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NUNAVUT WATER BOARD
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File: NWB5LON0308

Briefing Notes – FOX-2, LONGSTAFF BLUFF DEW LINE SITE: NWB5LON0308

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Date – January 22, 2007

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

Documents considered briefing note:

1. 2003 Annual Report – submitted by UMA Engineering Ltd. on behalf of Defence Construction Canada and the Department of National Defence, March 31, 2004.
 - In 2002, hydrocarbon impacted soils detected in close proximity to the shoreline (Beach POL) were identified. FOX-2 work program developed to excavate and store hydrocarbon impacted soils and store soil for treatment during overall site clean up. Additionally, airstrip and access roads around Beach POL were in poor conditions and repair work was undertaken.
 - In 2003 the following work was undertaken:
 - Excavation and transport of ~1,600 m³ of Type B hydrocarbon impacted soil from beach area to existing bermed tank area lined with HDPE liner.
 - Excavation required dewatering. Water pumped to existing, empty fuel tanks on site, located in northwest corner of tank farm. At end of construction, water tested and discharged on land about 150 m from shoreline and surface watercourses. Water quality measurements for two samples were provided and below discharge criteria proposed in the Monitoring Plan submitted to NWB August 2003.
 - Excavated area backfilled with clean granular material from an adjacent source.
 - Excavation, transport, placement and compaction of suitable granular material from local source to repair airstrip and access road.
 - No further work required until full site investigation scheduled for 2005 and site clean up scheduled for 2009.
 - A sump was constructed for collection of sewage and greywater. Sump covered with granular material at end of field season. No samples collected.
 - About 10 m³ of fresh water from water supply lake used for camp over a 2 week period. [Check with licence for compliance.](#)
 - Four spills occurred in 2003. A summary of each spill and spill report filed with the Spill Report Line were provided.
2. NWB5LON- UMA Engineering Ltd. – 2003 Annual Report, FOX-2, Longstaff Bluff, NU review – Environment Canada, September 7, 2004.
 - Based on information provided, no major concerns with the report.
3. 2003 Annual Report – NWB5LON0308 review – Indian and Northern Affairs, September 7, 2004.
 - INAC stated that the following required requirements were absent:
 - Part B, 1.i.- monthly and annual quantities of fresh water obtained from all sources
 - Part B, 1.ii- monthly and annual quantities or material deposited in solid waste facilities
 - Part B, 1.x- A public consultation/participation report describing consultation with local organizations and the residents of nearby communities
 - Part B, 1.xii- An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence.

- Recommended that Licensee review Part B, Section 1 of the Licence and provide outstanding information to NWB.
4. Annual Report Requirement NWB5LON0308 – NWB, September 29, 2004.
- NWB conditionally approved 2003 Annual Report and requested the items addressed in INAC review to be included as an addendum to the approved 2003 Annual Report. [Revised 2003 Annual Report not provided to reviewer. Was this revised document submitted to the Board?](#)
5. 2004 Annual Report: Water Use License NWB5LON0308 – submitted by UMA Engineering Ltd. on behalf of Defence Construction Canada and the Department of National Defence, March 11, 2005.
- “Due to changes in the work program in 2004, no work occurred at the FOX-2 site. Therefore, there is no data or information to report”
6. NWB5LON0308- 2004 Annual Report review – Indian and Northern Affairs, May 2, 2005.
- Noted that since no work was completed many of the stipulations in the licence do not apply. The following items were outstanding:
 - Part B1.6- summary of all abandonment and restoration work anticipated in the coming year. Summaries should be submitted to the NWB for review.
 - Stated that monitoring plan should have been implemented to assess restoration efforts completed in 2003. Recommended that monitoring data be provided as stipulated in Part B.1.4 of the Licence.
7. 2005 Annual Report: Water Use Licence NWB5LON0308 – submitted by UMA Engineering Ltd. on behalf of Defence Construction Canada and the Department of National Defence, March 27, 2006.
- Detailed site investigation was completed for use in the development of the clean up design. Site clean up is scheduled to commence in 2010.
 - Temporary camp set up on airstrip apron, adjacent to hangar.
 - Site investigation included:
 - Soil, water structural material sampled
 - Inventories of buildings and facilities on site were taken
 - Geophysical, topographical and location surveys performed.
 - Potential sources of granular material, site disposal facilities, storage areas, construction camp, etc. identified
 - Test pits excavated for soil samples or investigations
 - Monitoring wells for water collection were installed in some test pits.
 - Water obtained from Water Supply Lake for domestic use. Monthly quantities for July and August were 27 and 26 m³, respectively.
 - Porta potties used for sewage collection. Sewage pumped into drums and removed from site at end of season.
 - All site investigation equipment removed from site.
 - Laboratory waste containerized and stored in hangar for disposal during site clean up.
 - Excavated test pits backfilled.
 - Non-hazardous camp waste incinerated in empty drum and ash was buried. [Check licence for acceptance.](#)
 - Greywater from camp discharged to a pit and backfilled at end of site investigation. [Check licence for acceptance.](#)
 - No fuel spills reported
 - Clean up plan and engineering design currently being completed. Clean up to start in 2010, with completion date of 2013.

8. 2003 Proposed Monitoring Program – Licence No.: NWB5LON0308- August 18, 2003.
 - Two stations established for monitoring of effluent from sewage disposal facility (if established) and for wastewater discharge. Frequency, analytical requirements, and maximum allowable concentrations provided. [Check licence to see if monitoring plan is in compliance.](#)
9. NWB5LON0308 – Proposed Monitoring and QA/QC Plans review – Indian and Northern Affairs, September 21, 2004.
 - Recommended the following:
 - Provide GPS coordinates of wastewater monitoring points
 - Further explanation of sampling procedure at Station F2-1 recommended for statements provided are contradictory.
 - Recommended to provide additional information with respect to quantity of, sampling procedures, of field blanks with the QA/QC plan.
10. Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Water Samples at the FOX-2 (Longstaff Bluff) Dew Line Site, Prepared by: Environmental Sciences Group for Defence Construction Canada & UMA Engineering LTD., August, 2003.
 - Plan provides a description of sample collection, sample handling, and laboratory analysis.
11. NWB5LON – Proposed Monitoring Plan and QA/QC Plan for Fox-2 DEW Line site at Longstaff Bluff, Nunavut review, Environment Canada, September 23, 2004.
 - The following comments were issued by EC:
 - In the Annual Report, the table provided *Results Excavation Dewatering* levels of total mercury and PCBs, clarification on units requested. [Correspondence to address this has not been received by reviewer.](#)
 - Confirmation requested to ensure that discharged wastewater is onto land and will not enter surface or marine waters directly. [Correspondence to address this has not been received by reviewer.](#)
12. Approval of the Monitoring Plan for the Collection of Samples at the FOX-2 (Longstaff Bluff) DEW Line Site, Required by License NWB5LON0308-Type “B”, Nunavut Water Board, November 15, 2004.
 - Plan approved conditional upon receiving:
 - GPS coordinates of all surface and subsurface sampling points; and
 - Specific components of the visual, soil/water and thermal monitoring program; [The reviewer doesn't understand what this pertains to. Monitoring plan is for water quality only. These items don't apply.](#)
 - Sampling frequency; and
 - Physical and chemical parameters for analyses.[Correspondence to address these points has not been received by reviewer.](#)
13. Approval of the Monitoring Plan for the Collection of Samples at the FOX-2 (Longstaff Bluff) DEW Line Site, Required by License NWB5LON0308-Type “B”, Nunavut Water Board, March 5, 2005.
 - Identical letter to that issued November 15, 2004. [Don't understand why this letter was reissued.](#)

14. Quality Assurance and Quality Control (QA/QC) Plan Nunavut Water Board "B" Type Water License No. NWB5LON FOX-2 (LONGSTAFF BLUFF), Indian and Northern Affairs, June 30, 2005.

- The following comments deficiencies were identified:
 - Certificate of ISO/IEC 17025 accreditation for the chosen laboratories
 - Scope of accreditation, including those specific analyses required
 - Standard Methodology chosen for the analyses required.

15. Quality Assurance and Quality Control (QA/QC) Plan for FOX-2 (LONGSTAFF BLUFF) DEW Line Site, Required by Licence NWB5LON0308, Nunavut Water Board, June 20, 2005.

- Request the licensee to respond to INAC 2005 review of the QA/QC plan.

16. Quality Assurance (QA) and Quality Control (QC) Plan for the Collection of Water Samples at the FOX-2 (Longstaff Bluff) Dew Line Site, Prepared by: Environmental Sciences Group for Defence Construction Canada & UMA Engineering LTD., August, 2003, Revised May 2005, Revised September 2005.

- Revised plan provides amendments to address INAC 2005 review.

Additional Comments/Questions:

- Need to obtain a copy of licence and compare with site operations.
- Was there any NWB correspondence with regards to 2004 Annual Report?
- What is the status of the 2005 Annual Report? Has this been reviewed by NWB? Has this report been submitted for Intervener Comments?