

**Project No: Water Use Licence No.: 1BR-CAP0914 2011 Annual Report**

**Regarding: PIN-2, Cape Young DEW Line Site**

AECOM Canada Ltd. is providing the attached annual report form as per Section B.1 of the above-noted water use license. The report is being submitted on behalf of Defence Construction Canada and the Department of National Defence.

The remediation construction work at PIN-2 was completed in August 2011. Site activities included closure of the Tier II Disposal Facility and Non-Hazardous Waste Landfill, borrow restoration, demolition of the garage, excavation of landfills, excavation of contaminated soil areas and regrade areas. The following is a detailed summary of the work items completed during the 2011 summer construction season:

- All demolition activities were completed.
- All 23 remaining contaminated soil excavations were completed.
- All remaining landfills and buried debris areas requiring excavation and backfilling were completed, including:
  - Airstrip Landfill Lobe C, D, K, L, M, N, O, P, Q, R; Tower Buried Debris Area – Lobe B, C; Buried Debris Area 7; South Borrow Debris Area – Lobe B; Pallet Line West Landfill – Lobe E, F.
- All regrade areas were completed, including:
  - Airstrip Landfill – Lobes A, B, E, F, G, H, I, J; USAF Landfill; Station West Landfill; Buried Debris Area 14 – Lobes A, B, C; Tower Buried Debris Area – Lobes A, D; Pallet Line West Landfill – Lobe I; Buried Debris Area 2.
- The Non-Hazardous Waste Landfill (NWLF) was closed. Construction activities at the NWLF consisted primarily of waste placement, including demolition waste from the garage, and hangar, debris from buried debris excavation and site debris. Prior to the start of the 2011 construction season, it was discovered that two 65,000 gallon tanks had been categorized as non-hazardous waste and placed in the landfill in 2010. However, the tanks had been originally categorized as hazardous waste due to the presence of leachable lead concentrations which exceeded the DLCU Protocol criteria of 5 mg/L. At the start of the 2011 season, approximately 1.1 to 1.5 m of compacted waste and Type 6 granular material had been placed over top of the tank pieces, and it was not feasible to remove the material. To address the issue, the landfill surface was redesigned and consisted of the incorporation of a liner system using an oil resistant reinforced polyethylene geomembrane. The liner system was protected by providing layers of non-woven geotextile and Type 5 granular fill above and below the liner. The closure activities at the NWLF included the following:
  - Placement of remaining non-hazardous site waste, which was crushed using a D8 dozer during placement of layers not more than 0.5 m thick. Type 6 granular materials was placed to fill voids in waste layers and to provide temporary cover between waste lifts. Timber poles were disposed of within the landfill along the north side. The ends of the poles treated with creosote were cut off and wrapped in 6 mm polyethylene. Double-bagged asbestos from demolition activities was consolidated within an area in the northeast corner.
  - Final grading of Type 2 granular fill berms.
  - Placement of a liner, geotextile and Type 5 granular fill bedding layers.
  - Placement, compaction and final grading of the Type 2 granular fill cap.
  - Placement and final grading of the Type 1 Granular Fill on the exterior side slopes of the facility.



- The final lift of cover material was placed on July 30, 2011.
- The Tier II Disposal Facility was closed. The following work was completed in 2011:
  - Placement of the remaining Tier II contaminated soil from site areas. The contaminated soils were placed in lifts of approximately 0.3 m and the soils were compacted with multiple passes of the dozer.
  - Placement of Tier II contaminated soil from the PIN-B Intermediate DEW Line site. The final lift of Tier II contaminated soil was placed on July 15, 2011.
  - Placement of Type 6 intermediate fill layer.
  - Installation of the upper liner including Type 5 granular fill embedment layers and geotextile.
  - Placement, compaction and final grading of the Type 2 granular fill cap.
  - Placement and final grading of the Type 1 granular fill on the exterior side slopes of the facility. The final lift of Type 1 granular material cover was placed on August 1, 2011.
  - Installation of two thermistors into the facility berms, and two thermistors into the facility centre.
  - Construction was completed on August 2, 2011 after the final data-logger for the thermistors was installed.
- Baseline monitoring was carried out at the landfills which remain on-site.

No further construction work is required at this site. However, removal of the PCB material currently in temporary storage remains and will be completed once the contract has been awarded.

**Community Consultations:** The results of the community meetings held by DCC were submitted with the Project Description. The contractor typically holds a project start up meeting prior to each season.

**Spill Incidences:** None.

**Monitoring Reports:** See attached.



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