



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

File 9545-2-3.1BR.DYEA
CIDMS 238047

Tuesday, July 22, 2008

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

**Re: 1BR-DYE0409/TR/H1, Defence Construction Canada, DYE-M Cape
Dewar DEW Lines Site Reclamation Project, Qikiqtani Region,
Request for Modification**

Dear Mr. R. Dwyer,

Please be advised that Indian and Northern Affairs Canada (INAC) has reviewed the request for modification of the 1BR-DYE0409 water licence submitted by UMA Engineering Ltd. on behalf of Defence Construction Canada. This request was distributed for comment by email on June 25, 2008. The request for modification is specific to Part H, Item 1 of the licence (which pertains to the modification of water supply and waste disposal facilities).

Nunavut Water Board (NWB) Licence 1BR-DYE0409 was issued to Defence Construction Canada to allow for the use of water and disposal of waste during remediation activities at the Cape Dyer DYE-M Distant Early Warning Site. This project area is located in the Qikiqtani Region and has a coordinates of 66°39' north latitude, 61°21' west longitude.

Defence Construction Canada has requested the NWB through notification dated May 29, 2008 that it will increase the capacity of its camp facilities, remove nine additional buildings, not remove module train C and the walkway from module train B to module train C (please note the Application – indicate location on ftp - for exact locations. In addition Defence Construction Canada has advised the NWB that appropriate measures (list some here) are being taken in response to the July 9, 2007 spill of 52,000 liters of hydrocarbon impacted water from Storage Tank # W22G.

The following comments are provided for the Board's consideration when reviewing / approving this submission.

- Defence Construction Canada intends to enlarge the camp sewage lagoons (two (2) treatment cells) to support the increase in camp size. Therefore as-

built plans and drawings of the modifications to the Sewage Disposal Facility must be submitted within ninety (90) days of completion of the modifications. (as required by Part H, Item 3 of the 1BR-DYE0409 licence)

- An operations and maintenance manual specific to the project's Sewage Disposal Facility should be provided to the Board after the modifications are complete. This manual should address as a minimum, but not limited to, daily record taking procedures, berm integrity inspection and maintenance measures, water quality analysis methods, sludge management provisions, decant procedures, and design plans and drawings.
- The proponent should re-evaluate its water consumption requirements and notify the Board if it will surpass its 150 m³ daily limit. The proponent indicated in its May 28, 2008 letter addressed to P. Beaulieu that although the number of people at the camp will increase to a maximum of 165, freshwater consumption will not surpass the 150 cubic meter (m³) daily consumption limit. The proponent's January 5, 2004 licence application stated that water requirements for camp operations are 35 m³ per day and water requirements for construction purposes are 115 m³ per day. According to the original licence application's Exploration / Remote Camp Supplementary Questionnaire, domestic water consumption was estimated to be 0.34 m³ per person per day. Using this base value, domestic water consumption can reach 56.1 m³ per day. This value is much greater than the 2.0 m³ per day requirement for camp operations indicated on page 2 of the 1BR-DYE0409 licence.
- The proponent should inform the Nunavut Water Board, based on a technical assessment, on whether the hydrocarbon impacted soils which resulted from the July 9, 2007 spill will affect the design and capacity of the current Hydrocarbon Soil Treatment Facility. As a minimum this assessment should be included in the 2008 Annual Report. The design of a landfarm facility is briefly described in Section 5.3.3 Hydrocarbon Soil Treatment Facility, of the November 2003 *Project Description For the Clean Up of DYE-M, Cape Dyer DEW Line Site* that was prepared by UMA Engineering Ltd. on behalf of Defence Construction Canada. INAC understands that a landfarm has been constructed on-site and approximately 1,300 m³ of hydrocarbon impacted soil were placed in this facility in 2007 (refer to 2007 Annual Report).
- With respect to the project's landfarm facility, the proponent should ensure that all as-built plans and drawings have been provided to the Board.
- An operations and maintenance manual specific to the project's landfarm facility should be provided to the Board. The manual should address as a minimum, but not be limited to, spill prevention, determination of off site contaminant migration paths and associated prevention, confirmatory sampling, criteria for re-use of impacted materials, inspection and tilling

procedures as well as procedures for handling or storage of contaminated wastewater generated.

Indian and Northern Affairs Canada requests notification of any changes to the proposed project, as further review may be necessary. Please contact me should you have any questions or comments. 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:

Kevin Buck, Manager of Water Resources – INAC, NRO