



Water Resources Division
Nunavut Regional Office
Indian and Northern Affairs Canada
Iqaluit, NU X0A 0H0

File: 9545-1-2HIGG / CIDMS 206927
NWB File: 2BE-HIG0712

April 15, 2008

Richard Dwyer
Licence Administrator
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

**Re: 2BE-HIG0712 / Zinifex Canada Inc. / High Lake Project / Kitikmeot Region / 2008
Licence Amendment Application, Number 1**

Indian and Northern Affairs Canada (INAC) has reviewed the 2BE-HIG0712 licence amendment application submitted by Zinifex Canada Inc. for its High Lake Project. The Proponent is requesting that Part H: Conditions Applying to Spill Contingency Planning, Item 4 be amended to allow for two (2) buildings to remain within 30 metres (m) of the high water mark of High Lake. These buildings are used for the housing of a camp power generator and mineral exploration equipment, also referred to as the driller's shack. Both buildings contain fuel. This fuel is used for the camp power generator and to heat the driller's shack. The Proponent has indicated that fuel will be contained within these buildings and stored within a structure capable of storing 110% of the largest single storage tank capacity. In addition, spill kits will be stored within each of these buildings and a larger spill kit and boat will be available for spill response measures. These buildings will be inspected on a weekly basis.

The following advice has been provided pursuant to INAC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*. Indian and Northern Affairs Canada recommends that these comments be considered when reviewing this licence amendment application.

GENERAL

1. Indian and Northern Affairs Canada considers the Proponent's justification to amend Part H: Conditions Applying to Spill Contingency Planning, Item 4 of the 2BE-HIG0712 licence to be inadequate. The proposed amendment would allow two (2) buildings to remain within 30 metres (m) of the high water mark of High Lake. The Proponent should explain why this licence term and condition should be revised, considering the need to ensure the protection of freshwater quality when carrying-out project activities. Part H, Item 4 states, "The Licensee shall ensure that any chemicals, petroleum products or wastes associated with the project do not enter water. All sumps and fuel caches shall be located at a distance of at least thirty (30) metres from the ordinary high water mark of any adjacent water body and inspected on a regular basis.

2. The Proponent should notify the Nunavut Water Board as to whether the Kitikmeot Inuit Association (KIT IA) has approved the placement of two (2) buildings containing fuel products within 30 m of the high water mark of High Lake. If the KIT IA has provided its approval for this building placement, a written authorization letter should be provided for review.
3. The Proponent should ensure that the two (2) buildings within the 30 m high water mark of High Lake are removed within 30 days of the commencement of this year's project field season. Furthermore, the footprint of these two (2) buildings should be reclaimed within this time period.
4. A detailed report specific to the removal of the two (2) buildings situated within 30 m of the high water mark of High Lake should be submitted to the INAC Kitikmeot Region Water Resource Officer and Nunavut Water Board for review. This report should include written and photographic documentation of the building removal and/or relocation procedures performed by project personnel and be signed by an appropriate company representative. Part I: Conditions Applying to Abandonment and Restoration or Temporary Closing, Item 5 must be followed. This licence condition states, "The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations."
5. The Proponent should review all inspection reports provided by the INAC Water Resource Officer which pertain to the High Lake Project. Responses to each inspection report should be provided to the Water Resource Officer, Nunavut Water Board, and Land Owner for review.
6. The Licensee specified in the 2BE-HIG0712 licence should be changed from Wolfden Resources Inc. to Zinifex Canada Inc.

DRILLING OPERATIONS

7. Drill holes should have all rods and casings removed prior to their abandonment.
8. Upon completion of land-based drilling activities, drill holes should be sealed and capped to prevent possible vertical movement of water which may induce thermal erosion. All drill holes should be sealed at their lower and upper permafrost levels. Drill holes should be capped or sealed through the thermal active layer if artesian flows due to impervious layers and/or naturally occurring, confined salt water are encountered.

SPILL CONTINGENCY PLANNING

9. The Proponent should review Part H: Conditions Applying to Spill Contingency Planning in its 2BE-HIG0712 licence. All terms and conditions must be followed.

ABANDONMENT AND RECLAMATION PLANNING

10. The Proponent should review Part I: Conditions Applying to Abandonment and Restoration in its 2BE-HIG06712 licence. All terms and conditions must be followed.
11. Annual Reports should include detailed written and photo documentation specific to the reclamation of a minimum of five (5) drill sites. This will allow for an increased understanding of progressive reclamation work being undertaken specific to exploration drilling activities.

MONITORING PROGRAM

12. The Proponent should devise a written Monitoring Plan. This Plan should address all terms and conditions listed under Part I: Conditions Applying to the Monitoring Program of the 2BE-KAZ0609 licence and any other requirements set by the Nunavut Water Board.
13. The project's licence monitoring program requirements should be expanded to include the collection of basic water quality data at the water sources downstream of each drill site. A total of three (3) parameters, pH, temperature, and conductivity, should be collected / analysed on three (3) separate occasions at the water source downstream of each drill site. These parameters should be collected prior to the commencement of drilling, upon completion of drilling activities (i.e., abandonment), and one (1) week following the completion of site drilling activities using a calibrated field meter or other approved method. The information should be provided to the Nunavut Water Board in the annual report and, if pH or conductivity changed greatly, the Proponent should also inform the Nunavut Water Board of mitigation actions taken.

Indian and Northern Affairs Canada requests notification of any changes in the proposed project, as further review may be necessary. Please contact me should you have any questions or comments with regards to the foregoing. I can be reached by telephone at (867) 975-4555 or email at AbernethyD@inac-ainc.gc.ca.

Regards,

Original signed by

David W. Abernethy
Regional Coordinator

Carbon copy:

Jim Rogers, Manager of Water Resources – INAC, NRO
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