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NWB5DYE
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March 3, 2004

Phyllis Beaulieu
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0E 1J0

Via electronic mail to:
licensing@nwb.nunavut.ca

Re: DYE-M DEW line clean-up application

On behalf of Indian and Northern Affairs Canada ("INAC") Water Resources, I would like to thank you for the opportunity to provide comment on the Defense Construction Canada and Department of National Defense ("the proponents") Water License Application for the clean up of the former DYE-M Cape Dyer DEW Line Site. Based on our review of this document, INAC does not hold any fundamental objections to the proposed plan, however the following comments and recommendations are offered:

Water usage:

Section 9.2.4 indicates that "The existing water supply at DYE-M *may* be used" (emphasis is ours). It is requested that the proponent clarify additional water sources that may be utilized beyond those previously identified at the DYE-M site. It is also requested that the proponent identify, and provide data, for the flows, total volumes, and/or recharge rates of the water systems that are to be utilized. These data will ensure that the selected water sources are sufficient to meet the proponents needs identified in Item 7 of the Water Licence Application, as well as the criteria for usage limitations identified in Section 9.2.4. If possible, these data should account for seasonal variation, and should be considered by the Nunavut Water Board ("NWB") in concert with the August 13, 2003 Water License Application of Nasittuq Corporation for the use of 16,0000 L/year at the DYE-M site to ensure that the combined draw on resources is acceptable.

Spill contingency plan:

The information contained in Items 23-25 of the Supplementary Questionnaire and Section 10, the Spill Contingency Plan, should be compiled into a single comprehensive document. Once a contractor has been selected, additional information should be added to this compiled document, including the names, titles, and contact information of all persons responsible for spill response, a

description of the spill training on-site workers will receive, and the amounts and storage locations of contaminants on site.

Landfill construction, closure, and monitoring:

It is unclear in Section 5.5 what criteria will be used to determine the placement of thermistors and monitoring wells. It is also unclear in Section 5.3.2, how these thermistors and monitoring wells will be installed in landfills with impermeable liners without compromising the integrity of the liner. It is suggested that these points are worthy of further explanation by the proponent, given their importance in evaluating project success. It is also requested that the proponent provide an estimate of the identity, quantity, and fate of the contaminants previously released as leachate (Section 5.5), as well as the results of the permafrost freeze back study cited in Section 5.3.2.

Testing, cleaning, and disposal of barrels and contents:

It is requested that the details of containment and emergency response measures to be in place during the barrel opening be clearly identified in Section 5.8.1. It is further requested that the proponent provide a rationale for the suite of contaminants tested (Section 5.8), including a brief justification of how the analyses included in the proposed regime are sufficient to identify all contaminated materials that may be on site. With respect to disposal practices, it is recommended that the proponent provide information regarding the testing of empty barrels for residual contamination, the details of what constitutes the “appropriate manner” for barrel cleaning, and what confirmatory testing will be conducted on cleaned barrels to ensure that they are suitable for disposal. The proponent should also identify the fate of the materials used for barrel cleaning and, for all barrel liquids, what contaminant analysis will be conducted post-treatment and prior to liquid release. If no such testing is to be conducted, a rationale and any related treatment performance documentation should be provided.

Site abandonment and monitoring:

A variety of recommendations were derived from the long term planning and monitoring sections of this report. In response to the information contained in Section 5.16, Future Planning, it is advised that a time line should be provided by the issued Water Licence to outline the specific points at which the landfill monitoring program will be implemented. It is also recommended that the landfill and associated monitoring programs be initiated prior to the completion of site clean-up. This will provide the opportunity to ensure that the landfills are performing as anticipated prior to site abandonment. It is also recommended that leachate monitoring be conducted during the months of September and October, as these were identified in Section 6.1 as the wettest months at the site. In Section 9.2.19, Work Site Clean Up and Abandonment, the proponent should clearly identify what site QA/QC criteria, and associated testing, will be used to determine

when the site is suitable for abandonment. It is also unclear what party will be responsible for making this determination, unless it falls under the role of the Environmental Inspection Team identified in Section 9.4.1. Finally, it is suggested that Section 12.2, Monitoring in Relation to Environmental Objectives, should include plans for site specific monitoring and implementation programs at the outset of reclamation activities. Although it is understood that complete plan details may not be determined or available at the outset of reclamation activities, it is recommended that the framework for this program be provided, and be understood to be subject to modification as reclamation activities progress.

While the DYE-M application is largely complete and sound, an appreciable amount of information remains contingent upon the forthcoming appointment of a contractor. It is therefore recommended that an initial Water Licence be issued for this project, with the issuance of a subsequent Water Licence following the submission of outstanding information to the NWB.

Please do not hesitate to contact me if there are any further questions or concerns.

Best regards,

Original signed by:

Stephanie Hawkins

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