EA0405-002

## Martin Haefele

From:

Sent:

pitkanen@csolve.net June 21, 2005 1:48 PM

To:

Martin Haefele; Patrick Duxbury

Subject:

CZN IR's

Follow Up Flag:

Follow up

Flag Status:

Red





CZN Drilling IRs.doc PhotoSat\_IKONOS (110 KB) %20prices\_2004m..

Hello,

Attached are Dehcho First Nations and Nahanni Butte Dene Band's Information Requests for the CZN Drilling EA.

Also, please find attached a product pricing list for satellite imagery.

Laura Pitkanen for Dehcho First Nations



## DEH CHO FIRST NATIONS BOX 89, FORT SIMPSON, N.W.T. X0E 0N0 TEL: (867) 695-2355 FAX: (867) 695-2038



Martin Haefele
Senior Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
5102-50<sup>th</sup> Avenue
Yellowknife, NT
X1A 2N7

Tel: 867-766-7050 Fax: 867-766-7074

Re: EA 0405-002 Canadian Zinc Drilling

The Dehcho First Nations and the Nahanni Butte Dene Band submit the following Information Requests in the above environmental assessment.

IR Number: (to be determined by Review Board)

Source: Dehcho First Nations and the Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.1.2; Figure 3: Maps A, B, C Terms of Reference Section: B-1(c) and (f)

Preamble: The TOR asks CZN to identify where road conditions or road alignment is a potential concern in terms of stability and erosion, <u>and</u> proximity to watercourse, and to provide details on mitigation measures to address any problems. The DAR identifies in only general terms that specific roads and road sections require maintenance. CZN also states that further field inspection is necessary to evaluate the feasibility of several roadways that parallel or are within close proximity to a watercourse (e.g. Little Quartz Creek, Big Quartz Creek, Casket Creek, Funeral Creek, Prairie Creek, Galena Creek).

Request: Please provide further detail on the type and extent of road maintenance required for each existing roadway that parallels or is within 30 metres of a watercourse.

For all existing and planned roads within 30 metres of a watercourse, please clarify the exact distance from the waterways.

Please provide the results of the planned CZN field inspections to the Review Board.

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.1.2

Terms of Reference Section: B and C

Preamble: In the DAR, CZN states that they will generally employ mitigation measures in the Prospectors and Developers Association of Canada's (PDAC) Environmental Excellence in Exploration e-manual for drilling, as well as reference documents from DIAND, however, no details are provided.

Request: Please identify which specific mitigation measures from the above documents will be utilized for specific environmental concerns <u>and</u> which specific mitigation measures are required for specific road and watercrossing locations.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Department of Fisheries and Oceans

DAR Section: 2.1.2

Terms of Reference Section: B-1(h)

Preamble: In the TOR, CZN was asked to provide details on the proposed visits by DFO inspectors to examine the road network. In the DAR, CZN repeatedly states that DFO is planning the site inspection in June 2005. If CZN is relying on proposed DFO site visits to address specific mitigation measures, then the Reviewers need details on DFO's commitment to inspect the CZN road network, creek crossings, and proposed new road construction.

Request: Please provide details on DFO's commitment to inspect the creek crossings, existing road network and new road construction, and to provide the Review Board and Reviewers with recommendations for mitigation measures.

Following the site visit, please provide a detailed report to the Review Board and Reviewers.

Please clarify if CZN will require a Fisheries Authorization for activities under the Drilling Program, for eg. prior to rehabilitating the existing road network, rehabilitating or using watercourse crossings, and for the construction and use of new roads and watercourse crossings.

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.1.2

Terms of Reference Section: B-1(g)

Preamble: The DAR only generally describes the type and source of materials required for road construction and does not address the <u>quantity</u> of materials that will be required for road rehabilitation, road maintenance and new road construction.

Request: Please provide further detail on the source of road construction materials for each road that will require the addition of new materials.

Please state the quantity (eg. kg. tons, etc...) of materials that will be required for road construction, rehabilitation and maintenance for all roadways.

Please indicate if the source of construction material will also require rehabilitation, and if so, clarify what measures will be employed to rehabilitate the source.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.3

Terms of Reference Section: B-1(c)

Preamble: The DPD and the DAR state that the width of the skid-mounted drill rigs is 4 metres. The TOR requires CZN to identify areas where road conditions or road alignment is a potential concern. Road width is a factor in determining suitable road conditions. Furthermore, to determine the actual and cumulative effect of the existing and planned road network, it is necessary to account for the width of roads, as well as the length. The widening of roads may result in an increased fragmentation of the landscape, and may place roads in closer proximity to watercourses.

Request: Please clarify if CZN will need to widen the existing road network to accommodate the width of the skid-mounted drill rigs. If yes, please identify the exact locations, and the total length in linear km., of all roads and creek crossings that will require widening.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.2

Terms of Reference Section: B-2: Aerial Images

Preamble: The intent of the TOR request was to enable the Review Board to 'visualize' the drill site areas and access corridors, and to 'understand the progress of development' at the mine site. The historic aerial photos (1964 (?) and 1994) submitted by CZN are insufficient for the above purpose and do not provide any detail on current mine site

conditions. This information is critical for the assessment of the actual impact of the drilling program and to assess cumulative effects.

Request: 1) As the aerial photos provided are of an inappropriate scale and quality to allow any meaningful analysis, please provide current (2005) 5 metre Resolution satellite imagery of the entire Prairie Creek property. This information is readily available to CZN at a nominal cost.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 3.0

Terms of Reference Section: C (steep topography)

Preamble: The TOR requests that CZN discuss mitigation measures regarding project response to environmental sensitivity and identifies a list of criteria to be addressed. The DAR only provides general statements such as 'appropriate erosion and sediment control measures' and 'similar measures' for addressing steep topography'.

Request: Please provide detailed mitigation measures that CZN will employ to deal with steep topography.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 3.0 (areas utilized by fish); 7.1 (aquatic resources and habitat chart)

Terms of Reference Section: C

Preamble: CZN acknowledges that Bull trout may be present in Prairie Creek near the mine, in Galena Creek, Quartz Creek, and Funeral Creek, all of which have proposed road use within 30 metres.

Request: Please provide additional field studies to confirm the presence of Bull trout, and their habitat and lifecycle requirements, in the above watercourses.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 3.0 (areas utilized by fish)

Terms of Reference Section: C

Preamble: The DAR proposes to 'build a new route up the bank...on Prairie Creek to avoid crossing Galena Creek.

Request: Please provide further detail on this route, including the mitigation measures CZN will employ to minimize environmental damage (erosion, sedimentation, etc.) on this new proposed route.

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 3.0 (areas utilized by wildlife)

Terms of Reference Section: C

Preamble: CZN states that a biologist will be 'engaged' to undertake a survey of the proposed drilling area to minimize impacts to grizzly bears. The results of this survey will be critical to the Review Board and Reviewers in analyzing and developing appropriate mitigation measures to protect grizzly bears and grizzly bear habitat, as well as mitigation measures for other wildlife.

Request: Please provide the results of this survey to the Review Board.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Parks Canada DAR Section: 3.0; 5.2

Terms of Reference Section: C

Preamble: CZN states that if grizzly bears are disturbed by the drilling program, that the grizzly bears will simply use other parts of their range. Parks Canada is actively involved with grizzly bear monitoring and studies in the South Nahanni Watershed. To better inform the Review Board of the potential impacts of the proposed drilling program on grizzly bears, a detailed analysis is required in order to determine appropriate mitigation measures

Request: Please provide a detailed discussion on the frequency, occurrence, range, sensitivities to disturbance, food and habitat requirements for grizzly bears in the South Nahanni Watershed, and analyse the potential impacts of the drilling program on grizzly bears.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation DAR Section: 3.9; 5.2 (Vegetation) Terms of Reference Section: C

Preamble: CZN states that the above noted biologist will also be 'engaged' to assess and identify sensitive vegetation and provide guidance to CZN on minimizing impacts to vegetation. It is unlikely that a biologist will be sufficiently qualified to assess impacts and mitigation measures for vegetation, which is perhaps more suited to a 'botanist'.

Request: Please provide sufficient assurance that the proposed biologist is also a qualified botanist.

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 4.0

Terms of Reference Section: D

Preamble: In the DAR, CZN indicates that the drilling program is not a potentially conflicting land use goal in the Nahanni Watershed. This is incorrect. The Dehcho Land Use Planning Committee has identified the CZN's Prairie Creek project as a 'non-conforming' use in a Conservation Zone. However, the Dehcho Land Use Planning Committee has no legal authority to disallow the CZN project.

Conservation Zones – <u>Areas having significant ecological and cultural values.</u>

<u>Conservation Zones are meant to provide flexible protection to lands of important cultural or ecological value.</u> All development except tourism are prohibited in Conservation Zones. Two of the zones prohibit tourism as well. There are 18 Conservation Zones covering 52% of the Dehcho territory. (DCLUPC: Draft Land Use Plan, June 2005)

The Dehcho Land Use Planning Committee has also officially acknowledged the Dehcho First Nation's unanimous position of non-support for any mining in the South Nahanni Watershed.

Request: Please provide an updated and clear discussion on how the CZN project is incorporated into the Dehcho Land Use Plan and how CZN perceives the proposed drilling program as compatible with the goals of a Conservation Zone, the goals of UNESCO World Heritage Site, and the goals of Nahanni National Park Expansion.

IR Number:

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 6.1

Terms of Reference Section:F-1

Preamble: The DAR is deficient has it has omitted any detail on the type and number of jobs, and has not included the job qualifications for the proposed drilling program.

Request: Please provide details on the number and type (list the jobs) and attach job descriptions, job wages, and job qualifications for all jobs associated with the proposed drilling program.

Source: Dehcho First Nations and Nahanni Butte Dene Band

To: Canadian Zinc Corporation

DAR Section: 2.3

Terms of Reference Section: B-3

Preamble: The DAR provides the brand name and chemical composition of the additives proposed for use in the drilling program. It is also critical to understand the potential impacts of these additives on the environment, including vegetation, waterways and wildlife.

Request: List the quantity that will be used of each additive. Identify the amount (quantity) that may be released to the environment (into sumps, on the ground, down drilling holes, in waterways). Provide the potential environmental effects of each additive on wildlife, vegetation, and waterways.

Laura Pitkanen for Dehcho First Nations and Nahanni Butte Dene Band

## **IKONOS**

## SINGLE ORGANIZATION PRICE LIST

Prices subject to change without notice.

		US\$ /.km²	US\$ / km²	Americas Uss/knr
	IM	AGERY		Section 1 to 1
	Ge	olocated		
GEO – Archived 15m CE90 RMS 7m Tilt Angle: > 60	1m B/W 4m Multispectral 1m Color Bundle	\$7.00 \$7.00 \$7.70 \$9.80	\$7.00 \$7.00 \$7.70 \$10.50	Check with PhotoSat
GEO – New Collection 15m CE90 RMS 7m Tilt Angle: > 60	1m B/W 4m Multispectral 1m Color Bundle	\$18.00 \$18.00 \$19.80 \$25.20	\$18.00 \$15.00 \$19.80 \$27.00	Check with PhotoSat
	Orti	orectified		
REFERENCE 25 m CE90 RMS 12m Tilt Angle: > 60	1m B/W 4m Multispectral 1m Color Bundle	\$25.00 \$25.00 \$27.50 \$35.00	\$29.00 \$29.00 \$31.90 \$43.50	Check with PhotoSat
PRO 10 m CE90 RMS 5m Tilt Angle: > 66	1m B/W 4m Multispectral 1m Color Bundle	\$29.00 \$29.00 \$31.90 \$38.00	\$62.00 \$62.00 \$68.20 \$80.60	Check with PhotoSat
PRECISION 4 m CE90 RMS 2m Tilt Angle: > 72	1m B/W 4m Multispectral 1m Color Bundle	\$45.00 \$45.00 \$49.50 \$63.00	\$120.00 \$120.00 \$132.00 \$156.00	Check with PhotoSat
	STE	REO PAIR		
Reference Stereo	1m B/W 1m Color	\$36.00 \$39.60	\$42.00 \$46.20	Check with PhotoSat
Precision Stereo 4 m CE90 (RMS 2m)	1m B/W 1m Color	\$48.00 \$52.80	\$120.00 \$132.00	Check with PhotoSat
	ELE	VATION		
ITM-1 Vert Acc. 11.5m LE90 (RMS 7m) Horiz. Acc. 25m CE90 (RMS 12m)	30m postings	\$50	\$100	Check with PhotoSat
	STERE	O PACKAGE		
10x10km Package Includes: 1m Pro Image – 10m CE90 (RMS 5m) 1m Reference Stereo Pair – 15 CE90 (RMS 12m) 30m posting DEM - 11.5m LE90, 25m CE90	1m B/W 1m Color	Check with PhotoSat Check with PhotoSat	Check with PhotoSat Check with PhotoSat	Check with PhotoSat Check with PhotoSat

- MINIMUM ORDER: 100 km²; North American Archived Geo 49 km²
- **DELIVERY TIME:** Geo/Reference Stereo - Archive: 5 business days

Geo/Reference Stereo - New Collect: <500 km² (60days); 500-5,000 km² (90days); 5,000-10,000 km² (120days) Reference/Pro: <5,000 km² (90days); 5,000-10,000 km² (150days) Precision/Precision Stereo & ITM: <5,000 km² (120days); 5,000-10,000 km² (150days)

- CLOUD COVER: less than 20%. A point target may be selected to be cloud free.
- LICENSE UPLIFTS: Multiple Organization (add 15%), Tier 1: (add 30%), Tier 2: (add 55%), Tier 3: (add 90%)



Formerly

RGI Resource GIS and Imaging

Tel: +1 604 681 9770 Fax: +1 604 681 9790