channel.

LKFN agrees that a water plan involving baseline data, mitigation measures, monitoring plans, and adaptive management is necessary. However, it is not sufficient to meet the standards of Parks Canada, Fisheries and Oceans Canada, and the Mackenzie Valley Land and Water Board: LKFN and other affected First Nations are traditional stewards of the Project area, and must be involved to the same extent as other government regulators. LKFN's specific requirements must also be addressed.

For that reason, LKFN also requires the following:

- 1) Dene knowledge and values must be an essential component of baseline data, mitigation, monitoring and adaptive management planning for water, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plans;
- 2) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the development, approval, and implementation of baseline data, mitigation, monitoring and adaptive management planning for water, in order to ensure that Dene knowledge, values, and experience are engaged and that Dene requirements are met;
- 3) baseline studies and monitoring must specifically collect information about TSS and turbidity;
- 4) monitoring and adaptive management must include the involvement of LKFN and other First Nations' individuals, including Dehcho Ke'hodi (Guardians), in the monitoring of water; and,

- 5) before any regulatory approvals associated with the Project or water studies are granted, CanZinc must be required to provide funding to enable LKFN and other affected First Nations to fully participate on the same basis as government regulators in the development, approval, and implementation of baseline data, mitigation, monitoring and adaptive management planning for water.

Suggestion 8-2: Acid rock drainage and metal leaching

Suggestion 8-2 is aimed at addressing the potential for impacts from the use of borrow materials with a risk of acid rock drainage or metal leaching potential.

Suggestion 8-2 would require Parks Canada and the Mackenzie Valley Land and Water Board to enforce strict acid rock drainage and metal leaching conditions to minimize any potential impacts on water quality or fish from acid rock or metal leaching.

LKFN supports the enforcement of strict conditions to minimize impacts related to acid rock drainage and metal leaching.

For that reason, LKFN also requires:

- 1) that the regulators be required to enforce strict acid rock drainage and metal leaching conditions, by imposing them as a condition of permits or licenses and by establishing a system for ensuring compliance with those conditions;
- 2) that affected First Nations, including LKFN, are directly involved with the regulators in identifying the appropriate conditions for acid rock drainage and metal leaching; and,
- 3) before any regulatory approvals associated with the Project or water studies are granted, CanZinc must be required to provide funding to enable LKFN and other affected First Nations to participate as in the identification of the appropriate conditions for acid rock drainage and metal leaching, and the requirement of meeting those conditions – along with enforcement measures – must be put into place and incorporated into licensing conditions.

3.6 FISH AND FISH HABITAT

Measure 9-1 – Effects mitigation, baseline data, monitoring, and adaptive management for the Sundog Creek diversion

Measure 9-1 is aimed at preventing significant adverse impacts on fish and fish habitat from the Sundog Creek diversion by requiring CanZinc to design, construct, and operate the Sundog Creek diversion channel in a way that is protective of fish and fish habitat

Measure 9-1 requires CanZinc to develop a Sundog Creek Diversion Plan approved by Parks Canada and DFO, which mitigates and minimizes potential adverse impacts the channel design by using all available best practices, and which requires the collection of baseline data, short-term and long-term monitoring, and adaptive management. In particular, benthic invertebrates, aquatic vegetation, fish use and occupancy, channel morphology, flow characteristics, water quality, hydrology, and any other variable of concern as deemed appropriate by DFO or Parks Canada are to be studied and monitored.

LKFN agrees that the Sundog Creek Diversion Plan is necessary. However, during the hearing, the DFO confirmed that the road realignment will ultimately result in serious harm to fish and fish habitat. LKFN does not believe that the harms will be mitigated to the greatest extent possible unless the proposed mitigation measures are subject to an independent review.

For that reason, LKFN also requires the following:

- 1) prior to approval of the Sundog Creek Diversion Plan by DFO, Parks Canada, or any affected First Nations, it must be provided to an independent third party with relevant expertise (to be chosen by the participating First Nations and CanZinc, and funded by CanZinc) for independent review and comment, which must be taken into consideration by the regulators prior to approval;
- 2) baseline studies, monitoring, and adaptive management pursuant to the Sundog Creek Diversion Plan must specifically collect information quantities of arctic grayling and trout, and their habitats;

- 3) Dene knowledge and values must be an essential component of the Sundog Creek Diversion Plan, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plan itself;
- 4) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the development, approval, and implementation of Sundog Creek Diversion Plan, in order to ensure that Dene knowledge, values, and experience are engaged; and,
- 5) before any regulatory approvals associated with the Project or Sundog Creek Diversion Plan are granted, CanZinc must be required to provide funding adequate to enable the independent third party review and LKFN and other affected First Nations to fully participate to the same extent as other government regulators in the development, approval, and implementation of the Sundog Creek Diversion Plan.

3.7 CULTURE AND HERITAGE

Measure 10-1: Traditional Knowledge

Measure 10-1 is aimed at preventing significant adverse impacts on heritage resources by ensuring that Traditional Knowledge (“Indigenous Knowledge”) will inform Project design, mitigation of impacts on people and the environment, monitoring, and adaptive management. It is also aimed at ensuring that all potentially-affected Indigenous groups will be engaged in a culturally appropriate way in the collection of Indigenous Knowledge.

Measure 10-1 requires CanZinc to engage with First Nations including LKFN about ways to avoid impacts on the project prior to an Archaeological Impact Assessment; to incorporate Indigenous Knowledge into Project design, mitigations, monitoring, and adaptive management; to submit an updated engagement record and plan for approval by Parks Canada and the Mackenzie Valley Land and Water Board; and to do so in a culturally-appropriate way that respects applicable Indigenous Knowledge policies and protocols.

LKFN agrees that incorporating Indigenous Knowledge into all stages of the project is necessary to minimize significant adverse impacts on heritage resources, and that such engagement with

affected First Nations including LKFN is required. We note that CanZinc previously committed to conducting an Indigenous Knowledge study, but has not fulfilled that commitment. In addition, insufficient Indigenous Knowledge has been relied upon in the Board's process thus far.

For those reason, LKFN also requires the following:

- 1) the terms of the Indigenous Knowledge study must be developed collaboratively with the affected First Nations including LKFN, and shall include provisions regarding confidentiality and Dene ownership of Dene knowledge;
- 2) the Indigenous Knowledge study must be fully and adequately funded by CanZinc;
- 3) before any regulatory approvals associated with any part of the Project are granted, CanZinc must be required to provide funding adequate to carry out the Indigenous Knowledge study, including funding adequate to allow for full engagement by affected First Nations including LKFN, in a culturally appropriate way, and to begin the Indigenous Knowledge study; and
- 4) CanZinc must be required to submit identify in each mitigation and monitoring plan how Indigenous Knowledge has been incorporated, and those plans should always be subject to approval by affected First Nations including LKFN.

Measure 10-2: Archaeological Impact Assessment

Measure 10-2 is also aimed at preventing significant adverse impacts on heritage resources.

Measure 10-2 requires CanZinc to conduct an Archaeological Impact Assessment along the final alignment of the Project and all sites where it will cause a disturbance, which is developed in consultation with regulators and First Nations including LKFN.

LKFN agrees that an Archaeological Impact Assessment is necessary and that it should build upon the Indigenous Knowledge Study. It agrees that it should incorporate all evidence of place names, Indigenous land use, Indigenous Knowledge, cultural and spiritual use, and harvesting in the vicinity of the Project, and be completed after the Indigenous Knowledge Study and the final road alignment, but before the ground is disturbed.

LKFN also requires the following:

- 1) the terms of the Archaeological Impact Assessment study must be developed not only in consultation with regulators and First Nations including LKFN, but must be approved by regulators and First Nations including LKFN;
- 2) the Archaeological Impact Assessment must not be merely a “desk top” review, but must involve field surveys aimed at identifying heritage resources on the ground and appropriate mitigation measures;
- 3) the Archaeological Impact Assessment must include engagement with affected First Nations including LKFN. Such engagement must go beyond engagement in Indigenous Knowledge studies, and include LKFN involvement in field surveys and mitigation measures; and,
- 4) before any regulatory approvals associated with the Project are granted, CanZinc must be required to provide funding adequate to carry out the Archaeological Impact Assessment, including funding adequate to allow for full engagement by affected First Nations including LKFN in a culturally appropriate way.

3.8 VEGETATION

Measure 11-1: Rare plant and rare plant assemblage baseline surveys and management in the Nahanni National Park Reserve

Measure 11-1 is aimed at preventing significant adverse impacts on vegetation within Nahanni National Park Reserve by requiring additional vegetation surveys.

Measure 11-1 requires CanZinc to conduct baseline surveys for rare plants and rare plant assemblages, and develop a Rare Plant Management Plan for approval by Parks Canada, prior to ground disturbance or clearing within the NNPR. The baseline surveys must address impacts on rare plants and rare plant assemblages, mitigation measures, monitoring, adaptive management, and reclamation, and the Rare Plant Management Plan must include mitigation measures, detailed monitoring plans, and adaptive management measures based on the baseline surveys.

LKFN agrees that baseline surveys and a Rare Plant Management Plan are necessary to reduce significant adverse impacts on vegetation.

LKFN also requires the following:

- 1) Dene knowledge and values must be an essential component of baseline data, mitigation, monitoring, adaptive management, and reclamation planning, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plans;
- 2) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the development, approval, and implementation of baseline data and the Rare Plant Management Plan, in order to ensure that Dene knowledge, values, and experience are engaged;
- 3) monitoring and adaptive management must include the involvement of LKFN and other First Nations in the monitoring of vegetation, including the involvement of Dehcho Ke'hodi (Guardians); and,
- 4) before any regulatory approvals associated with the Project or Rare Plant Management Plan are granted, CanZinc must be required to provide funding adequate to carry out the studies and the Rare Plant Management Plan, including funding adequate to enable LKFN and other affected First Nations to fully participate to the same extent as other government regulators in the development, approval, and implementation of baseline data and the Rare Plant Management Plan and its adaptive management measures.

Measure 11-2: Invasive species management

Measure 11-2 is aimed at preventing significant adverse impacts from invasive plant species on vegetation communities (which also serve as wildlife habitat) caused by the spread of invasive species along the corridor of the Project through the relatively “undisturbed” region.

Measure 11-2 requires CanZinc to collect additional information on invasive species and develop an Invasive Species Management Plan, including by surveying the right-of-way, mitigating the spread of invasive species through already-identified measures (eg a wheel-wash station) as well as additional measures identified by the GNWT and Parks Canada, and monitoring for the presence of invasive species under the Invasive Species Management Plan, which will include off-site and on-site prevention and control measures and adaptive management provisions.

LKFN agrees that additional studies and an Invasive Species Management Plan are necessary to reduce the adverse impact of invasive species.

LKFN also requires the following:

- 1) Dene knowledge and values must be an essential component of the studies and Invasive Species Management Plan, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plans;
- 2) the additional studies and Invasive Species Management Plan must specifically address the impact of invasive species on riparian habitats in the area;
- 3) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the development, approval, and implementation of the additional studies and the Invasive Species Management Plan – including in the identification of additional mitigation measures – in order to ensure that Dene knowledge, values, and experience are engaged;
- 4) monitoring and adaptive management must include the involvement of LKFN and other First Nations in the monitoring of vegetation, including monitoring by Dehcho Ke'hodi (Guardians); and,
- 5) before any regulatory approvals associated with the Project or Rare Plant Management Plan are granted, CanZinc must be required to provide funding adequate to carry out

the studies, create and execute the Rare Plant Management Plan, and provide adequate funding to enable LKFN and other affected First Nations to fully participate to the same extent as other government regulators in the development, approval, and implementation of baseline data and the Rare Plant Management Plan and its adaptive management provisions.

3.9 PERMAFROST

Measure 12-1: Permafrost management

Measure 12-1 is aimed at preventing significant adverse impacts on permafrost and subsequent impacts on water, vegetation, and human safety throughout the construction, operations, and post-closure stages of the Project, through a precautionary approach.

Measure 12-1 requires the establishment of an independent technical review panel (also contemplated in Measure 5-1 – see Section 3.1, above) which will consider all permafrost data to inform road design in permafrost areas. This requires CanZinc to conduct baseline studies on permafrost for the road alignment and borrow pits, and to create and implement a Permafrost Management Plan. It also requires the independent technical review panel to review the data and the Permafrost Management Plan.

LKFN agrees that baseline studies on permafrost, a Permafrost Management Plan, and the independent technical review panel are necessary.

LKFN provided comments respecting the independent technical review panel at Section 3.1, above. In addition, LKFN requires the following;

- 1) Dene knowledge and values must be an essential component of the studies and Permafrost Management Plan, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plan;
- 2) the studies and Invasive Permafrost Management Plan must specifically address Tetra Tech's recommendations with respect to:

- a. selecting suitable embankment design and construction techniques where there is the potential for differential settlement of embankment material due to bog peat,
 - b. natural surface water drainage paths should be preserved and diverted if/where necessary to avoid water from pooling along road embankments,
 - c. drainage structures designed to reduce the likelihood of thermokarst development,
 - d. diversions directing surface water toward and along existing natural drainage paths, and
 - e. flatter fill slope gradients to reduce the likelihood of snow drifting against the road embankment resulting in the thawing of permafrost;
- 3) LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in the baseline studies and Permafrost Management Plan, including receiving baseline data, approving the Permafrost Management Plan, reviewing the findings of the independent technical review panel, and providing input on those findings, in order to ensure that Dene knowledge, values, and experience are engaged;
- 4) monitoring and adaptive management must include the involvement of LKFN and other First Nations in the monitoring of permafrost, including monitoring by Dehcho Ke'hodi (Guardians); and,
- 5) before any regulatory approvals associated with the Project or Permafrost Management Plan are granted, CanZinc must be required to provide funding adequate to carry out the terms of the Permafrost Management Plan, including executing baseline studies, developing and executing the Permafrost Management Plan, creating and maintaining the independent technical review panel, and enabling LKFN and other affected First Nations to fully participate on the same basis as government regulators in the development, approval, and implementation of the baseline studies and Permafrost Management Plan and adaptive management.

3.10 FOLLOW UP

Measure 15-1: Monitoring by the developer

Measure 15-1 aims at ensuring that the Measures for which the developer is responsible are fully and effectively implemented, and inform adaptive management throughout all phases of the development.

Measure 15-1 requires CanZinc to establish and implement monitoring programs to measure the effects of the project on the environment, assess the effectiveness of the implementation of mitigation measures, assess the accuracy of predictions regarding environmental impacts, inform adaptive management, and provide relevant data to other monitoring initiatives by First Nations and regulators.

LKFN agrees that ongoing monitoring is necessary.

LKFN also requires the following:

- 1) Dene knowledge and values must be an essential component of all monitoring plans, and should be acquired through the development of protocols with LKFN and other affected First Nations, and demonstrably included in the plans;
- 2) as traditional stewards of the Project area, LKFN and other affected First Nations must be involved in the same ways and to the same extent as other government regulators in ongoing monitoring, including monitoring by Dehcho Ke'hodi (Guardians), in order to ensure that Dene knowledge, values, and experience are engaged; and,
- 3) before any regulatory approvals associated with the Project or Rare Plant Management Plan are granted, CanZinc must be required to provide funding adequate to carry out ongoing monitoring, including funding adequate to enable LKFN and other affected First Nations to fully participate.

Measure 15-2: Annual reporting from the developer

Measure 15-2 aims at ensuring that the developer demonstrates how Measures are being implemented and evaluates their effectiveness throughout all phases of development, in order to ensure that mitigation measures are both implemented and effective.

Measure 15-2 requires CanZinc to provide annual reports describing the actions being taken, including mitigation measures, and their effectiveness. These reports are to be provided to the Review Board and the First Nations, including LKFN.

LKFN agrees that annual reporting delivered to LKFN as well as the other parties is necessary.

Measure 15-3: Annual reporting from government and regulatory authorities

Measure 15-3 aims at ensuring that the effectiveness of mitigation measures is being evaluated throughout all phases of development.

Measure 15-3 requires each of the regulatory authorities to provide an annual Report on Implementation of Measures, describing the actions being taken, including mitigation measures, which fall within their jurisdiction, and whether and how they are addressing and reducing significant adverse impacts or meeting other intents of the Environmental Assessment. These reports are to be provided to the Review Board.

LKFN agrees that annual reporting by regulatory authorities is necessary.

LKFN also requires the following:

- 1) In addition to being filed with the Board, each Report on Implementation of Measures should be delivered to the First Nations, including LKFN.

Measure 15-4: Support Indigenous monitoring initiatives

Measure 15-4 aims at preventing significant adverse impacts on the environment and Indigenous rights by including Indigenous groups in monitoring.

Measure 15-4 require the developer to support, to the greatest extent practicable, independent monitoring of the Project area through monitoring initiatives undertaken by First Nations including LKFN. This is to be done by providing access to the Project throughout all phases, whenever it is safe to do so, and by providing in-kind support for independent community monitors (eg accommodations, meals, transport, safety training).

LKFN agrees that Indigenous monitoring and support for Indigenous Monitoring is necessary.

LKFN also requires the following:

- 1) regulatory authorities should liaise with Dehcho Ke'odhi (Guardians) in carrying out monitoring and regulatory inspections;
- 2) CanZinc must be required to enter into legally-binding funding agreements with LKFN and other affected First Nations – either individually or collectively – to support their participation in independent monitoring arrangements before permits are granted. Regulatory agencies must be satisfied that such agreements provide adequate resources for the construction and operations phases of the Project, and that such resources are advanced to participating affected First Nations before any permitting occurs; and,
- 3) CanZinc funding must be sufficient for LKFN to engage their Dehcho Ke'hodi (Guardians) in independent monitoring activities, to carry out technical and Indigenous knowledge reviews of monitoring results, and to engage with other affected First Nations, regulatory authorities, and CanZinc in carrying out the monitoring work. LKFN notes also notes that the Ni Xadi Ha monitoring program operating in relation to the Gahcho Kue diamond mine not only provides for independent Indigenous on-site monitors, but also for regional monitoring of the project area by traditional land users. LKFN recommends consideration of a similar arrangement in respect of the Project.

Suggestion 15-3: Regulatory coordination, including coordination of public registries

Suggestion 15-3 is aimed at minimizing duplication and promoting consistency in the application of the Measures to the Project, since the Project is located across numerous jurisdictions.

Suggestion 15-3 suggests that Parks Canada investigate sharing the Mackenzie Valley Land and Water Board's public registry, or develop a coordinated registry for regulatory documents related to the Project.

LKFN supports the suggestion that Parks Canada and Mackenzie Valley Land and Water Board coordinate among themselves, including by way of sharing a registry. However, like Dehcho First Nations, LKFN is very concerned that the multiple agencies and jurisdictions responsible for overseeing the Project will result in not only duplication, but also in Measures and Developer's Commitments falling through the cracks.

For that reason, LKFN supports the Dehcho First Nations request that Parks Canada and Mackenzie Valley Land and Water Board harmonize or coordinate their regulatory activities and registries, and additionally recommends that:

- 1) all involved regulators (Parks Canada, the Department of Fisheries and Oceans Canada, the Government of Northwest Territories, and the Mackenzie Valley Land and Water Board) harmonize their regulatory processes by:
 - a. producing a consolidated project description, which identifies all the measures and commitments filed for the project;
 - b. outlining what Regulatory Authority is responsible for the each Measure and Developer's Commitments;
 - c. outlining the sequential timeline for implementing the Measures and Developer's Commitments ;

- d. in the case of overlapping regulatory authorities for specific Measures and Developer's Commitments, describe how the overlapping regulatory authorities will work together or harmonize their processes in respect of those Measures and Developer's Commitments; and
- e. in the case of an "orphan" measure(s) (ie a Measure without a regulatory authority), require the regulatory body will ensure how such "orphan" Measures will be addressed in the permitting phase.

4.0 DEVELOPER'S COMMITMENTS

CanZinc has made 244 Developer's Commitments, including commitment 60 which states "[a]ll recommendations by consultants have been accepted by CanZinc and will be assumed as commitments."

The Developer's Commitments are included in Appendix C of the Report and relate to virtually every topic addressed by the Measures canvassed above. The Measures drafted by the Board in the Report frequently refer to these Developer's Commitments, and rely upon them.

LKFN agrees that the developer's commitments would assist in reducing significant adverse impacts on the environment and on LKFN's established and asserted Dene rights, and that it is necessary that they become firm commitments. If they are not implemented and enforced, there is high risk of infringement of LKFN's Dene rights.

For that reason, LKFN also requires the following:

- 1) the responsible Ministers and regulatory authorities must ensure that all of the 244 Developer's Commitments are incorporated as terms and preconditions of required permits and authorizations for the Project; and,
- 2) CanZinc must be required to provide adequate funding and resources to LKFN to engage in consultations or implementation processes in respect of the Developer's Commitments, and, wherever possible, those funds must be set aside in advance.

5.0 CONCLUSION

Naha?deh is a special sacred area, and LKFN is extremely concerned about potential impacts to heritage resources, the environment, human safety, and the cultural uses of that place. As the traditional steward of that place, LKFN has a responsibility to protect it, which is – in part – the aim of this Written Response.

The Board has correctly concluded that the Project is likely to cause significant adverse impact on the environment, on human safety, and on Indigenous rights. Now, it is imperative that the Measures identified by the Board and Developer's Commitments identified by CanZinc become not only law, but also practice. As repeatedly noted in this Written Response, they must be actively enforced by regulators, by ensuring that they are (i) incorporated as pre-conditions of permitting and licensing requirements enabling the project to proceed, and (ii) fully funded prior to any work taking place.

The Board has also correctly identified a dearth of baseline information available to enable proper assessment of the appropriate design, mitigation measures, and impacts of this project. Among other things, LKFN notes that there is still no Indigenous Knowledge study of the Project area. Going forward, it is imperative that LKFN and other affected First Nations are involved in all studies as well as all stages of the development, execution, and closure of the Project, in order to ensure First Nations including LKFN are able to uphold their responsibility to protect the land and that Dene values are incorporated in the Project.