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#### **RECEIVED**

By Licensing Administrative Assistant at 3:53 pm, Jul 22, 2011

July 21, 2011

Sean Joseph Technical Advisor Nunavut Water Board P.O. Box 119 Gjoa Haven, NU

Dear Sean:

Project No: Water Use Licence No.: 1BR-CAP0914 2009 & 2010 Annual Reports

Regarding: Comments Dated June 17, 2011

AECOM Canada Ltd. on behalf of Defence Construction Canada and the Department of National Defence, is providing the following information in response to the comments received on June 17, 2011 with regards to the 2010 Annual Report for 1BR-BYR0712.

- 1. The Non-Hazardous Waste Landfill and the Tier II Disposal Facility were not surveyed at the end of the 2010 construction season; therefore, the volume of material placed within each of the facilities in 2010 is not known at this time. However, the design of the facilities was based on the known volumes of demolition waste and debris, along with a contingency volume for materials to be excavated from landfills and buried debris areas. The design volumes for these facilities are 4,800 m³ for the Non-Hazardous Waste Landfill and 3,300 m³ for the Tier II Disposal Facility. Both of these facilities will be surveyed in 2011 to confirm volumes and also to collect information for the preparation of as-built drawings.
- As-built drawings for the permanent facilities (Non-Hazardous Waste Landfill and Tier II
  Disposal Facility) are prepared after the final cover has been placed and closure is complete.
  At this time, as-built drawings are not available, but will be provided upon closure of the
  facilities and completion of the remediation work at the site.
- Please see attached presentation, which is used each year prior to the start up of the site work.



We trust the information provided is sufficient. Please feel free to contact the undersigned, or Tamara Van Dyck with Defence Construction Canada at 613-995-9741, if you have any additional questions or comments.

Sincerely,

**AECOM Canada Ltd.** 

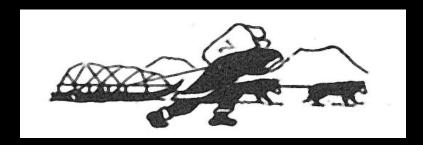
Eva Schulz, P.Ag.

Senior Environmental Scientist

Eva.Schulz@aecom.com

Encl. Pre-Season Presentation cc: Tamara Van Dyck, DCC

#### Cape Young (PIN2) Cleanup



E. Gruben's Transport Ltd. Kugluktuk Community Presentation

August 10, 2009

# Cape Young PIN-2



## Key Personnel / Management

- Eric Andert, Contaminated Sites Project Officer, Defense Construction Canada (DCC)
- Stewart Dafoe, Contracts Manager, DCC
- Steve Poaps, Project Manager, DCC
- Roland Merkosky, Project Manager, Geotech, AECOM
- Katherine White, Project Manager, Enviro Sampling, ESG
- Russell Newmark, Project Manager, EGT
- Darren Klippenstein, Site Superintendent, EGT
- Kurt Kure, Hazmat Specialist, EGT
- Doug Saunders / Roger Gruben, Logistics/Employment, EGT

#### Cape Young PIN-2 History

- Located at the western edge of Nunavut on the coast along Dolphin and Union Strait.
- Site originally developed in 1957 by the United States and Canadian Defense Departments as part of the DEW Line
- Abandoned in 1994 and is known to have hazardous wastes including asbestos, PCB's and hydrocarbons
- Site has been used very little since and it is anticipated that cleanup activities will have an overall positive effect on the value of the land.

## **Project Organization**

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DCC

AECOM/ESG(project design/supervision)

E. Gruben's Transport Ltd.

Kikiak and other Subcontractors
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# **Project Organization (cont)**

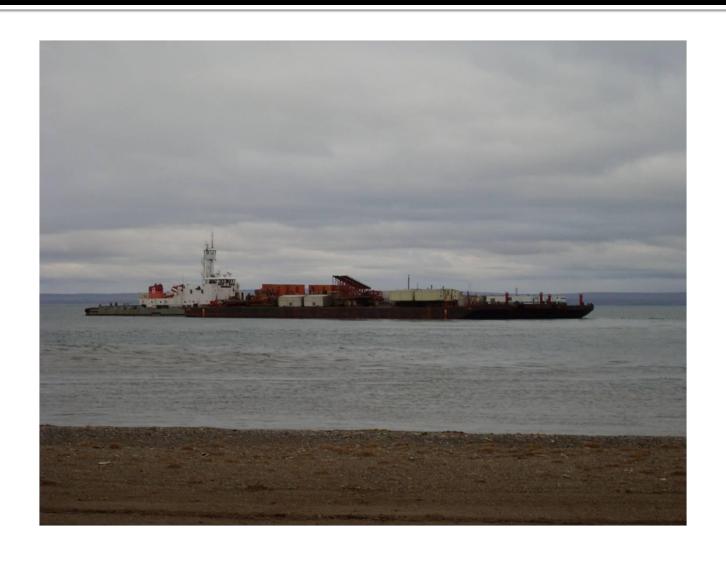
#### E. Gruben's Transport Ltd. (General Contractor)

- Kikiak Contracting Ltd. Prime subcontractor, supply of equipment, personnel, expediting, wildlife monitors and logistics services
- Inukshuk Geomatics Inc / Sakku Surveying
- Frontier Medical / Peter Expediting EMT's / Medics
- Kitikmeot Caters Ltd. Catering and Camp Services
- NTCL Marine Transportation; Barge mobilization and demobilization
- Air Tindi / Aqsaqniq Air Air Transportation
- Kure Engineering Solutions
   – hydrocarbon soil remediation, groundwater treatment, hazardous material handling

#### Schedule/Duration

- Mobilization in August 2009
- 2009 Work Season Aug 20 to Sept 30
- 2010 Work Season June 10 to Sept 30
- 2011 Work Season June 10 to August 1:
   Completion & Demob via NTCL in August 2011

## Mobilization



#### 2009 Mobilization

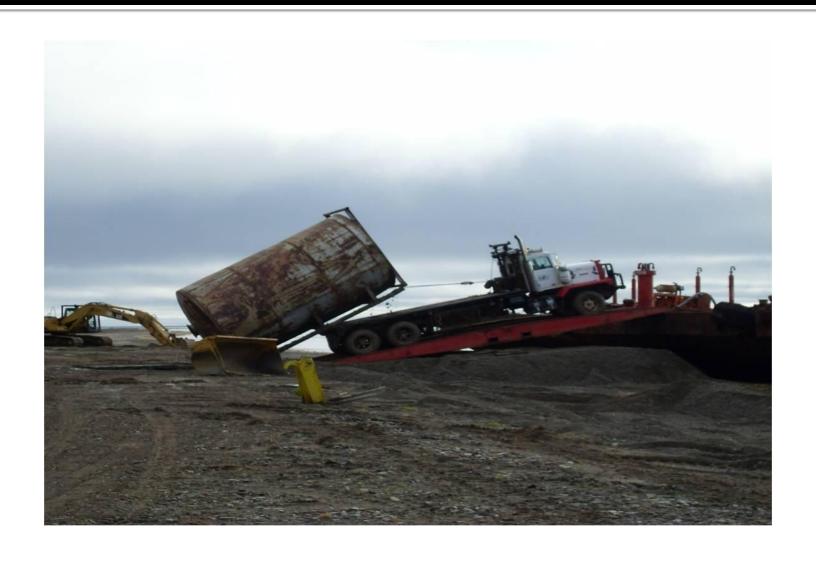
- Initial start-up crew mobilized by Twin Otter in mid August
- Mobilization of equipment, materials, fuel and camp to site by NTCL mid August
- Camp setup
- Road and airstrip repairs

NTCL Barge similar to the one to be used at Cape Young Landing

August 2009



# Unloading Barges/Camp Setup



#### Barge Loading/ Unloading

Building being unloaded with heavy equipment



# Camp Set Up At Cape Young

A similar camp will be set up after it is mobilized to site at Cape Young



#### **Demolition of Structures**

 There are a number of structures that will be demolished which will begin with a Hazardous Material Removal and Containerization in 2009

#### **Communication Dishes**



## Garage and Warehouse



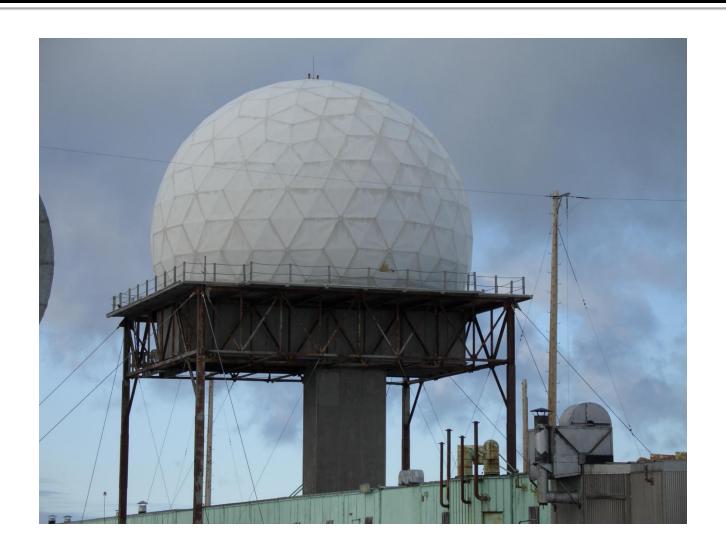
## **Module Train and Dome**



## **Module Train and Dome**



## The Dome



## **Monitoring Wells**

- Monitoring wells will be drilled and set up
- Monuments will be established for survey

# Setting Up Monitoring Wells



# Soil Sampling and Drilling



#### **HAZARDOUS MATERIALS**



#### **Demolition Items**

The structures will be demolished during the 2010 Season including the Module Train, Radome, Garage, Warehouse, Fuel Tanks Communication Dishes, POL pump house, Utility poles, POL/Sewage lines, Water Tanks and other site structures and items

# Hazardous Material Removal Prior to Demolition of Structures

 All possible hazardous materials are removed from structural components prior to demolition including PCB Amended Paint and Asbestos.

#### **PCB Amended Painted Material**





#### Asbestos Work

Removing asbestos board from building



#### Tank Demolition

There are a number of tanks on site that will be demolished



#### **Tank Demolition**

Tanks to be removed



## Water Tanks



#### **Tank Demolition**

Loader and Telehandler taking tank pieces apart



#### **Demolition Features**

- Emphasis on Training and Safety
- WCB approval
- Pre-demolition asbestos removal

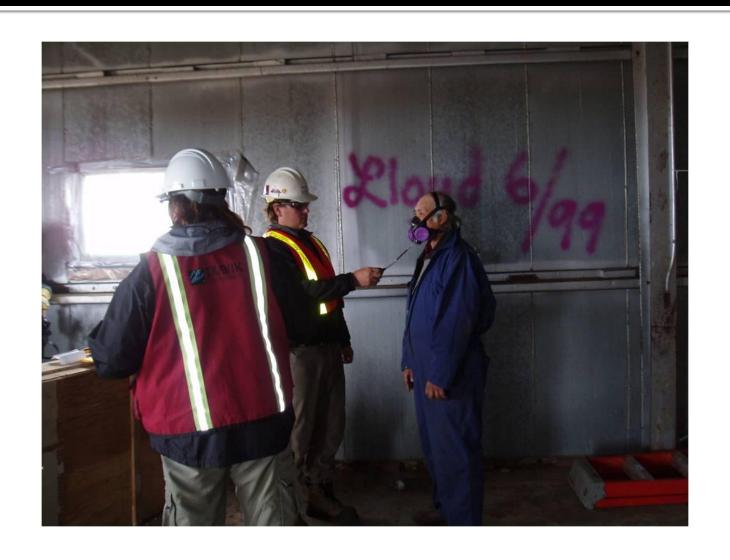
 PCB Amended Paints (PAP) materials to be removed and containerized

#### Tank Demolition Safety Gear

Laborer with fall protection on top of tank during demolition activities



## Fit Testing Respiratory Equipment



# Housekeeping is Hugely Important



# Wrapping Asbestos Coated Pipes



### Work to be Completed in 2009

- Mobilization of Camp and Equipment
- Camp setup
- Airstrip and road repairs
- Surveying and Layout of Site
- Installation of Monuments
- Install monitoring wells
- Develop Borrow Sources
- Construct Non Hazardous Landfill (NHL)
- Some Characterization for Hazardous Waste for Removal and containerization
- Start Hazardous Material removal from Module Train.

## Work to be Completed in 2010

- Mobilize to site and re-open camp
- Construct Tier II Disposal Facility and place liners
- Remove hazardous material and demolish structures.
- Contaminated soil excavations
- Buried landfill excavations
- Re-grade and cover landfills
- Barrel collection, characterization, cleaning and disposal
- Transport and disposal of non-hazardous materials at the NHL
- Transport and disposal of Tier II soils at Tier II disposal facility

## Work to be completed in 2011

- Finish remaining soil excavations
- Finish re-grading of landfills
- Final disposal of non-hazardous materials in NHL
- Final disposal of Tier II soils in Tier II disposal facility
- Closure of NHL and Tier II disposal facility
- Final cleanup and demobilization offsite

# Barrel Collection, Characterization, Cleaning and Disposal

- Any barrels on site will be inspected, sampled by ESG, characterized, and bulked during the 2010 Season
- The barrels will be processed, washed, crushed and disposed of in the Non-Hazardous Landfill.

# **Washing Barrels**



#### Barge Departure

NTCL departing site with full load of demolition materials headed for Tuktoyaktuk



#### Transport of Type 2 Soil

Transport of Type 2 for Landfill grading



#### Hydrocarbon Soil Testing

Grid for testing of hydrocarbon soils



## Health, Safety and Environment

- DCC and EGT place a great emphasis on workplace safety
- Remote isolated site. Medic on site.
- Work can be dangerous. Materials encountered could be hazardous
- Worker Orientations and Training. Basic training will include WHMIS, TDG, First Aid. EGT putting forward proposals for other training including hazardous materials handling course (HAZWOPER)

#### Health, Safety and Environment (cont)

- Site specific HSE, Spill Response, Wildlife, Medical Response, Fire Response plans in place
- Governed by Land Use Permit and Water License
- Drugs and alcohol prohibited
- No hunting, fishing or recreational ATV use

#### Landfill work

Landfill work will commence during the 2010 Season



#### Landfills

- Landfills to be stabilized with granular fill and erosion protection
- A number of areas will be excavated and debris will be removed, sorted and processed.

#### Landfills (Continued)

- Closure and re-grading of 16 existing landfills and buried debris areas including Airstrip landfill, USAF landfill and Station landfills;
- Complete excavation of 5 landfill lobes and buried debris areas including airstrip landfill, debris are 7 and pallet line west;

## **Buried Debris**



# **Soil Testing**



## **Hydrocarbon Soil Excavation**



## **Inuit Participation Principles**

- All work to be completed in accordance with the Nunavut Land Claims Agreement and other agreements between the Inuit and Government
- EGT is committed to maximizing Inuit employment, training and business opportunities for participation on this Project
- EGT will undertake Inuit training
- EGT will offer first preference for employment opportunities to residents of Kugluktuk;
- Opportunities for employment will then be offered to residents of other Kitikmeot communities

### **Employment Opportunities**

- Demolition / Labor- 12 to 16 jobs per shift (2 week shifts) -- EGT/Kikiak
- Heavy Equipment 6 to 8 jobs per shift --- EGT/Kikiak
- Truck Drivers 6 to 8 jobs per shift --- EGT/Kikiak
- Catering and camp staff --- 3 to 4 jobs per shift ---Kitikmeot Catering Ltd. 780-410-1000 (Paul Sine)
- Wildlife monitors --- 2 or more jobs per shift -- Kugluktuk, NU wildlife monitors will be sourced through
   Kikiak