

May 16, 2011

Our reference
IQALUIT-#456052

Sent by email: licensing@nunavutwaterboard.org

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, Nunavut
X0E 1J0

Your reference
2BE-KLG----

**Re: Type 'B' Water Licence No. 2BE-KLG---- – Kiyuk Lake Gold Project
– Prosperity Goldfields Corp. – Kivalliq Region – New Application**

Dear Phyllis,

Thank you for your April 14, 2011 request for written representations on the above referenced water licence application.

A Technical Review Memorandum is provided for the Board's consideration.

Please do not hesitate to contact me by telephone at 867 975-4555 or email at David.Abernethy@inac-ainc.gc.ca to discuss this submission.

Regards,

David W. Abernethy
Water Resources Regional Coordinator
Operations Directorate
Nunavut Regional Office
Iqaluit, Nunavut
X0A 0H0

Encl.

c.c.: J. Rogers, Water Resources Manager
P. Kusugak, Field Operations Manager

Technical Review Memo

TO	Phyllis Beaulieu Manager of Licensing Nunavut Water Board	OUR REFERENCE File #9545-2-2.2BE.KLGA IQALUIT-#456052
FROM	David Abernethy Water Resources Regional Coordinator Indian and Northern Affairs Canada	YOUR REFERENCE 2BE-KLG---- DATE May 16, 2011
SUBJECT	Type 'B' Water Licence No. 2BE-KLG---- – Kiyuk Lake Gold Project – Prosperity Goldfields Corp. – Kivalliq Region – New Application	

A. PROJECT DESCRIPTION

On April 14, 2011 the Nunavut Water Board (the Board) distributed Prosperity Goldfields Corp.'s (PGC) application for a Type B water licence to allow for the use of water and disposal of waste associated with their Kiyuk Lake Gold Project. Prosperity Goldfields Corp. has requested a five (5) year term.

The Kiyuk Lake Gold Project is situated 350 km southwest of the Hamlet of Arviat near the Nunavut – Manitoba border. According to the submitted February 2011 Corporate and Social Responsibility Action Plan, PGC's property consists of fifty (50) mineral claims covering 49,912 hectares on land administered by Indian and Northern Affairs Canada. Project activities include the operation of a twenty (20) person temporary camp and a drill program. Prosperity Goldfields Corp. has requested a daily water allowance of 55 m³, of which 50 m³ will be used for drilling purposes and 5 m³ for domestic purposes.

Drill water and grey water will be directed to sumps at least 31 metres from the normal high water mark of any water body in a manner that prevents direct entry into water bodies. Combustible waste materials, including Pacto bagged sewage, will be burned in a vented-base, fuel fed incinerator. Remaining ashes will be barreled and transported to an approved waste management facility in Manitoba. Non-combustible waste materials, including waste oil and hazardous wastes will also be brought to approved waste management facilities in Manitoba. Included in PGC's water licence application are a Spill Response Plan and an Abandonment and Reclamation Plan.

B. RESULTS OF REVIEW

On behalf of the Indian and Northern Affairs Canada (INAC) Water Resources Division I am providing the following comments/ recommendations for the Board's consideration.

1. General

- Standard water licence terms and conditions applicable to the proposed project activities should be included in a Type B Water Licence.
- Prior to the upcoming field season, PGC should revise their project management plans to address the findings of this water license application review.
- The proponent should provide the Board with a schematic of the camp site that indicates the location of infrastructure and storage areas and the direction of overland flow to and from the camp early in the process. The schematic should also indicate the locations and features that the later revised Spill Response Plan's topographic map will identify.

2. Fuel Management

- The submitted Spill Response Plan should be revised to include the quantities of fuel that will be brought to site and details on how each fuel type will be contained/ managed. As a precautionary measure, PGC should provide secondary containment in all locations where fuel, chemicals, and other hazardous materials (e.g., lubricants and waste oils) are stored. Secondary containment is to be provided where fuel storage exceeds 4,000 L.
- The submitted Spill Response Plan makes reference to North Country Gold Corp. and their Hayes Camp. North Country Gold Corp. holds Water License No. 2BE-CRA1015 for the Committee Bay Project. Prosperity Goldfields Corp. should provide clarification on the status of North Country Gold Corp.'s involvement in their Kiyuk Lake Gold Project and this water licence application.
- Once known, the submitted Spill Response Plan should be revised to include the coordinates of the project's temporary camp(s), fuel cache(s), and domestic water source. Also, a topographic map identifying these locations and any other applicable features (e.g., airstrip, project infrastructure, spill response equipment) should be included in a revised plan.

- The submitted Spill Response Plan should be revised to include the correct INAC Water Resource Officer's contact information (i.e., Tel. 867 975-4295, Fax. 867 979-6445). The INAC Water Resource Officer should be notified of any hazardous material spills.

3. Solid Waste Management

- The submitted application references the burning of solid waste materials in an incinerator. The INAC Water Resources Division recommends that any burning of waste materials be carried out in accordance with Environment Canada's, "Technical Document for Batch Waste Incineration." This document provides information on appropriate incineration technologies, best management and operational practices, monitoring, and reporting.
- The submitted Abandonment and Reclamation Plan states that seasonal shutdown procedures will include the burning of untreated wood and cardboard in a controlled open burn in compliance with the Government of Nunavut's Municipal Solid Wastes Suitable for Open Burning Guidelines. Also, this plan's final abandonment and reclamation procedures include the burning of wooden structures. The INAC Water Resources Division does not encourage the burning of combustible waste materials as a form of disposal. Rather, the disposal of all waste materials at approved waste management facilities is preferred. In the event that open burning of waste materials is carried out, the following recommendations are provided,
 - Only waste materials considered to be acceptable for burning by the Board should be burned;
 - Waste materials considered to be acceptable for burning should be appropriately sized (cut if necessary) to promote complete burning;
 - The burn should remain in a 'hot phase' or 'hot burn' until complete combustion of the waste materials has occurred (i.e., there are no remaining unburned debris). Air assistance to the fire should be considered to improve complete burning; and
 - Remaining non-combustible debris (e.g., nails) should be removed from the burn area and disposed in an approved facility.
- The submitted Abandonment and Reclamation Plan should reference the INAC Water Resource Officer's contact information.

Prepared by David Abernethy

c.c.: J. Rogers, Water Resources Manager
P. Kusugak, Field Operations Manager