From:	David Hohnstein
To:	carrie.spavor@ec.gc.ca
Cc:	gord@northarrowminerals.com; Phyllis Beaulieu
Subject:	New Water Licence Application - Torp Lake Project - North Arrow Minerals Inc.
Date:	Wednesday, November 18, 2009 10:21:35 AM

Good Morning Carrie,

I was wondering if I could ask you for some further input into this application and the comments submitted?

The NWB received an application for a new water licence from North Arrow Minerals Inc. back in July, with additional information submitted in August. The application went out for review and comment with the deadline for comments September 18, 2009. Comments have been received, reviewed and the NWB staff is looking at presenting the application to the Board with a recommendation for approval of the new Licence.

NWB File No. 2BE-TOR
EC File: 4704 004 047 – Submission dated September 3, 2009

With this file (and possibly all future files) there is one issue that remains to be confirmed with options to be presented to the Board, and that is with respect to the comments received from EC, under Fuel/Spill Contingency (of the submission to NIRB), and the recommendation to provide secondary containment for the storage of fuel on site as well as discharge of collected snow/water.

The NWB has generally addressed this concern (similar to those of INAC) with appropriate conditions in the licence with respect to the location of fuel storage in relation to water and the prevention of petroleum products/chemicals from entering water, ie:

> "The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering water. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary high water mark of any adjacent water body where direct flow into a water body is not possible and no additional impacts are created."

Question one would be, is there a trigger amount in the storage of fuel (barrels or otherwise) that EC would be recommending would require secondary containment? Would this amount be based on total volume or container/vessel size?

With the potential introduction of secondary containment requirements to a WL, the issue of accumulated water would need to be addressed and the disposal of that water. In addition, there is also the added disturbance of land, potentially impacting waters upon construction, removal and closure of the containment. No recommendations have been received from parties with regard to the handling of accumulated water, disposal and potential impacts, with the exception of EC's recommended use of secondary containment (insta-berms along with INAC) and disposal of the accumulated water. In EC's submission, there is a reference to "decanting of snow or water should only proceed if the appropriate chemical analysis has determined that the contents will not violate the requirements of Section 36.3 of the Fisheries Act, such as contact with hydrocarbons."

Any condition contained within a licence must be enforceable and as such, must have some determinate measure to say whether the licensee is compliant or not. Having secondary containment is pretty straight forward, there either is or there isn't. Effluent discharge and the water quality on the other hand, would require limits for these discharges to be enforceable. Also, discharge location should be considered. If discharge is not to a water body (most if not all, would be to land), or not to fish bearing waters, is there a need to carry out chemical analyses (and I would think toxicity tests) on water to be released.

The above issue of water discharge and water quality would impact many if not all the projects (exploration, research, lodges etc.) and would most likely require sampling and verification analyses prior to release. There would likely be a low percentage of licensee's that would comply with this requirement and be considered non-compliant.

A few questions/clarifications to consider and provide feedback on are:

1) Is this a concern with exploration only? Or are other projects which have fuel storage affected (ie research camps, lodges etc.);
2) Is there a min/max fuel storage volume for fuel caches that would apply to these types of projects (I've heard the number 19 drums passed around from INAC but nothing confirmed), if so, are there restrictions preventing the project from having more than one fuel cache for a particular project (ie 40 drums for the project, but spread out in 4 caches?);
3) How are these fuel storage areas being handled in the NWT where there would not be a water licence issued for the "smaller" projects;

Some clarification on this issue(s) would be appreciated prior to moving forward on this application, as well as other new/renewals to be expected. If you could provide some additional information on the secondary containment requirement (recommendation), the basis for it and the options for dealing with the discharge of water from these storages, that would be great. If it would be easier to discuss over the phone, either individually or via telecom with others (ie INAC land/Water, inspection, GN, the applicant) that could work well.

Thanks for your time as I greatly appreciate your input in the development of licence conditions that will work for all parties involved. If you have any questions please feel free to give me a call at your convenience at (780) 443-4406 (MST).

Regards,

Dave

David Hohnstein, C.E.T.
Director Technical Services

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