



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

May 1, 2009

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0A 1J0

**Re: 2BE-FER0712 – Starfield Resources Inc. – Ferguson Lake Project -
Temporary Shutdown**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of the above noted notification of temporary closure.

The Nunavut Water Board (NWB) distributed the notification for comment on April 29, 2009.

In conducting this review, I have referred to all documents on the Nunavut Water Board FTP site related to water license 2BE-FER0712 as well considered concerns noted by INAC's Water Resources Officer. Attached is a Technical Review Memorandum for your consideration.

Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4566 or by email at tanya.trenholm@inac.gc.ca.

Sincerely,

Original signed by

Tanya Trenholm
Pollution Policy Specialist



Technical Review Memorandum

To: Phyllis Beaulieu, Manager of Licensing - Nunavut Water Board
A. Keim, Water Resources Officer, Indian and Northern Affairs Canada

From: Tanya Trenholm, Pollution Policy Specialist - Indian and Northern Affairs
Canada – Water Resources Division

**Re: Temporary Closure – Starfield Resources Inc. – Ferguson Lake
Project**

Existing Water Licence # 2BE-FER0712

Background Information:

Starfield Resources Inc. notified the NWB in a letter dated April 20, 2009 of their intention to temporarily close their exploration camp at Ferguson Lake, effective at the end of April.(until such a time as the 'economics improve').

Comments:

Annual Reports:

Starfield Resources Inc was first issued a water licence for exploration related to the Ferguson Lake Project in 2003. Part B of the licence requires the submission of annual reports, and to date, including 2008 (due March 31, 2009), only one has been submitted (2007). This is a contravention of the water licence terms and conditions, and subsequently, the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*.

The 2007 annual report (as submitted by Starfield) makes reference to the following documents / monitoring results that were to be submitted by Starfield to the NWB;

- A full report on water sampling and monitoring in relation to a dozer that went through the ice on Ferguson Lake (November 2007).
- Environmental baseline studies.
- Hydrocarbon assessment of the old camp location (conducted summer, 2007).

A review of the NWB ftp site yielded no such reports. The NWB should request that Starfield immediately submit these reports, as well as the 2008 Annual Report, prior to any temporary shutdown



Abandonment and Reclamation Plan / Fuel Management:

As per Part I of the existing water licence, the Proponent was to submit an Addendum to the 2007 A&R Plan, to take into account and address the following;

- incineration of waste oil and associated products to be carried out in an incinerator approved for that purpose

The addendum was to be submitted with the 2008 annual report. However, as noted previously, this report has not been filed with the NWB as required.

Starfield should be advised by the NWB that, as part of any temporary closure, they must implement actions as stated in their 2007 A&R Plan. Section 2 of the 2007 A&R Plan (which forms part of the license requirements for this project) states the following, among other things, will be carried out in the event of temporary shutdown:

- All fuel barrels will be removed to an approved location
- All waste oil will be incinerated.
- All drill sites will be cleaned

The April 20, 2009 notification indicates that '60 drums of waste oil, fuel and lubricants at the site will be placed within the lined earthen berm'. However, the current Spill and A&R Plans state that the total volume of oil and lubricants to be stored on-site is 25, 10 L containers, or 250 L total. Starfield should, prior to closing the camp, either incinerate this excess waste on site in an approved waste incinerator (at this time, there is no indication that there is an approved incinerator on site) or remove it from the site to an approved facility.

Further, the notification states that 33,000 litres of bulk P50 fuel will be 'placed in steel, double walled enviro tanks'. Aerial photos taken of the site on July 27, 2008 reveal that there are 3 fuel bladders on site, and one small double walled enviro tank. It is known that each fuel bladder at a maximum capacity can hold 113,000 L of fuel. The proponent should confirm to the NWB and an INAC Water Resources Officer that there are currently enough double walled enviro storage tanks available on site to store all of the fuel from the bladders. Fuel from the bladders should be transferred to such enviro tanks or removed from the site. The reason for this is that the length of time the site will be closed is unknown and as per the manufactures instructions (for the fuel bladders), there is a limited amount of snow that may accumulate on top of the fuel bladders.

Staff on Site:

The 2007 A&R Plan indicates that during seasonal shut downs (December 15 to March 15) Starfield retains staff on site to ensure ongoing maintenance and monitoring of the camp site.



The notification does not indicate if this practice will occur, for the purposes of inspection and monitoring during the temporary shut down.

Drill Sites:

There is no information in the notification letter that indicates the status of drill sites prior to the planned temporary closure.

As part of the temporary closure, the NWB should require the proponent to submit the GPS locations of any additional drill-hole locations to those indicated via the 2007 annual report. Further, the proponent should indicate if all drill holes have been cleaned and reclaimed to their pre-existing state as per the 2007 A & R Plan.

Conclusions / Recommendations:

- The temporary shutdown notification submitted by Starfield does not address many components stated in their 2007 A&R Plan. The A&R Plan forms part of the licence, and as such Starfield is required to implement actions included within the A&R Plan relating to temporary closure.
- Starfield should submit an updated A&R / Care and Maintenance Plan to the NWB that addresses all of the above noted items stated in this Technical Review Memo, including;
 - the use of fuel bladders (the current Spill Plan and A&R Plan does not identify the use of fuel bladders),
 - frequency of site inspections by Starfield during temporary shutdown.
 - Fuel and waste management procedures that address spill prevention, removal of excess wastes, fuel storage, etc
 - The submission of all required reports stated in this document
- This information has been forwarded to an INAC Water Resources Officer for consideration and / or further actions.

Please feel free to contact me at your convenience should you wish to further discuss any part of this submission to the Board. I can be reached at 867-975-4566 or via email, tanya.trenholm@inac.gc.ca.

Cc. Kevin Buck, Manager, Water Resources Division – Indian and Northern Affairs Canada;
Bernie MacIsaac, Acting Manager of Field Operations – Indian and Northern Affairs Canada.