Environmental Protection Branch Qimugjuk Building 969 P.O. Box 1870 Iqaluit, NU X0A 0H0

Tel: (867) 975-4639 Fax: (867) 975-4645

February 21, 2003

Jorgen Komak Environmental Technolgoist Nunavut Impact Review Board

P.O. Box 2370

Cambridge Bay, NU X0E 0C0

Tel: (867) 983-2593 Fax: (867) 983-2594

Via Facsimile

Our file: 4517 000 011

RE: NIRB 03DN013 - Defence Construction Canada - Dew Line Site Clean-up, Hall Beach Area, NU

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the Canadian Environmental Protection Act, Section 36(3) of the Fisheries Act, the Migratory Birds Convention Act, and the Species at Risk Act.

UMA Engineering Ltd., on behalf of Defense Construction Canada, is proposing to conduct a clean up of the former FOX-M Hall Beach Dew Line Site. Hall Beach, NU is located on the eastern side of the Melville Peninsula in the Foxe Basin area, NU. The station is adjacent to the shoreline on the eastern side of the peninsula and forms part of the community of Hall Beach. This project is part of the larger Department of National Defence project to decommission and reclaim the Distant Early Warning System sites. This clean up includes the remediation of chemically contaminated soils, the partial excavation of the East Beach landfill, the creation of a non-hazardous and a hazardous material landfill, the creation of a landfarm for contaminated soils, and the demolition/disposal of surplus infrastructure and debris. A monitoring program will be carried out after the clean up has been completed. Work will begin in July 2003, with completion expected in 2007. The site will be occupied from July to October each year.

Environment Canada requires Appendix III of the application to be submitted in order to facilitate the review of this project.

Environment Canada recommends that the following conditions be applied throughout all phases of the project:

WATER QUALITY

 The proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.

- The proponent shall ensure that all hazardous waste and wastewater not being disposed
 of in the Tier II Landfill receive treatment at an appropriate disposal facility. This includes
 any hazardous water and/or leachate found to be over the Tier II limits originating from
 the East Beach landfill, the perimeter collection system of the landfarm, and any
 meltwater collected on site.
- No details regarding the disposal of sewage and wastes from the construction camp were
 provided with the application. Environment Canada recommends that all sumps be
 located in such a manner as to prevent their contents from entering any waterbody.
 Furthermore, all sumps shall be backfilled at the completion of the season and
 recontoured to match the landscape. The location of sumps may be of special concern
 given the low elevation of the site and the numerous water-filled depressions that occur
 throughout the landscape. Environment Canada also recommends that an approved
 incinerator be used if combustible camp wastes are to be burned.
- All spill basins and fuel caches should be located above the high water mark of any waterbody and in such a manner that the contents do not enter any waterbody.

QUARRYING

- The proponent shall not deposit nor permit the deposit of sediment into any water body.
 The ecological balance of fish and plants in rivers and lakes can easily be upset by
 sedimentation or blockage from quarrying. A minimum undisturbed buffer zone of one
 hundred metres (100) shall be maintained between the proposed quarry operation and
 the high water mark of any definable watercourse as identified on a 1:50,000 NTS map.
- In order to decrease the creation of dust and the related impacts on air quality, EC recommends that the area to be quarried be wetted with water prior to and periodically during excavation.

LANDFILLING/LANDFARMING

- The proponent has indicated that there is ponded water in the vicinity of the East Beach Landfill Site. Environment Canada recommends that in areas where debris has been buried and ponded water is present, the area be dewatered, and the water tested prior to disposal to ensure that all waste water discharge guidelines are being met.
- The proponent has indicated that during landfarm operations, moisture conditioning of the landfarm (by application of water spray) will be conducted. The proponent shall ensure that the water to be used meets all the wastewater discharge criteria.
- Environment Canada recommends that bulky material deposited into the non-hazardous waste landfill be cut into varying shapes and sizes so to minimize void spaces in the landfill
- The placement and capping of landfill sites must be carried out such that erosion will not
 occur.

GENERAL CONDITIONS

- Drip pans or other absorbent material should be used when refuelling equipment on site.
- Environment Canada recommends that the proponent limit their activities to existing roadways and disturbed areas.
- The proponent shall not store materials or erect camps on the surface ice of lakes or streams.
- Environment Canada recommends that any holes created through the removal of creosote coated power poles and foundations be capped off with fill and regraded to match the contours of the land.
- All spills are to be documented and reported to the NWT Spill Line at (867) 920-8130.

If any changes to the proposed project occur, EC should be contacted as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.meloche@ec.gc.ca.

Yours truly,

Colette Meloche Environmental Assessment Specialist

cc: (Mike Fournier, Northern Environmental Assessment Coordinator, Environment Canada, Yellowknife)