

● Consulting ● Engineering Construction Management Services



January 22, 2002

File: FOX-5 1.4.5

VIA FACSIMILE: (867) 360-6369

Rita Becker
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Jan 25/02

Dear Ms. Becker:

RE: Amendment to Water Use License Application NWB5QIK

On behalf of Defence Construction Canada Ltd. (DCC), the following provides amendments to the above noted water use license (WUL) application for the clean up work at the former FOX-5, Broughton Island DEW Line site.

Revision to Item 8 WUL application (Waste): Sewage from the construction camp is to be hauled to the Hamlet of Qikiqtarjuaq's existing sewage lagoon for disposal. DCC has contacted the community to obtain a quote for the use of the Hamlet's sewage lagoon, and this information is to be included in the tender package.

In letters to the Nunavut Water Board (NWB), dated May 7 and July 18, 2001, the Hamlet of Qikiqtarjuaq expressed concern regarding the location of two proposed landfills at the FOX-5 site (reference p.14 of the Project Description in Appendix B of WUL application). A review by the Environmental Working Group (EWG), that includes representatives of the Nunavut Tunngavik Inc. (NTI), determined that the locations as chosen are the most environmentally and technically feasible (see attached map for the location). The decision is based on the following:

- The area is not located within any meltwater pathways leading towards the Hamlet's Secondary Water Supply Lake.
- The area is on a topographic high, and thus receives little run-on.
- A portion of the area drains to the southwest and ultimately west down along the road towards Qikiqtarjuaq. Another portion of the area drains to the south and then easterly towards the middle valley towards the Secondary Water Supply Lake; however, the proposed landfill site is approximately 3.5 kilometers away from this lake.
- Grading the surface of the landfill towards the west will minimize potential drainage to this lake.

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Another concern raised by the Hamlet was the chosen remediation option for the Main Landfill, located at the Upper Site at FOX-5 (reference p.14-15 of the Project Description in Appendix B of WUL application). These concerns suggested that significant surface flow and instability from earthquake activity may affect the performance of this landfill, and that serious consideration should be given to excavation of this landfill. Again, the issue was reviewed by the EWG. Based on the EWG's review of existing environmental and engineering information, and remediation options available, it was determined that landfill excavation is not required. The optimum remediation design for this landfill is to include measures to contain leachate within the landfill, and provision of additional granular cover on the landfill surface to mitigate the potential for subsidence and erosion.

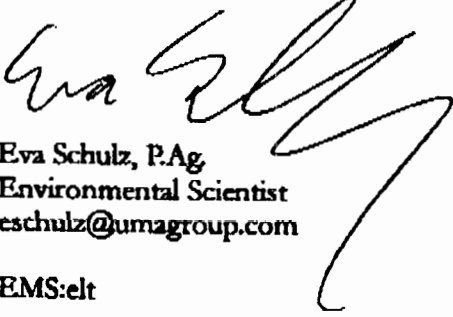
Groundwater wells are to be installed at each of the proposed facilities described above to monitor the performance of the landfill, and to mitigate impacts to the neighbouring lands.

Please note that a landfill for the disposal and containment of PCB Amended Painted Material **WILL NOT** be constructed on site (reference p.14 of the Project Description in Appendix B of WUL application).

We trust that we have addressed the concerns expressed by the Hamlet of Qikiqtarjuaq related to the clean up of the former FOX-5 DEW Line site. Please feel free to contact the undersigned at (403) 270-9220 if you have any questions or require further clarification.

Sincerely,

UMA ENGINEERING LTD.



Eva Schulz, P.Ag.
Environmental Scientist
eschulz@umagroup.com

EMS:elt

Encl. Site Map

cc: Suzanne Fontaine/Scott Munn, DCC

