October 17, 2008

Alistair MacDonald
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
5102 50th Avenue,
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Dear Mr. MacDonald

RE: Environmental Assessment EA0809-002, Prairie Creek Mine
Relevant Pre-Existing Materials for Scoping – Document Locations

The Mackenzie Valley Environmental Impact Review Board ("MVEIRB") requested that Canadian Zinc Corporation (CZN) "clarify as fully and as soon as possible all of the 'existing permits, approved management plans, and precedents' relating to the Prairie Creek mine that it wants the Review Board to consider during scoping". A letter was provided dated September 23, 2008 addressing this request. Since that time, several parties have requested that CZN provide copies of relevant past documents to facilitate their review of project issues, and to potentially avoid duplicating efforts expended in past assessments. CZN believes it would be inefficient to provide copies of all of this material as much of it is available on websites. The text that follows is a repeat of that contained in the September 23 letter, but with links to sites where the relevant documents can be found. In some cases, additional relevant documents are noted.

1980-82 Permits for Mine Operations

Environmental assessments were directed by Ker Priestman, and culminated in Preliminary Environmental Evaluation reports, one on the Mine, Mill and Camp, and one on the Winter Access Road, both dated May 1980, and subsequently in "*Environmental Evaluation, Prairie Creek Project*", dated October, 1980. These studies were the basis for successful applications for Land Use Permit (**LUP**) **N80D248** (1980) and **Water Licence #N3L3-0932** (1982) for the mine (see Appendix A of the CZN Project Description Report (PDR) for copies), and **LUP N80D249** (1980) for the winter road.

The winter road was constructed in the summer of 1980, and was used extensively over the period from late January to the end of March in both 1981 and 1982 to haul in excess of 800 loads into the Mine site. Loads consisted of construction materials, equipment, and supplies for operations until the next winter, including fuel. A staging area on the eastern bank of the Liard River was used. By May 1982, mine infrastructure was 90-95% complete. The only major structure that was planned but not completed was a storage shed for mineral concentrates.

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The above facts illustrate that, not only did the Prairie Creek Mine have permits for the mine and road before June 22, 1984 (thereby exempting new permits from Part 5 of the Mackenzie Valley Resource Management Act (MVRMA)), but that these permits were exercised and used and the mine was ready for operation. The winter road alignment is still clearly visible on the ground and in the air, and the mine is as built, apart from small additions and maintenance/repairs.

It is CZN's view that the MVEIRB should not assess structures that already exist, and must give due consideration to the legal precedent set by the Supreme Court decision referred to below (under Winter Road).

Underground Decline and Pilot Plant

Applications for a LUP for development of an underground decline and a Water Licence for a metallurgical pilot plant were submitted to the MVLWB in 2001. After environmental assessment (EA01-002), **LUP MV2001C0023** and **Water Licence MV2001L2-0003** were issued. These projects closely resemble the operating activities now being applied for, albeit at a smaller scale.

During the EA, existing site facilities were reviewed in detail. CZN undertook to treat all mine water and construct a **Polishing Pond** to polish treated waters. The pond was designed, built and approved in 2005. CZN was required to provide a **Mine Water Contingency Plan** (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/MV2001L2-0003-Dist-Plan-Jan05.pdf), and an **Effluent Treatment Options Plan** (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/MV2001L2-0003-CZNOctober2005ETOP.pdf). These plans address the management and treatment of mine water. The plans were written and approved, and CZN has been treating mine water since 2006. Surveillance Network Reports are available on the MVLWB website. This information confirms that water treatment is being successfully undertaken to protect water quality. Water treatment will not be greatly different during mine operations, it will be a continuation of that occurring at present, albeit in a more sophisticated, automated plant.

The new permits had a number of other requirements. The **flood protection dikes** separating the site from Prairie Creek are inspected by a qualified engineer annually (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/reports/MV01L2-03-AnnualFloodRpt-Oct07.pdf). No significant problems have been found to date. CZN was required to update the **maximum flood estimate** (see Appendix C in the PDR) that was used to determine the required height of the dikes. The new estimate determined a flood elevation lower than the original one, confirming that the dikes are indeed suitable to protect the site from the most extreme flood event imaginable.

The **Tank Farm** containment and infrastructure were inspected by geotechnical and mechanical engineers. The containment was found to be sound, and only minor repairs were required to the infrastructure. These have been completed and the farm was approved for continued use by the

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MVLWB (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/MV2001L2--0003-Ltr-BoardApproval-GeotechSiteReconnaissanceRpt-May05.pdf). CZN is presently having the tanks internally inspected in preparation for filling and use during operations.

This information illustrates that major infrastructure that will be used to support mine operations has been previously assessed by both the MVEIRB and the MVLWB, and has recently been investigated to confirm it is still sound and in good working order.

A **Waste Rock and Ore Pile Monitoring Plan** (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/MV01L2-03-Approval-06WROPMP-Jun06.pdf), **Wildlife Management Plan** (http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/CZN-ActivitiesUpdate-Jul06.pdf and http://www.mvlwb.com/pdf/2001Water/MV2001L2-0003/CZN-ActivitiesUpdate-CD-July16-06.zip, these documents contain many of those listed above) and a **Fuel Spill Contingency Plan** (see link for Wildlife Management Plan) were also prepared and accepted by the MVLWB.

Winter Road

CZN applied for an LUP to use the existing winter road in May, 2003. The MVLWB initially ruled that the application was subject to Part 5 (Preliminary Screening) of the MVRMA. After a Judicial Review, the Supreme Court of the Northwest Territories ruled that the road was 'grandfathered' under the MVRMA according to Section 157.1. **LUP MV2003F0028** was issued by the MVLWB on April 7, 2007.

The Supreme Court decision was rendered because use of the road was considered the same undertaking as before. It follows that CZN's use of the road to support mine operations is also grandfathered as that was the intent of the original permit. It also follows that, if CZN were to apply for the same mine project as was permitted before, those applications would also be grandfathered. CZN considers this to be a key legal precedent that the MVEIRB must appropriately account for in the scoping of EA0809-002.

During scoping sessions, comments were made in relation to wildlife protection and vehicle traffic. These issues were discussed during the permit process for LUP MV2003F0028, and some solutions were provided in a Controlled Use Plan (http://www.mvlwb.com/pdf/2003Land/MV2003F0028/app/GNWT-ENRreWildlifeImpacts-Mar21-07.pdf and http://www.mvlwb.com/pdf/2003Land/MV2003F0028/Reports/MV03F28-ControlledUsePlan-Aug07.pdf. More discussion is required to resolve road use issues, but this dialogue is underway.

Phase 3 Drilling

A request to amend the Phase 2 surface drilling LUP was made to allow further drilling exploration outlying from the mine (Phase 3). The amendment application was referred to EA in June, 2004. In CZN's opinion, the scope of EA0405-002 correctly focussed on those activities

that were different from activities that had been previously assessed, or were already the subject of existing permits, and did not seek to re-assess the existing infrastructure even though it was to be used to support the Phase 3 drilling. The EA was appropriately focused on plans to drill in outlying areas using a helicopter-transported drill, and to ford Prairie Creek to access sites with a skid-based drill.

As required by the subsequently issued **LUP MV2004C0030**, a spring wildlife survey of the mine area was conducted (May, 2006) to assess local wildlife that could potentially be affected by the project (http://www.mvlwb.com/pdf/2004Land/MV2004C0030/report/MV04C30-WildlifeSurvey-Jun06.pdf). A **Flight Impact Management Plan** (see attachment) was prepared and approved to mitigate potential affects from helicopter and fixed-wing flights. This information confirms that possible impacts to wildlife from site operations have been recently assessed and addressed.

Thank you for this opportunity to provide brief information on pre-existing permits, management plans and precedents for your consideration in scoping the EA. We respectfully urge the MVEIRB and EA process participants to review the above noted documents, and the many others available on websites associated with CZN's previous EA's and existing permits, to fully comprehend the extent of prior assessment and regulation of the project.

Yours truly,
CANADIAN ZINC CORPORATION

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CANADIAN ZINC CORPORATION
PHASE 3 EXPLORATION DRILLING PROGRAM
PRAIRIE CREEK MINE SITE

FLIGHT IMPACT MANAGEMENT PLAN
MARCH 31, 2006

Background

The Phase 3 exploration program was described in Canadian Zinc Corporation's (CZN) Developer's Assessment Report (DAR) submitted to the Mackenzie Valley Environmental Impact and Review Board. This Flight Impact Management Plan (FIMP) has been developed to address a concern expressed during the environmental review process related to the potential disturbance of wildlife, particularly Dall's sheep, by aircraft traffic. CZN has drafted this FIMP as part of its commitment to the Government of the Northwest Territories (GNWT), as stated in a letter dated October 14, 2005.

The FIMP has been developed by an experienced, qualified Wildlife Biologist, who will be on site in spring 2006 to carry out site surveys with the assistance of a Wildlife Observer. It is also expected that an Environmental Monitor will be on site during Phase 3 drilling operations to observe compliance with the FIMP.

Wildlife of Concern

The principal species of concern is thin-horn sheep (Dall's sheep), due to their distribution in the Prairie Creek mine site area and vicinity, and their sensitivity to disturbance while on lambing (parturition) range in the spring (mid-May to mid-June). Some sheep are known to frequent the steep slopes immediately above the mine site in summer. These sheep ruminate on the slopes, and periodically come down into the site. The sheep appear to be attenuated to site activities. Therefore, this FIMP is directed at those sheep that occupy other locations in the area, and that are not attenuated.

Earlier wildlife surveys (early 1980's and mid-1990's) identified four specific areas as being used by ewe-lamb groups:

- Folded Mountain north of the Prairie Creek Mine camp;
- Peaks immediately east of the Prairie Creek airstrip;
- Peaks immediately west of the Prairie Creek airstrip; and
- Slopes north of Harrison Creek (immediately below Adit #3).

Of these, the first three were believed to be lambing areas. One sighting of a group of 50 ewes and lambs was made at the Prairie Creek airstrip on June 4, 1994, suggesting that a substantial population inhabits the general area around the mine site and camp.

Another key life cycle activity is related to the use of mineral licks, particularly during the post-lambing period, when ewes are lactating. Such a lick was identified below Adit #3, near the Prairie Creek Mine camp.

Other sensitive wildlife species that occur, or may occur, in the Phase 3 exploration area include northern mountain woodland caribou, grizzly bear, wolverine and peregrine falcon.

Objectives of the FIMP

Objectives of the FIMP are to:

- Minimize the potential for impacts to sensitive wildlife species and populations in the CZN Phase 3 exploration area and vicinity; and
- Enable effective management of the Phase 3 exploration program to optimize efficiency of equipment, manpower and aircraft support.

The intent of the FIMP is to develop this document into a working procedure for exploration related to the Prairie Creek Mine, and incorporate this into CZN's standard operating policy. The FIMP is a work in progress, and is to be amended as further information becomes available. As more site-specific data on actual lambing locations becomes available, the FIMP will be modified to take the new location data into account.

General Guidelines for Disturbance Mitigation

The following guidelines pertain to avoiding or reducing impacts to the principal species of concern (Dall's sheep), and are intended to promote target conditions rather than as rules:

- The greatest reaction to aircraft is to the first flight of the day, so this flight needs to be careful to minimize disturbance;
- There is no evidence that sheep become habituated to aircraft operation, and so do not assume those sheep on the slopes proximal to the mine cannot be disturbed;
- The general recommendation is to remain >3.5 km from any known sheep concentrations (where these have been confirmed), and 2.0 km from known sheep range, where possible;
- Try to plan a route that places a ridge between the aircraft and known sheep locations;
- Fly below known locations of sheep, rather than above or at the same elevation, where possible;
- Fly a minimum of 400 m above known locations of sheep or on sheep ranges where there is a high likelihood of sheep occurrence, unless a lesser distance is unavoidable during landing;
- When sheep are known to be at a certain location and a flight line near them is not avoidable, plan the route to fly at an angle to the sheep, rather than directly toward them;
- Avoid flying near sheep on exposed slopes as this will prompt them to flee at greater distances compared to their presence on or near escape terrain, and increases the risk of falls;
- Avoid sudden exposure of aircraft to sheep, such as turning a corner or coming over a ridge;
- When flying within 2 km of sheep congregations, minimize flying between 1100 and 1500 hours when sheep are generally bedded down and ruminating;
- Concentrate flying time as much as possible, as opposed to many flights throughout the day (shorter periods of more intense flights are preferred); and
- Avoid lambing areas between May 1 and June 15 (2 km buffer), and preferably do not carry out intensive activity near (within 2 km) sheep range until July 1 and complete the work by October 31.

Some of the guidelines above also have general relevance to other species such as woodland caribou and grizzly bears; however, if the caribou are known to rut in a particular location, flights should not take place over or near rutting caribou after October 1.

FIMP Development Strategy

The following steps are recommended for FIMP development:

1. The Wildlife Biologist is to compile known sheep ranges and actual sighting locations onto a 1:50,000 scale NTS base map, with geographic coordinates where possible, and enter these into a database to be maintained by CZN.
2. Once the Wildlife Biologist is on site, interview CZN personnel to gain updates and prepare a map that is to be posted in a well-used common area. This map is to be continually updated with new sightings, along with the database.
3. The Wildlife Biologist is to complete an aerial helicopter survey (scheduled for spring 2006) to identify sheep ranges, locate known sheep occurrences, and find additional sheep in the exploration area and vicinity. NOTE: CAUTION IS TO BE USED ON THIS FLIGHT, WHICH IS TO BE CARRIED OUT AT AN ALTITUDE OF AT LEAST 400 m ABOVE GROUND, AND PREFERRABLY HIGHER. IF ANY SHEEP ARE SIGHTED, THE PILOT IS TO IMMEDIATELY BACK-OFF AND CHANGE THE FLIGHT PATH TO AVOID THE SHEEP. THE INTENT OF THE INITIAL SURVEY IS TO IDENTIFY LOCATIONS, SO THAT THESE CAN LATER BE OBSERVED FROM THE GROUND FOR AGE AND SEX BREAK DOWN.
4. Once the flight is completed, the Wildlife Biologist is to summarize the results, update the base map and database, and share these with the exploration manger, camp manager, pilot(s), and drill crews.
5. The Wildlife Biologist if to revise the FIMP to reflect the new data and in consultation with the exploration manager and pilot(s), formulate a flight plan strategy whereby contact with known sheep locations can be avoided using the general guidelines listed above. Where avoidance is not possible, a strategy will be formulated for carrying out flights that will minimize the potential for impacts to sheep.
6. The Wildlife Biologist is to provide training to the Wildlife Observer; this is to include methods for observation and data recording, updating data, providing feedback to the exploration manager and pilot(s), updating the base map and database, transmitting the new information to the Wildlife Biologist, and how to provide assistance to the exploration program for specific instances where a potential for impact may occur.
7. The Wildlife Biologist is to revise the FIMP to update information and formulate a strategy for day-today operation of the Phase 3 exploration program. This is to include an analysis of locations of proposed drill holes and possible access routes and to recommend which access routes are preferred, and how daily flights are to be scheduled, carried out and managed. The Wildlife Biologist is to prepare contingency plans for specific potential occurrences where sensitive wildlife may be encountered unintentionally, and to explain these to the exploration manager, Wildlife Observer, and pilot(s).
8. The Wildlife Biologist is to provide the revised FIMP to the GNWT (ENR) Regional Biologist in Fort Simpson for review and comment, and to provide explanation and clarification, as necessary.