



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

File: 9545-1 / CIDMS 206814
NWB File: 2BE-KAZ0609

April 15, 2008

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

Re: 2BE-KAZ0609 / Pacific Ridge Exploration Ltd. / Kazan Falls Project / Kivalliq Region / Amendment 1, 2008 – Application / Indian and Northern Affairs Canada Review

Indian and Northern Affairs Canada (INAC) has reviewed the 2BE-KAZ0609 licence amendment application submitted by Pacific Ridge Exploration Ltd. for its Kazan Falls Project. The Proponent is requesting three (3) amendments to its licence. First, the company wishes to change the camp for fly camps to an established main camp. Second, an increase in the total allowable water consumption limit in the license from 56 cubic metres (m³) to 170 m³ per day with 150 m³ to support exploration drilling activities and 20 m³ to support the domestic needs of project personnel. The accommodation capacity of the exploration camp will be increased from 15 to 25 people as part of the increased water use and change from fly camps to a main drill camp. Third, the Proponent wants to reduce the required grouting depth for the reclamation of exploration drill holes from 31 metres (m) to 15 m due to the project area's shallow overburden depth, which is generally less than 5 m.

The Kazan Falls Project is situated in the Kivalliq Region, approximately 65 kilometers southeast of Baker Lake, Nunavut. The project is on Crown Land and has general coordinates of 63° 00' to 64° 00' north latitude and 94° 45' to 96° 00' west longitude. The project's exploration camp has a coordinate of 63° 42' north latitude by 95° 45' west longitude and is situated on the west side of Bissett Lake.

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 the following comments be considered when reviewing this licence amendment application.

GENERAL

1. INAC believes the change in camp type fits within Part E of its water license, although the Nunavut Water Board should consider requesting the company to provide a better description of the camp location.

2. INAC is supportive of the Proponent's request to set the total allowable water consumption limit at 170 m³ per day, which remains under the 300 m³ per day listed for industrial undertakings Type B licenses.
3. The Proponent should ensure that Part C, Items 2 and 3 of the 2BE-KAZ0609 licence are followed. These licence terms and condition concern the authorization of water source usage.
4. INAC is supportive of the Proponent's request to set the required grouting depth for exploration drill hole reclamation at 15 m. If the the grouting extends into solid material and below the maximum annual depth of the active layer, 15 m should be adequate. The Proponent should be reminded to plug the holes at the bottom of the permafrost if drilling extends through the permafrost. The Nunavut Water Board should request the Proponent provide the depth of permafrost in their Annual Report to the Nunavut Water Board.
5. The 2BE-KAZ0609 licence will expire on November 1, 2009. INAC recommends that the licence term be extended to a later date (e.g., December 31, 2014) as part of this licence amendment application. The Proponent should be consulted on this matter to ensure that they have no intention of abandoning their Kazan Falls Project in the foreseeable future.
6. The Proponent should review all inspection reports provided by the INAC Water Resource Officer which pertain to their Kazan Falls Project and any other licensed Projects situated within Nunavut. Responses to each inspection report should be provided to the Water Resource Officer, Nunavut Water Board, and Land Owner for review.
7. The Proponent should be consulted on the actual project name of its mineral exploration undertaking. The project's Abandonment and Restoration Plan and Spill Contingency Plan reference the Baker Lake Property. The project's Uranium Exploration Plan makes reference to the Baker Basin Project. The 2BE-KAZ0609 licence is for the Kazan Falls Project. A consistent project name with a defined location would mitigate any confusion when referencing this mineral exploration undertaking.

DRILLING OPERATIONS

8. Drill holes should have all rods and casings removed prior to their abandonment.
9. 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.
10. When drill additives are not used for ice-based exploration drilling operations, released return water must be non-toxic and not result in an increase in total suspended solids within the immediate receiving waters.

11. The Proponent should review its Uranium Exploration Plan and make necessary revisions, if applicable, to reflect changes to its project's development. Should the Nunavut Water Board reduce the required grouting depth for reclaiming exploration drill holes, this information should be revised in the Plan. In addition, the Plan should be revised to include a title, date of its most recent revision, company identification, and a contact name for those who want to discuss uranium exploration details with a company specialist in this field of study and provided to the Nunavut Water Board.

MONITORING PROGRAM

12. The Proponent should provide 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.

SPILL CONTINGENCY

14. The Proponent should review Part G: Conditions Applying to Spill Contingency Planning in its 2BE-KAZ0609 licence. All terms and conditions must be followed.
15. The project's Spill Contingency Plan should include a detailed diagram of its main fuel cache. This diagram should be set at an appropriate scale and reference its global positioning system coordinate, proximity to adjacent freshwater sources, base contour lines, spill response equipment, and fuel transfer area.
16. The submitted Spill Contingency Plan makes reference to regular fuel cache inspections. The Proponent should provide a detailed description of how a fuel cache inspection is carried out and its frequency (i.e., Are inspections being carried out daily or weekly?).

17. The Project's Spill Contingency Plan should be revised to include the contact information of Peter Kusugak, Manager of Field Operations, INAC Nunavut Regional Office (NRO); David Ningeongan, Water Resource Officer, INAC NRO; and Henry Kablalik, Resource Management Officer, INAC NRO. These individuals are the primary Departmental contacts for the notification of hazardous material spills.

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ABANDONMENT AND RECLAMATION PLANNING

18. The Proponent should review Part H: Conditions Applying to Abandonment and Restoration in its 2BE-KAZ0609 licence. All terms and conditions must be followed.
19. 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.
20. The project's Abandonment and Reclamation Plan should be revised to include the site reclamation procedures specified within this review letter, particularly, those which relate to exploration drill site reclamations.

Indian and Northern Affairs Canada
Nunavut Regional Office, Water Resources Division

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
Peter Kusugak, Manager of Field Operations – INAC, NRO
David Ningeongan, Kivalliq Water Resources Officer – INAC, NRO
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