

#### AECOM

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April 21, 2009 Project Number: 0171-146-01-08

Phyllis Beaulieu Manager of Licensing Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0

Dear Phyllis:

#### Re: Modification to Water Use License 1BR-QIK0712: FOX-5, Qikiqtarjuaq DEW Line Site

AECOM is submitting the following proposed modifications as per Section H.1 of the above-noted license and is based on the discussion between the Nunavut Water Board (NWB) and Douglas Craig of Defence Construction Canada (DCC) on February 17, 2009. The notification of the modifications is being submitted on behalf of DCC and the Department of National Defence (DND).

The following modifications are being proposed as additional clean up work to be completed as part of the landfill monitoring program at the former FOX-5, Qikiqtarjuaq DEW Line site. The additional remedial work at FOX-5 includes the following, as described by work area:

#### Beach Area - Clamming Raft/Barge

- Dismantling of the clam-diving platform/barge structure, which consists primarily of four former DEW Line fuel tanks, and cutting of the tanks into suitable sized components to facilitate disposal.
- Loading, transport and disposal of the clam diving platform/barge to the Middle Site Non-Hazardous Waste Landfill, or containerization of the structure components if leachability testing completed by July 20, 2009 indicates the paint on the tanks to be hazardous.

# Airstrip Landfill - West

- Collection and disposal of surface and submerged non-hazardous debris along the toe of the Airstrip Landfill – West.
- Full excavation of the landfill lobe including physical separation of soil and debris.
- Transport and disposal of excavated non-hazardous soils and debris to the Middle Site Non-Hazardous Waste Landfill.
- Containerization and secure storage of any Tier II Contaminated Soil and hazardous soil and debris identified during this portion of the work.
- Backfilling of excavated area with local borrow material, including rip-rap, to match surrounding terrain.

#### Reservoir Road Debris Area

 Collection and disposal of surface and partially buried non-hazardous debris to the Middle Site Non-Hazardous Waste Landfill.

- Containerization and secure storage of any hazardous debris identified during this portion of the work.
- Reshaping areas where partially buried debris was removed.

# Community Borrow Buried Debris Area

- Removal and disposal of surface debris and partially buried non-hazardous debris to the Middle Site Non-Hazardous Waste Landfill.
- Transport and disposal of excavated non-hazardous debris to the Middle Site Non-Hazardous Waste Landfill.
- Containerization and secure storage of any Tier II Contaminated Soil or hazardous soil and debris identified during this portion of the work.
- Facilitate soil testing in stained areas or in areas where hazardous debris is found.

### Main Landfill

- Placement of rock rip-rap material to provide a 10 to 15 metre extension to the existing rock berm on the southeast side of the Main Landfill.
- Relocation of approximately 5 m of rock rip-rap materials to close the channel along the northwest side of the Main Landfill and open the channel slightly further west.

#### Station Non-Hazardous Waste Landfill

 Regrading the portion of the landfill surface showing settlement with additional Type 2 Granular Fill.

# Middle Site Non-Hazardous Waste Landfill

- Excavation of the existing landfill cap to a depth of 0.6 m.
- Placement and compaction of perimeter berms for the new landfill cell.
- Placement and compaction of waste in the cell.
- Supply of additional borrow material, placement and compaction of intermediate cover over the waste and placement and compaction of a final cap.

We trust the information provided is sufficient to meet the requirements of Section H.1 of the water use license. Please feel free to contact the undersigned if you have any questions or comments.

Sincerely,

**AECOM Canada Ltd.** 

Eva Schulz, P.Ag.

Eva.Schulz@aecom.com

Encl. Site Location Plan, Site Photos

cc: Douglas Craig, DCC



Photograph 1. Clamming raft/barge - Beach Area ↑



Photograph 2. Debris in water - Airstrip Landfill ↑

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Photograph 3. Exposed landfill lobe - Airstrip Landfill ↑



Photograph 4. Exposed landfill lobe - Airstrip Landfill ↑



Photograph 5. Surface debris area - Reservoir Road ↑



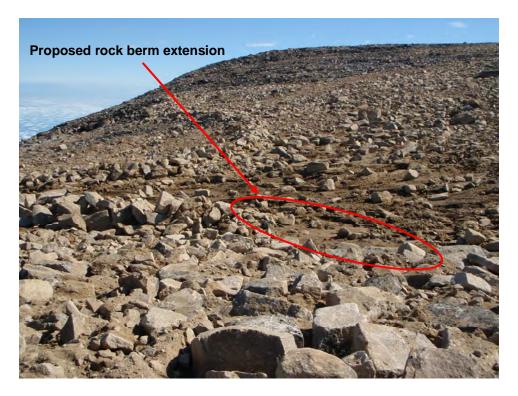
Photograph 6. Partially buried debris - Reservoir Road ↑



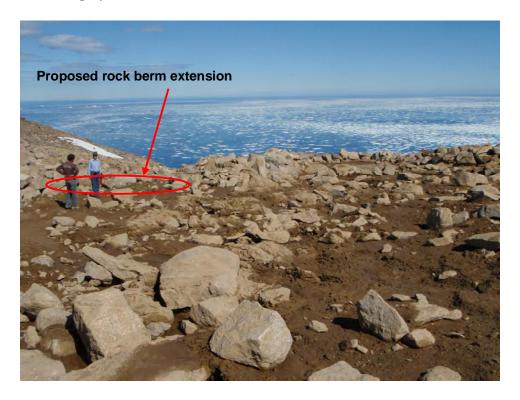
Photograph 7. Partially buried debris area - Community Borrow ↑



Photograph 8. Partially buried debris - Reservoir Road ↑



Photograph 9. Water diversion work, south side - Main Landfill  $\uparrow$ 



Photograph 10. Water diversion work, south side - Main Landfill  $\uparrow$ 

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Photograph 11. Water diversion work, north side - Main Landfill 🛧



Photograph 12. Settlement pockets - Station Area Non-Hazardous Landfill ↑

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