



**Environment Canada** **Environnement Canada**

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*Via Email*

**RE: NWB5QIK0207 – Defence Construction Canada – FOX-5 DEW Line, Broughton Island – 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 FOX-5 DEW Line site on behalf of Defence Construction Canada to fulfill its Part I licence requirement. This Plan summarizes a brief summary of the final reclamation activities that will be conducted at the DEW-Line clean-up. In particular, reclamation activities are planned for demolition work areas, areas excavated of contaminated soil, the Non-hazardous Waste Landfill, the Tier II Soil Disposal Facility, and the demobilization of project equipment, supplies, and waste.

The A&R Plan makes reference to the project's Monitoring Plan to track the performance of the non-hazardous waste landfill and the tier II soil disposal facility. This Monitoring Plan will be implemented in accordance with the DEW Line Clean-up Environmental Provisions established in the DND/NTI Cooperation Agreement. It provides a standard for the monitoring of soil, groundwater, and thermal data in the DEW Line site's construction and post-construction clean-up phases. A 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.

The A&R Plan does not refer to the reclamation of the project's Main Land Fill. Environment Canada requests clarification as to why this project component was not included in the Plan. The Main Land Fill will be monitored in the same manner as the Tier II Soil Disposal Facility and the Non-hazardous Waste Landfill (i.e., visual observation, soil, groundwater, and thermal monitoring). Its reclamation will consist of the removal of contaminated soil and debris for proper disposal and the installation of a leachate containment system. If the proponent intends to categorize this landfill as an area of contaminated soil excavation, it is suggested that it be clearly identified as such in the A&R Plan.



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The Monitoring Plan does not address 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