



Environment Canada    Environnement Canada

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*Via Email*

**RE:    NWB5PEL0510 – Defence Construction Canada – CAM-4 DEW Line, Pelly Bay - Abandonment and Restoration Plan**

On behalf of Environment Canada (EC), I have reviewed 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. has submitted an Abandonment and Restoration (A&R) Plan for the CAM-4 DEW Line reclamation project on behalf of Defence Construction Canada (DCC) to fulfill its Part I licence requirement. This Plan provides a brief summary of final reclamation activities that will be conducted at the DEW Line site. In particular, closure activities are planned for demolition work sites, areas of contaminated soil excavation, the land-farm facility, the two non-hazardous waste landfills, the tier II soil disposal facility, and the demobilization of project equipment, supplies, and wastes. The CAM-4 DEW Line site is situated nearby the community of Kugaaruk, having a coordinate of 68°27'N, 89°45'W. Project reclamation efforts are ongoing and scheduled to be complete by 2007.

The Monitoring Plan submitted to the Nunavut Water Board in November 2005 will be used to observe the efficiency of the non-hazardous waste landfills and the tier II soil disposal facility. Landfill monitoring will be implemented in accordance with the DEW Line Clean-up Environmental Provisions established in the DND/NTI Cooperation Agreement. The Monitoring Plan provides standards for monitoring soil, groundwater, and thermal data in the construction and post-construction phases of the CAM-4 site clean-up. Its detailed monitoring requirements section outlines the functions of each landfill, the types of landfill monitoring stations and their locations (e.g., soil and ground water monitoring wells and thermistors), and the frequency and parameters that will be used to monitor evaluation components.

Environment Canada recommends that the Upper Site Landfill and Lower Site Landfill be included in the CAM-4 A&R Plan. The Monitoring Plan indicates that these sites will receive visual monitoring, collection of soil and ground water samples, and thermal monitoring. The proponent is expected to carry out its monitoring commitments and indicate how it will reclaim these landfills in its A&R Plan. If the proponent intends to categorize these landfills as areas of contaminated soil excavation, it is suggested that they be clearly identified as such in the Plan.



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The Monitoring Plan does not include provisions for monitoring groundwater at the Lower Site Landfill's east lobe. This area is scheduled to receive soil monitoring but there is no indication that ground water wells will be established according to Figure 4.6 of the Monitoring Plan. Environment Canada requested clarification on whether ground water monitoring will occur at this location in its December 2005 Monitoring Plan review letter. It is recommended that the proponent explain why ground water monitoring has not been proposed for this lobe when it is included for the land fill's south lobe (monitoring location MW-19).

The Monitoring Plan does not discuss the monitoring of the landfarm located on site. Environment Canada requests clarification regarding whether the landfarm is still in operation, or if remediation efforts have already been met. Environment Canada recommends that if the landfarm is still operational, the Monitoring Plan be modified to include monitoring of hydrocarbons in the groundwater (total petroleum hydrocarbons (TPH)) and the soil (TPH fractions F1 – F3). Monitoring locations should be indicated on a map. Once remediation objectives are met and the landfarm is closed, further monitoring will not be required.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me if you have any questions or comments with regards to the foregoing at (867) 975-4631 or by email via [david.abernethy@ec.gc.ca](mailto:david.abernethy@ec.gc.ca).

Sincerely,

David W. Abernethy  
Environmental Assessment Technician

CC. Colette Spagnuolo – Environmental Assessment / Contaminated Sites Specialist, Environment Canada, Iqaluit