

P.O. Box 119 GJOA HAVEN, NU X0B 1J0 Tel: (867) 360-6338

Fax: (867) 360-6369

NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI

File: NWB5QIK0207

Briefing Notes – FOX-5, BROUGHTON ISLAND DEW LINE SITE: NWB5QIK0207

Author – Jamie VanGulck, Ph.D., P.Eng. (VGQ Consulting Inc.) **Date** – January 23, 2007

Information contained in blue text indicates points where questions or follow up is needed.

Documents considered briefing note:

- 1. Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Water Samples at the FOX-5 (BROUGHTON ISLAND) DEW Line Site, Prepared by: Environmental Sciences Group for Defence Construction Canada & UMA Engineering Ltd., July 2003.
 - Plan covers the discharge from the Sewage Disposal Facility as part of the proposed SNP.
 - QAQC water sampling plan- does not have laboratory accreditation forms or a description of laboratory methods. This has been corrected in Revised QA/QC plan.
- 2. NWB5QIK UMA Engineering Ltd. QA/QC and Monitoring Plan FOX-5, Broughton Island, NU review, Environment Canada, September 7, 2004.
 - "Based on the information provided, EC has not major concerns with the monitoring plan or the QA/QC plan at this time."
- Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Effluent Samples at the FOX-5 (BROUGHTON ISLAND) DEW Line Site, Prepared by: Environmental Sciences Group for Defence Construction Canada & UMA Engineering Ltd., Revised September, 2005.
 - Plan covers the discharge from the Sewage Disposal Facility as part of the proposed SNP that is required should the construction camp discontinue the practice of having sewage collected and treated by the Hamlet of Quikqtarjuaq Municipal Services.
 - Revised QAQC water sampling plan has laboratory accreditation forms and a description of laboratory methods.
- 4. 2004 Annual Report: Water Use License NWB5QIK0207, Submitted by UMA Engineering Ltd. on behalf of Defence Construction Canada and the Department of National Defence, April 6, 2005.
 - Water Usage and Wastewater Disposal- water and wastewater quantities not recorded for municipal services were used. Discussions with NWB in fall of 2004 resulted in water and wastewater quantities should be recorded even if municipal services are used.
 - Summary of Work Completed in 2004-
 - Demolition- Garage, two 65,000 US gallon fuel tanks, two billboards, one communications dish and four water tanks. Removal of PCB amended pain and asbestos containing material. PCB materials containerized and placed in PCB storage area and asbestos material wrapped in polyethylene sheeting and placed in non-hazardous waste landfill.
 - Non Hazardous Waste Landfills- Completion of the Station Area and Middle Site NHW Landfills. Landfills began receiving non-hazardous demolition materials in 2004 and will continue use in 2005. Was an engineered designs submitted? Have as-builts and construction records been submitted?
 - Tier II Soil Disposal Facility- Construction of Tier II facility near completion and will
 continue in 2005. This is a lined facility for the placement of Tier II contaminated soil.

Was an engineered designs submitted? Have as-builts and construction records been submitted?

- Contaminated Soil Removal- Started in 2004 including soil from Beach POL area. Modifications from the Project Description in the Beach POL area were required. A berm was specified for use to separate excavation from shoreline; however, contaminated soils which required excavation were located where the berm was to be placed. Instead of a berm, a silt fence with a hydrocarbon sorbent boom placed at the base was used to prevent sediment runoff from entering shoreline. What is source document of *Project Description?*
- Landfarm- Landfarm constructed completed and began receiving hydrocarbon-contaminated soil. About 6,700 m³ were treated at the landfarm at end of 2004 season. Was an engineered designs submitted? Have as-builts and construction records been submitted? Where is treated soil placed?
- Debris Removal- General site clean up initiated; majority of debris removal will occur in 2005.
- o **Spill Incidents** No incidences in 2004.
- 5. NWB3QIK0106 2004 Annual Report review, Environment Canada, July 25, 2005.
 - In EC review of the 2004 Annual Report for Municipality of Qukiqtarjuaq, sewage disposal facility (lagoon) suffers from operational issues and ability to meet water quality requirements. What is impact of DEW line site on Municipal Lagoon operational issues?
- 6. Defence Construction Canada- Monitoring Program FOX-5, Broughton Island, UMA Engineering Ltd., April, 2005.
 - The plan provides a general summary of monitoring to be conducted on site. Generally, the plan is similar to the level of detail reported in the DEW Line site clean up report generated by the Steering Committee.
 - Monitoring at the Main Landfill, Tier II Soil Disposal Facility, and Non-Hazardous Waste Landfills, require location for sampling groundwater, soil, and thermal. Stated that these locations will be determined after construction. What is the status of construction for each structure? Monitoring locations should be provided on a site map.
- 7. Abandonment and Restoration Plan: Water Use License NWB5QIK0207, UMA Engineering Ltd., January 23, 2006.
 - A brief summary of final reclamation activities for demolition work areas, areas excavated of contaminated soil, non-hazardous waste landfill, Tier II soil disposal facility, and demobilization of project equipment, supplies, and waste was provided. No details provided, should this be required and reviewed by NWB?
- 8. NWB5QIK0207 Defence Construction Canada FOX-5 DEW Line, Broughton Island Abandonment and Restoration Plan review, Environment Canada, March 14, 2006.
 - Plan does not refer to reclamation of the project's Main Landfill. Clarification was requested why this was not included in the plan. If this landfill is categorized as an area of contaminated soil excavation, it should be clearly identified as such in the A&R plan.
 - Monitoring plan does not address monitoring of the landfarm on site. Clarification was requested into if the landfarm is still in operation or if remediation efforts have been met. If landfarm is still operational, monitoring plan should be modified to test groundwater and soil and monitoring locations indicated on a map.

Additional Comments/Questions:

- Need to obtain Licence and check for compliance.
- Has 2005 and 2006 Annual Reports been submitted?
- Hard to assess A&R Plan without reviewing previous Annual Reports.
- Has there been any correspondence from NWB on this site?