



March 22, 2011

Chuck Hubert  
Environmental Assessment Officer  
Mackenzie Valley Review Board  
Suite 200, 5102 50<sup>th</sup> Avenue,  
Yellowknife, NT  
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Dear Mr. Hubert

**RE: Environmental Assessment EA0809-002, Prairie Creek Mine**  
**Updated Commitments Table**

As requested, please find attached an updated commitments table. We have endeavoured to include all of the commitments made by Canadian Zinc Corporation (CZN) on the file to date. However, some may have inadvertently been overlooked, and we look forward to these being brought to our attention.

Yours truly,  
CANADIAN ZINC CORPORATION

David P. Harpley, P. Geo.  
VP, Environment and Permitting Affairs

## COMMITMENTS TABLE (March 22, 2011)

<b>Consultation</b>
Continue to engage First Nations throughout the EA process.
Operate and participate in a Technical Advisory Committee (TAC) which will meet in the region three times annually to review and discuss mine operations and monitoring results.
Welcome NBDB, LKFN, other First Nation, and Government representation on the TAC.
<b>Culture</b>
If possible heritage/cultural resources are found, they will be preserved and the authorities notified.
Monitor un-authorized use of the access road and hunting.
Employ an NBDB member as an environmental monitor for each mine and road operation shift.
Involve NBDB members in spill response training and inform the Band of any spills.
<b>Socio-Economics</b>
Adopt a hire-first policy for qualified local residents, then Dehcho residents, then northern residents.
Source services and supplies locally, and across the north provided these are competitive.
Monitor employment of Dehcho residents and social impacts via IBA reports.
<b>Fish</b>
Replace any habitat losses to the satisfaction of Fisheries and Oceans Canada (DFO).
Make use of DFO's <i>Operational Statements</i> for creek crossings, including span structures and ice bridges/snowfills.
Minimize disturbance of stream banks and riparian areas at stream crossings. Protect stream banks as necessary, with the possible use of ice and/or matting.
A sediment and erosion control plan will be developed for construction and operation of the access road as a condition of a new road LUP.
Make use of the 'DFO Protocol for Winter Water Withdrawal from Ice-Covered Waterbodies in the NWT' for road construction, and measure flows and other parameters in creeks and consult DFO for approval before extracting water from creeks.
After the first year of construction, and following extreme rainfall events at any time, the road re-alignments will need to be checked for areas of instability, specifically the creek crossings, areas of fill placement, and the switch-backs in the Silent Hills. Over-flights of these areas are proposed. If problem areas are suspected, follow-up inspections will be made by helicopter, and will include set-downs and the use of small tools (e.g. shovels) and readily transportable materials (e.g. silt fence), as necessary.
Avoid disruption of the only known spawning location in the area (bull trout in Funeral Creek) during the spawning period (mid-August).
Continue the site policy of no fishing and any other unnecessary disturbance of the aquatic environment.
Perform a detailed habitat assessment of the exfiltration area as part of detailed design and construction planning.

<b>Wildlife</b>
Guidelines found in the “Safety in Grizzly and Black Bear Country” document will be followed to prevent and mitigate bear-human interactions.
All relevant observations of wildlife (particularly of Dall’s sheep, caribou, grey wolf, wolverine and grizzly bear) will be reported to mine environmental staff.
If a bird nest is found on site and eggs are present, monitoring will be conducted and efforts will be made to avoid the area. Any raptor nesting activity observed within 1.5 km of the Project will be reported to GNWT ENR.
An effective Waste Management Plan will be implemented, particularly as it relates to the disposal of food waste.
Hunting, trapping and harvesting by site employees and contractors will be prohibited.
Filtered sewage sludge will be taken to a sludge storage cell in the Solid Waste Area of the Waste Rock Pile. The cell will be bermed and fenced to prevent wildlife entry.
The transfer facilities will be closed and free of all attractants outside of the haul season.
Non-mine vehicles, including all terrain vehicles (ATVs) and snowmobiles will be prohibited on site.
Pets will be prohibited on site.
On-site personnel will receive basic bear awareness and safety training, including information on bear behaviour, how to avoid bear encounters, and how to respond to bears in the case of an encounter.
On-site personnel will be educated on the applicable policies and practices contained in the Wildlife Mitigation and Monitoring Plan.
On-site personnel will be discouraged from using areas outside of immediate work sites.
Wildlife sightings in proximity to the Mine site and access road will be recorded in a wildlife sightings log.
The appropriate regulatory agencies ( <i>e.g.</i> , GNWT ENR and Parks Canada) will be informed of any incidents with problem bears or other wildlife prior to action, unless imminent worker safety is at risk.
Bear use of habitats near mining infrastructure ( <i>e.g.</i> spring foraging by bears in disturbed areas) will be documented.
Dead wildlife encountered in proximity to the mine site and access road will be recorded and geo-referenced.
Food waste will be collected and incinerated on a daily basis.
All food and garbage will be stored in bear-proof areas or bear-proof containers.
Measures aimed at reducing the number of birds that use the water storage pond (WSP) will be implemented.
To reduce noise along the access road, the use of “Jake” brake engine retarders will be discouraged.
Flight paths to and from the mine will be considered according to the recommended guidelines for flying in caribou and sheep country, where feasible and within topographic and safety constraints.
The Flight Impact Management Plan will be reviewed and updated.
A Dall’s sheep monitoring program will be implemented to ensure that Project-related effects on sheep are minimized.

High snow banks from removal along the access road will be avoided so that wildlife can flee from traffic. Failing this, lower snow banks will be left every 100 m to facilitate wildlife moving off the road surface.
Maximum traffic speeds for all sections of the access road will be implemented accounting for road grade, curvature, adjacent sensitivities and sight-lines. Lower maximum speeds may be posted in the vicinity of sensitive wildlife areas.
Vehicle operators will yield right-of-way to wildlife and will take all reasonable measures to avoid vehicle-wildlife incidents.
When any SARA species is visible on the road, vehicle activity will cease until the animals have moved a safe distance away or are no longer visible.
A signage system will be employed along the access road to inform vehicle operators of vehicle/wildlife conflict areas.
All vehicles will be equipped with two-way radios. Wildlife sightings along the access road will be geo-referenced and reported to road supervisors.
Non-mine road traffic will be deterred from using the road by signage and operating a check-point and screening station near the south-eastern terminus of the access road, manned by representatives from the Nahanni Butte Dene Band.
Public use of the access road and evidence of land use, such as hunting, fishing, camping, or firewood harvesting will be noted and reported.
The south-eastern end of the access road will be blocked at specified locations after each hauling season with gates, berms, pits and/or boulders to discourage use.
Wildlife monitors will conduct ground surveillance during the initial mine start up and production period.
Wildlife Monitors will conduct ground-based surveys of the access road (during winter operation), mine infrastructure sites, and the airstrip to assess caribou presence and identify caribou aggregations in the Project area.
A radio call-in procedure will be implemented so that observations of caribou along the access road can immediately be relayed to the Road Operations Supervisor.
A procedure will be implemented so that caribou observations made by aircraft pilots during transport of crews and materials will be reported to the Wildlife Monitors.
Wildlife Monitors will contribute to a detailed quarterly report of wildlife observations and incidents that occurred during the monitoring period. Reports will be submitted to First Nations, GNWT ENR, and Parks Canada.
For caribou, wood bison, grizzly bear, wolverine, peregrine falcon, short-eared owl, horned grebe, rusty blackbird, olive-sided flycatcher, and common nighthawk, any mortality directly relating to the operation of the mine site or access road will trigger a review of mitigation strategies.
Summer maintenance work on the all season road will be voluntarily restricted to the period July-September. Wildlife monitors will check for birds nests before work commences.

<b>Operations Management</b>
All concentrates will be shipped in bags free of external concentrate dust.
A spill contingency plan for the Mine and access road will be reviewed and updated as per Appendix I of the Second Round IR Response
Water treatment sludge will be combined with the backfill mix and taken underground.
Annual geotechnical inspections of major structures (Water Storage Pond, Waste Rock Pile, Flood Protection Berm) and terrain in and around them.
The Catchment Pond will be lined with a low permeability geomembrane, and the existing culvert to Harrison Creek will be retained for emergency use only.
The Catchment Pond discharge mechanism will include pumps on stand-by which can be activated to ensure sufficient discharge. The outfall line will have a valve or gate which can be temporarily closed, if necessary. Discharge of treated water to Prairie Creek during winter will occur via a pipeline from the WTP connected to the outlet culvert in the Catchment Pond. The pond would be isolated from the line to avoid freezing effects. There will be a safety return line from the Catchment Pond to the Water Storage Pond with installed pumps.
<b>Road</b>
The Polje re-alignment will include fill placement, but gaps/swales will be left so natural runoff flow directions are not significantly modified.
All trucks on the access road must carry spill kits, and drivers must have read the spill contingency plan and be prepared for an appropriate spill response in relations to their load. Drivers must be suitably qualified and experienced.
All trucks will have communications, will be on alert for on-coming traffic or wildlife presence in the roadway and will be in contact with a controller
All of the vehicles and equipment using the access road will be properly maintained and free of leaks.
Road use (including vehicle speeds and driving conditions) will be monitored by radio and inspections. A journey management system (JMS) will be used (see Appendix I of the Second Round IR Response for details).
The access road bed will be sampled before and after the seasonal haul period as a check on potential contamination from concentrate losses.
The existing Controlled Road Use Plan will be modified for access road operations to promote safety and minimize the risk of accidents.
Potentially unstable areas and karst features along the access road will be inspected at a frequency dependent on observed conditions and changes or lack thereof of those conditions.
Temporary crossing structures and snow-fills will be removed at break-up to avoid blockage and erosion.
A stable road bed will be constructed adjacent to creeks and provide for runoff control and minimize the dispersal of sediment during precipitation events.
Promote re-vegetation of riparian areas to further reduce the potential for sediment dispersal.
The Spill Contingency Plan (SCP) will address all potentially hazardous substances used at the Mine or transported along the road. The SCP will contain information that clearly states who is responsible for spill response and clean-up.
Portable spill response equipment will be maintained no more than 50 km from any location along the road.

The SCP will include details of spill responses for all types of ground conditions, including frozen and non-frozen ground, and with and without snow cover. Opportunities for the rapid spread of contaminants will also be considered, such as in karst areas.
A trained spill response team will be maintained at the Mine. Operators at the Transfer Facilities will also receive appropriate spill response training. Training will include classroom study, equipment deployment instruction and spill exercises.
Spill exercises will be undertaken in summer (initial training) and winter (final training) conditions, and in locations representing the range of environmental conditions that will exist on the road.
The erection of a physical barrier on the outer edge of the road from Km 11-16 will be evaluated to reduce the risk of spills along this section where the grade is steeper and a tributary of Funeral Creek exists below.
Suitable locations for the construction of run-away lanes will be investigated for sections Km 11-16 and 19-22.
Specific speed limits may be set for specific types of trucks and loads through sensitive sections.
The road operations supervisor will place limits on hours of driving over a prescribed period.
The road will be regularly inspected and maintained during the operating season to ensure optimal performance and minimize risks from poor road bed conditions.
Trucks will be required to use chains from Km 0 to Km 29.
To respond to spills, an Incident Command System (ICS) will be used that is widely used by governments and industry (see Appendix I of the Second Round IR Response for details).
A silt or other form of curtain will be stored approximately mid-point between the mine and Funeral Creek ready for deployment to reduce flow in part of Prairie Creek adjacent to a spill.
Control points will be established at key locations, and will include material to create temporary dams, absorbents, booms, board weirs and sand bags. Control points locations will include two upstream tributaries to Funeral Creek, on Sundog Creek just above the main falls and just before the fluvial outwash plain, and downstream of the Tetcela River and Fishtrap Creek crossings.
Spill kits will be carried on vehicles with materials appropriate for the loads (i.e. type of sorbent). Comprehensive spill kits will be maintained at the mine site, Cat Camp, the Tetcela Transfer Facility, Grainger Gap, and the Liard Transfer Facility. Custom built and stocked road trailers dedicated to spill response, containing equipment, materials and tools will be considered.
<b>Water</b>
Flows in Prairie Creek will be monitored continuously, and if abnormally low flows occur in winter, the discharge of treated process water will be reduced as necessary in order to continue to meet site specific water quality objectives.
Closely monitor ammonia concentrations in water.
Closely monitor discharge water quality and the receiving environment's ability to absorb the discharge.
During operations, collect and assess data on actual and potential metal release from the Mine and WRP after Mine closure, and further develop mitigation and monitoring plans.