EXECUTIVE SUMMARY

Public Works and Government Services Canada (PWGSC) Environmental Services, on behalf of Indian and Northern Affairs Canada (INAC) is planning to implement a remedial action plan for the former CAM-D Intermediate Distant Early Warning (DEW) Line Site (CAM-D DEW Line site) at Simpson Lake, Nunavut. As required under the *Nunavut Land Claim Agreement* (NLCA) and the *Canadian Environmental Assessment Act* (CEAA), the activities proposed for the CAM-D DEW Line site remediation must undergo an environmental screening.

The CAM-D DEW Line Site remedial action plan will involve excavating, sorting and containerizing 371 m^3 of contaminated soil for shipment off site to a licensed disposal facility. Approximately 3,074 m^3 of hydrocarbon impacted soil will be treated on site. Hydrocarbon impacted soil below INAC criteria, but with elevated F1 and F2 fraction hydrocarbons, BTEX and/or PAHs will be remediated in-situ by aerating through excavating in place and adding amendments to accelerate the bioremediation process. Hydrocarbon impacted soils below INAC criteria, but showing elevated F3 and/or F4 fraction hydrocarbons, will preferably be used as intermediate fill for the new non-hazardous waste landfill to be constructed on site.

Approximately 94 m^3 of hazardous materials, such as lead batteries, lead and PCB-contaminated paint materials, will be dismantled and/or collected, containerized and shipped off site for disposal as per INAC protocol for disposing of hazardous materials. Asbestos will be properly abated, according to territorial and federal regulations and guidelines, and placed in sealed, properly labeled containers and disposed in the new on-site landfill. POL fluids will be incinerated.

Non-hazardous site debris will be collected and disposed in the new engineered landfill to be constructed on site. All remaining structures on the site will be demolished and debris disposed in the new landfill.

Associated activities for the project consist of establishing a work camp and upgrading some site infrastructure to facilitate the remediation activities. The airstrip and some of the existing roads will require repair and upgrading to allow equipment and vehicle movement; the road between the main station area and the airstrip and Murchison River borrow source area will require repair and upgrading. A temporary road will be constructed between the existing main dump and the new landfill site to be constructed at the main station area to facilitate transport of material from the old main dump to the new landfill. A non-hazardous waste landfill will be constructed near the main station area and a temporary waste handling facility will be established.

The CAM-D DEW Line site remediation is scheduled to occur during the summer of 2009, with equipment and supply transport to the site occurring in spring 2009 and demobilization from the site occurring in spring 2010.

The remediation activities at the CAM-D DEW Line site will interact with the environment through vehicle and machinery emissions, waste disposal, surface disturbance and employing area residents. There is also the potential for spills of fuel or hazardous materials. The activities will be carried out following standard good operating practices for northern Canada, with spill prevention practices and contingency plans in place. The environmental effects of the activities are assessed as being of low

hazardous and non-hazardous materials on the site. The results of this program provided the information for preparing a comprehensive remedial action plan for the site. Additional sampling was undertaken by UMA Engineering Ltd. in September 2007.

4.3 Site Description

The site consists of the main station area, SRR station, airstrip area, Simpson Lake, Freshwater Lake, plumbers dump area, and borrow source areas (Figure 4.0 in Appendix A). Detailed drawings showing the location of each area and types of contaminates and wastes found at each located are provided in Appendix A.

The main station is situated in the Ross Hills at an elevation of 370 m above sea level. Terrain around the site consists of rolling grassy hills cut by rock outcrops (Indian and Northern Affairs Canada 2005). The site is landlocked and inaccessible by sea-lift, so the transportation of heavy equipment to the site will have to be completed by CAT Train in the winter.

4.3.1 Main Station Area

At the main station area, the only remaining structures left in place on the site are a garage, one POL tank and fuel pump shed, and warehouse foundation. These remaining structures have been left standing on steep gravel mounds because much of the gravel was removed from the site to construct the SRR station. Other infrastructure that remained on the site has been demolished and partially buried. Refer to Figures 5.0 to 5.11 in Appendix A for more detail.

The Doppler antenna has fallen down and is lying just off the southwest corner of the module train pad. Located to the northeast of the garage are several electrical cabinets with most of their components removed.

To the southeast of the garage are some abandoned vehicles and several large stacks of empty barrels (about 5000 in total). The pallet storage line is located northeast of the main station area. The storage line contains approximately 1000 barrels most of which are empty and stacked, although some full and partially full barrels, associated with dark staining were noted.

Five dump or debris areas have been identified at the main station area:

- The Main Dump is located north of the station within a shallow depression in the bedrock. Debris within this dump includes heavy equipment, domestic waste and approximately 2000 barrels;
- The Barrel Dump is located north of the station and consists of two distinct piles of barrels. Approximately 245 barrels were identified in this area; six of them were left open and upright and contain some liquid;
- The Vehicle and Debris Dump is located southeast of the station and contains various pieces of heavy equipment and vehicles as well as 10 empty barrels, assorted metal debris and a battery;
- The Large Barrel Dump, which is located east of the station, contains approximately 5100 empty barrels. Of the barrels inspected here in 1994, all were either empty or contained a small volume of rusty water; and

4.3.6 Borrow Source Areas

There are various potential borrow sources for the project, including at the main station area and approximately 3 km south of the main station area at Murchison River (Figure 4.0 in Appendix A). Debris in the Murchison River location consists of caches of empty barrels, approximately 200 barrels in total.

4.4 Objectives of the Remedial Action Plan

Remediation options were identified and evaluated for each waste stream, and recommendations made for the preferred approach for handling each waste stream (Table 4-1). The remediation options were presented at community meetings, led by PWGSC and INAC, in Taloyoak, Gjoa Haven and Kugaaruk to obtain input on the proposed options.

The remedial action plan was designed to meet the requirements and standard environmental management practices of INAC's Abandoned Military Site Remediation Protocol (refer to Appendix B), as well as its Contaminated Sites Management Policy (INAC 2002). The objectives of the remedial action plan are to restore the site to as near pre-disturbance conditions as possible while minimizing the potential for contaminants to enter the ecosystem, remove physical hazards that pose a risk to human health and safety, and carry out a cost-effective remediation program.

Table 4-1: Environmental and Human Health Concerns Identified at the CAM-D DEW Line Site

Environmental/Health Concern	Site Assessment Findings	Recommended Remediation Method
Contaminated Soil		
PCB Contaminated Soil	3 m^3 of soil with PCB concentrations (co-contaminated with Tier II heavy metals) was found at the outfall area of the module train building location. The concentrations exceeded Tier I INAC Abandoned Military Site Remediation Protocol criteria. However, PCB concentrations did not exceed Tier II criteria.	Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.
Metals Contaminated Soil	42 m^3 of soil with metal concentrations of As, Cd and Zn (some of which was co-contaminated with PCB contaminated soil), exceeding Tier II INAC Abandoned Military Site Remediation Protocol criteria, was found at electrical cabinet area, airstrip, plumbers dump and Simpson Lake.	Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.
Hydrocarbon Contaminated Soil	Approximately 326m^3 of hydrocarbon contaminated soil, exceeding INAC Abandoned Military Site Remediation Protocol for PHC soil, was found at POL tank area and Pallet Line area.	Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.
Hydrocarbon Impacted Soil	3,074 m^3 of soil with elevated PHC and PAH concentrations were found at the garage, burn pit, POL tank, Pallet Line and Portable Fuel Tank areas. While this soil is not classified as contaminated under the INAC protocol and does not require remediation, INAC as a measure of environmental stewardship, will address these soils during the remediation program.	PHC impacted soil below INAC criteria, but exhibiting elevated F1 and F2 fraction hydrocarbons, BTEX and/or PAHs, will be remediated in-situ by aerating through excavating in place and adding amendments to accelerate the bioremediation process. PHC impacted soil below INAC

Table 4-1: Environmental and Human Health Concerns Identified at the CAM-D DEW Line Site

Environmental/Health Concern	Site Assessment Findings	Recommended Remediation Method
		criteria, but exhibiting elevated F3 and/or F4 fraction hydrocarbons, will preferentially be used as intermediate fill for the non-hazardous waste landfill.
Unknown Tier I soils	240 m^3	Collect and dispose in onsite landfill.
Unknown Tier II soils	319 m^3	Collect and dispose offsite.
Hazardous Materials		
Hazardous Materials	Approximately 60 m^3 of hazardous materials (i.e., lead acid batteries, lead and PCB contaminated paint materials, and asbestos). This includes 2 m^3 of compressed gas cylinders. There is also a potential 56 m^3 of hazardous materials within the buried waste at the Main Station Area.[1]	Containerize and dispose all hazardous materials (except for asbestos containing materials and POL fluids) according to INAC protocol. Unearth buried hazardous material near the warehouse, and sort and dispose accordingly.
Asbestos	Asbestos containing materials were limited to the Main Station Area, both in the remaining structures and buried debris piles.	Asbestos will be properly abated, according to federal and territorial regulations and guidelines, and placed in sealed, airtight container clearly labeled "ASBESTOS." The containers will be placed in the engineered on-site landfill.
PCB/Lead Contaminated Paint Items	Approximately 40 m^3 of PCB/lead contaminated paint materials were inventoried on the site. There is also a potential 53 m^3 of PCB/lead contaminated paint materials within the buried waste at the Main Station Area.	Dismantle contaminated paint items and ship off site to a licensed disposal facility.
POL Fluids	Approximately 16,400 L of POL fluids were found on the site.	Incinerate POL fluids that meet incineration criteria (< 2 ppm PCB and Cd,<10 ppm Cr, < 100 ppm lead and < 1,000 ppm Cl). Treat as hazardous waste all fluids not meeting the criteria.
Non-hazardous Materials		
Non-hazardous Site Debris	Approximately 1,173 m^3 of non-hazardous debris (i.e., heavy equipment, barrels, scrap construction materials, steel, concrete and buried debris from previous demolition activities) was inventoried around the site. Approximately 428 m^3 of this material is partially buried at the Main Station Area, while the remaining 745 m^3 is not buried.	Consolidate and dispose of in an on site non-hazardous waste landfill. Handle barrels according to DND protocol.
Remaining Site Structures	Remaining structures include the garage, warehouse foundation, POL tank and pump shed.	Demolish all existing buildings and infrastructure to their foundations, except for the garage foundation which should be removed for safety reasons and to access the PHC contaminated soils underneath. Dispose of all non-hazardous materials in the on-site non-hazardous waste landfill.

[1] The compressed gas cylinders will be vented and disposed of as non-hazardous waste. Asbestos (known and buried) will be bagged and disposed of in a landfill as non-hazardous waste, decreasing the numbers to 41 m^3 of hazardous materials and 53 m^3 of buried hazardous materials.

4.5 Scope of Work

The scope of work to be carried out at the CAM-D DEW Line Site for the undertaking of the remedial action plan is described in this section.

4.5.1 Planning and Design

A detailed review of all previous site information was conducted to determine any information gaps and identify additional site information required for preparing a remediation specification. Applicable previous site information includes the assessment completed in 1994 by Environmental Sciences Group of Royal Roads Military College (ESG 1994) and the Earth Tech (2006) report on its 2006 Phase III site investigation and waste audit.

Area communities have been consulted on the remedial action plan. A draft copy of the plan was provided to NTI, and the communities of Taloyoak, Gjoa Haven and Kugaruuk for review and comment. INAC and PWGSC project managers hosted open community meetings in all three communities in April 2006 to meet with community members to gather their comments and concerns regarding site remediation and gain a better understanding of their current use of the facilities. Notes from the community meetings are provided in Appendix C.

The community consultation component of the project will continue for the duration of the project to ensure community members are kept informed about the activities, results and plans regarding the site and are active participants in the remedial action plan development.

When the detailed scope of work has been finalized, permit applications will be prepared. The final component of the planning phase will be preparing a tender document for the supply of a camp, heavy machinery and labourers for support services during all site activities.

4.5.2 Field Program

The field program will involve preparing the site for the planned remediation work, including building a temporary work camp and related facilities, and repairing and upgrading the airstrip and select site roads, and conducting the planned remediation activities.

A number of human health and environmental concerns were identified at the CAM-D DEW Line Site during the Earth Tech investigation and waste audit conducted in 2005. Table 4-1 provides a summary of the concerns along with details on the site assessment findings and the recommended remediation methods for addressing each concern. Specific concerns to be addressed during the remediation program include:

- 930 m^3 of contaminated soil;
- 3,074 m^3 of hydrocarbon impacted soil with elevated petroleum hydrocarbons (PHC) and polycyclic aromatic (PAH) concentrations;
- approximately 116 m^3 of hazardous materials (i.e., lead acid batteries, lead and PCB contaminated paint materials, and asbestos);

- approximately 93 m^3 of PCB/lead contaminated paint materials;
- approximately 16,400 L of POL fluids;
- asbestos containing materials;
- 1,173 m^3 of non-hazardous debris; and
- removal of remaining site structures.

4.6 Project Activities

The proposed activities at the CAM-D DEW Line Site include:

- equipment, materials and personnel for the project will be moved to the site by Cat Train and/or air;
- the airstrip, select existing roads and access to the Murchison River borrow source will be upgraded to facilitate vehicle and equipment access;
- a temporary work camp with associated facilities (*i.e.,* water supply, sewage disposal and utilities) will be established for the work crew;
- an engineered non-hazardous waste landfill and a temporary waste handling facility will be constructed;
- a temporary road will be constructed between the main dump area and new landfill at the main station area to facilitate hauling of debris to the waste handling facility;
- hazardous materials will be collected, sorted, containerized and shipped off site for disposal at a licensed disposal facility;
- hydrocarbon impacted soil and POL fluids that meet INAC criteria will be remediated on site (those not meeting the criteria will be treated as hazardous waste);
- non-hazardous materials (including materials from the existing buildings that will be demolished) will be collected and disposed in the new on-site landfill;
- at the end of the clean-up, project facilities will be removed and area reclaimed (i.e., the work camp and associated facilities, temporary road between the main dump and new landfill, and the waste handling facility will be removed and areas reclaimed); and
- all project equipment and materials, as well as the hazardous materials containerized for offsite disposal will be moved from the site by Cat Train.

4.6.1 Remediation Activities

The remediation measures outlined in Table 4-2 are the activities that will be undertaken for the project.

Table 4-2: CAM-D DEW Line Site Remediation Activities

Material to be Addressed	Remediation Activities
Contaminated Soil	
PCB Contaminated Soil	• Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.
Metals Contaminated Soil	• Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.
Hydrocarbon Contaminated Soil	• Excavate contaminated soil, containerize and ship off site to a licensed disposal facility.

The fluids handling area of the facility will be lined with an engineered clay/synthetic liner to prevent the migration of contaminants resulting from any accidental spills, and liner will have fill cover to protect the liner integrity. The area will also be bermed.

At the end of the remediation project, the facility will be decommissioned and the ground beneath the facility sampled for confirmatory purposes.

4.6.7 Project Schedule

The proposed schedule for the project is presented in Table 4-3 and based on the assumption that the work will be tendered in Fall 2007.

Table 4-3: Proposed Project Schedule

Activity/Milestone	Date
Community Meetings	Spring 2006
Permitting	Winter 2007
Bidders Site Meeting	Summer 2007
Contract Tender	Winter 2007
Contract Award	Spring 2008
Sea-lift Equipment Mobilization to Nunavut Community	Summer 2008
Mobilization to Site by Cat Train	Spring 2009
Camp Construction	Summer 2009
Road Improvement and Construction	Summer 2009
Engineered Non-hazardous Landfill Construction	Summer 2009
Removal of Lead and PCB-based Paint Items	Summer 2009
Removal of All Remaining Hazardous Materials	Summer 2009
Demolition of Structures and Placement in New Landfill	Summer 2009
Collection and Off-site Disposal of Metal, PCB and Hydrocarbon Contaminated Soils	Summer 2009
Demobilization from Site by Cat Train	Spring 2010
Sea-lift Equipment Demobilization from Nunavut Community	Spring 2010

4.6.8 Personnel

The site restoration team will include the remediation contractor, a site project manager, an environmental expert, and PWGSC and INAC representatives periodically. Based on previous experience with DEW Line clean-up projects, the personnel compliment on site is expected to consist of the following:

- one Site Engineer;
- one Biologist (part time); and
- Construction Contractor which includes:
  - Site Superintendent;
  - Hazardous Waste Specialist;
  - Backhoe operator;
  - Five quad drivers;
  - Three Wildlife Monitors;
  - Mechanic;

Table 6-12 : Residual Environmental Effects Summary Matrix: Aquatic Animals and Habitat

Phase	Residual Adverse Environmental Effect Rating	Likelihood (of significant adverse environmental effects)	
		Probability of Occurrence	Scientific Uncertainty
General Remediation	NS		
Landfill Development	NS		
Borrow Development and Site Regrading	NS		
Placement of culverts	NS		
Hazardous Materials and Contaminated Soil Removal	P		

KEY

Residual Environmental Effects Rating:

S = Significant Adverse Environmental Effect
NS = Not Significant Adverse Environmental Effect
P = Positive Environmental Effect

Probability of Occurrence: based on professional judgement:

1 = Low
2 = Medium
3 = High
n/a = effect not predicted to be significant

Scientific Uncertainty: based on scientific information, and statistical analysis or professional judgement:

1 = low level of confidence
2 = medium level of confidence
3 = high level of confidence
n/a = effect not predicted to be significant

6.8.2.5 Summary of Environmental Effects on Aquatic Animals and Habitat

Effects of the Project on aquatic animals and habitat are associated with the potential deposition of eroded material from borrow excavations and water quality effects from landfill leachates and fuel and chemical spills. The implementation of mitigation measures such as berms, silt fences and/or silt booms will prevent deleterious substances from entering the aquatic environment. Spill prevention and contingency plans will mitigate the effects of accidental spills.

6.9 Archaeological and Heritage Resources

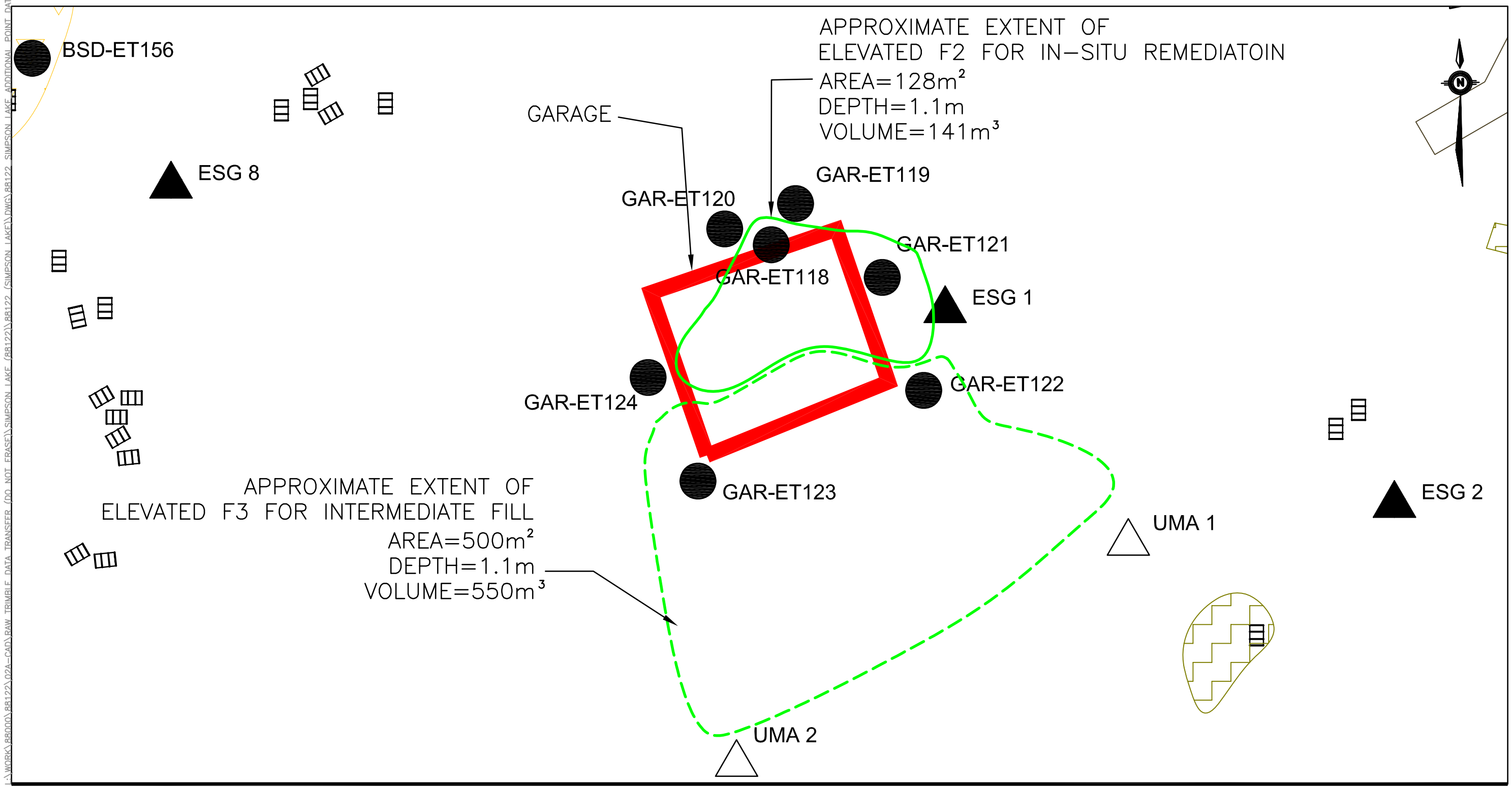
6.9.1 Existing Environment

Information on the archaeological and heritage resources of the CAM-D DEW Line Site has not been collected prior to the preparation of this screening document. An archaeological survey of the site was conducted in the summer of 2007. The report is being prepared and will be provided to the Nunavut Department of Culture, Language, Elders and Youth upon completion. The recent history of the site is as a DEW Line facility.

6.9.2 Environmental Effects Analysis - Archaeological and Heritage Resources

6.9.2.1 Study Area Boundaries

The spatial boundary for the assessment of the effects of project activities on archaeology and heritage resources is the facility and access route footprint. The temporal boundary for terrain is the time period for the remediation program, essentially 2009, including the time from moving equipment to the site to demobilization.



Date: OCTOBER 29, 2007
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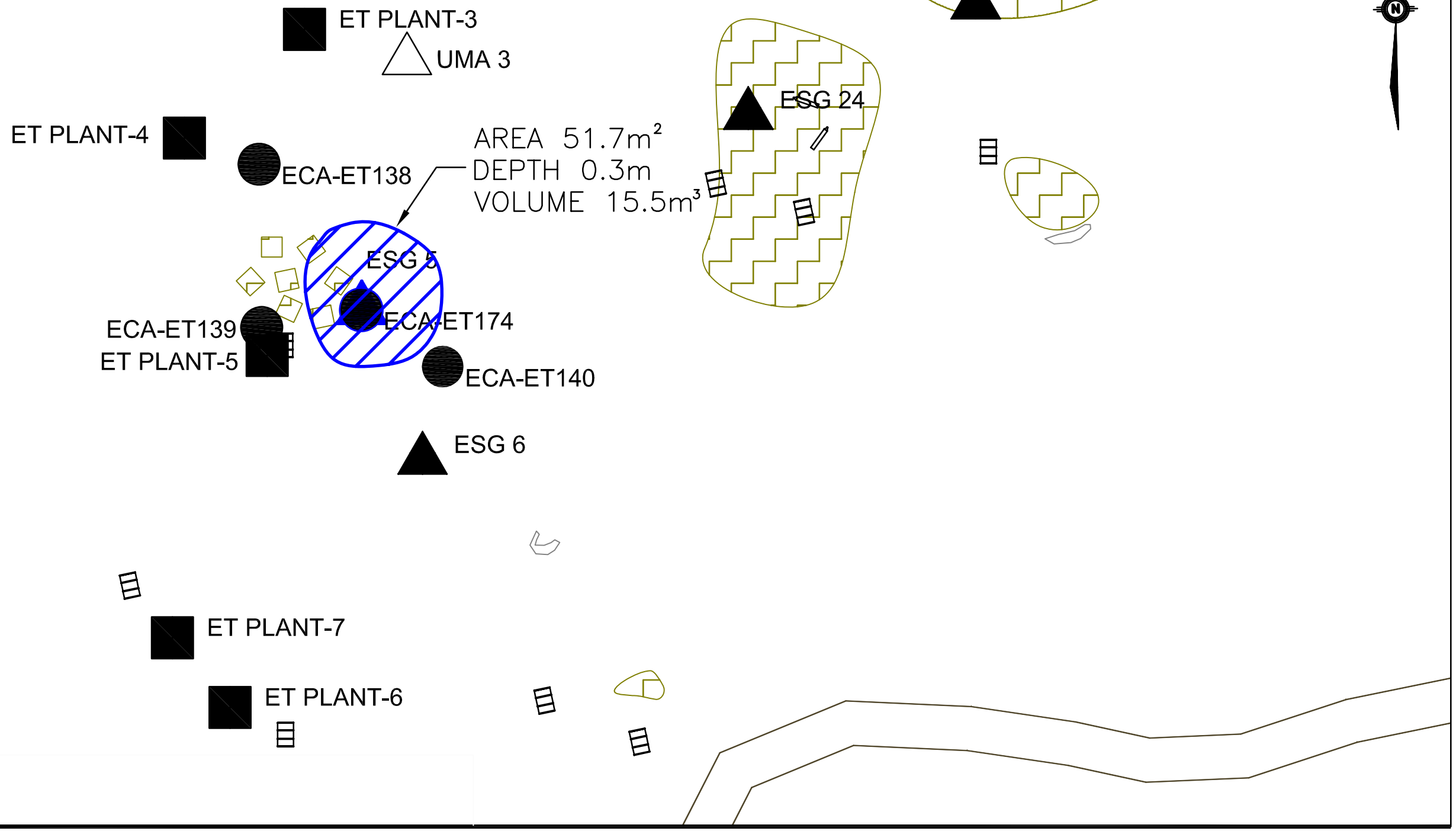
EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

- SOIL SAMPLE
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- MISCELLANEOUS DEBRIS
- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM-D DEW LINE REMEDIATION ACTION PLAN
GARAGE AREA (0-110 cm)
Figure 5.1



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SCALE:

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EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

- SOIL SAMPLE
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- MISCELLANEOUS DEBRIS
- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM–D DEW LINE REMEDIATION ACTION PLAN
ELECTRICAL CABINET AREA (0–30 cm)
Figure 5.2

POL-ET127

L-ET126

UMA 5

7

UMA 6

ESG 16

BURRIED DEBRIS AREA

BRN1-ET135

BRN1-ET134

BRN1-ET136

BRN1-ET137

UMA 9

APPROXIMATE EXTENT OF ELEVATED F2, F3, AND F4 FOR INTERMEDIATE FILL
AREA 55.8m^2
DEPTH 0.7m
VOLUME 39.1m^3

WBD-ET161

ET159

WBD-ET160

ET PLANT-3

UMA 3

Date: OCTOBER 29, 2007
SCALE:

0 5 10
1:250

EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

- SOIL SAMPLE
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- MISCELLANEOUS DEBRIS
- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM–D DEW LINE REMEDIATION ACTION PLAN
BURN PIT AREA (0–70 cm)
Figure 5.3

ESG 19

ESG 22

POLBD-ET164

ESG 23

POL SW

POL-ET132

ET PLANT-8

POL-ET131

AREA 179m²
DEPTH 0.4m
VOLUME 72m³
Hydrocarbon Contamination

POL-ET133

POLBD-ET163

ESG 18

POL-ET128

UMA 4

POL-ET129

POL-ET130

POL TANK

ESG 17

APPROXIMATE EXTENT OF ELEVATED F2 and PAH'S FOR IN-SITU REMEDIATION
AREA 1067m²
DEPTH 1.5m
VOLUME 1600m³

UMA 8

POL-ET125

POL-ET127

PUMP HOUSE

POL-ET126

UMA 5

UMA 7

UMA 6

BURRIED DEBRIS AREA

BRN1-ET135

ESG 16

Note: ESG 17 & 18 were not analyzed for PAH or PHC

Date: OCTOBER 29, 2007
SCALE:

0 5 10
1:125

EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

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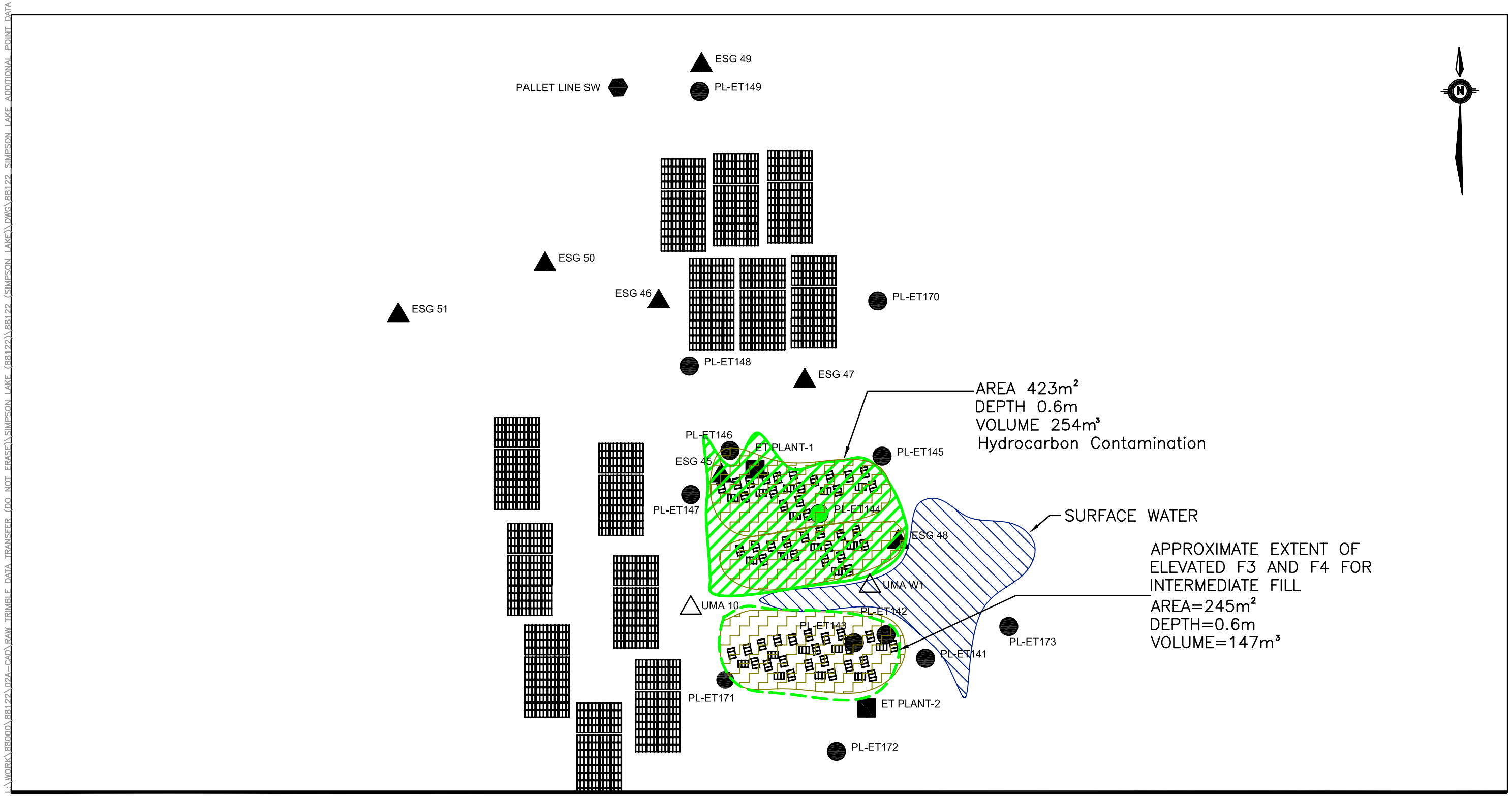
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- MISCELLANEOUS DEBRIS
- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM-D DEW LINE REMEDIATION ACTION PLAN
POL AREA
Figure 5.6



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EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

- SOIL SAMPLE
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
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- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM–D DEW LINE REMEDIATION ACTION PLAN
PALLET LINE BOREHOLE LOCATIONS (0–60 cm)
Figure 5.8

APPROXIMATE EXTENT OF
ELEVATED F2, F3, BTEX, AND PAH
FOR INTERMEDIATE FILL
AREA 588m²
DEPTH 1.0m
VOLUME 588m³

AREA 265.8m²
DEPTH 1.0m
VOLUME 266m³
PAH CONTAMINATION FOR INTERMEDIATE FILL

UMA 12

ESG 29

FT-ET165

FT-ET168

FT-ET152

Note: ESG 28 & 29 were
not analyzed for PAH or PHC

ESG 28

ESG 33

FT-ET169

FT-ET166

FT-ET153

FT-ET154

BTEX CONTAMINATION

UMA 11

FT-ET167

ESG 30

Date: OCTOBER 29, 2007
SCALE:

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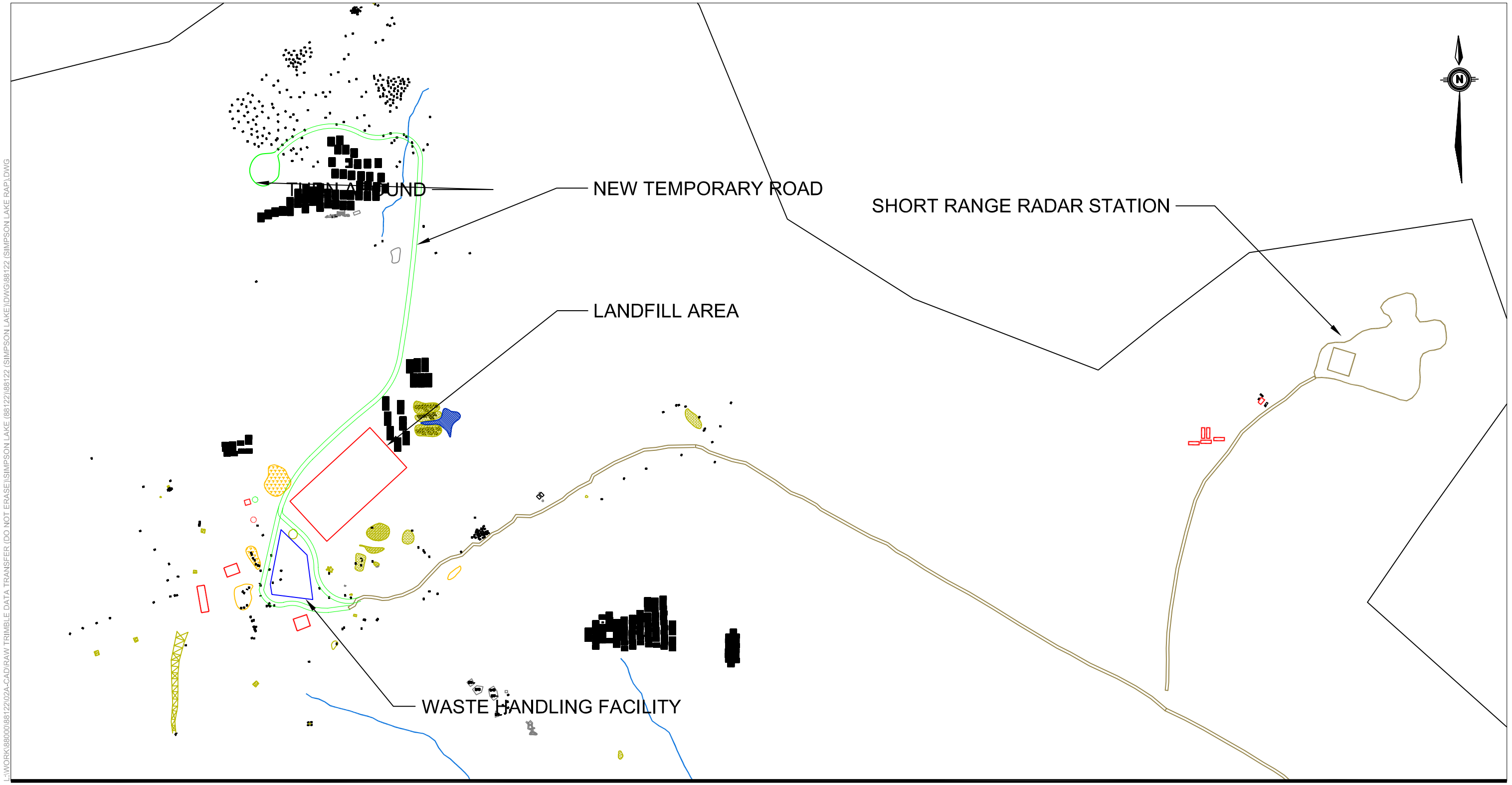
1:250

EarthTech
A Tyco International Ltd. Company

Legend (Note: ESG Samples were not analyzed for PHC or PAH)

- SOIL SAMPLE
- ESG SAMPLE
- PLANT SAMPLE
- BARREL
- CULVERT
- COMPRESSED GAS CYLINDER
- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- MISCELLANEOUS DEBRIS
- BURIED DEBRIS
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME
- WATERCOURSE

PWGSC
CAM–D DEW LINE REMEDIATION ACTION PLAN
PORTABLE FUEL TANKS
Figure 5.9



L:\WORK\88000\88122\02A-CAD\RAW TRIMBLE DATA TRANSFER (DO NOT ERASE)\SIMPSON LAKE (88122)\88122 (SIMPSON LAKE)\DWG\88122 (SIMPSON LAKE RAP).DWG

Date: APRIL 13, 2006
SCALE:

EarthTech
A Tyco International Ltd. Company

PWGSC
CAM–D DEW LINE REMEDIATION ACTION PLA
REMEDIATION ACTION PLAN MAIN STATION AREA
Figure 10.0

CAM-D (SIMPSON LAKE)
2006 Community Consultation - Questions & Answers

Lou Spagnuolo (INAC) Brad Thompson (PWGSC) Greg Wright (Earth Tech)

Presentation:
Lou – Remedial Action Plan

Taloyoak
April 26, 2006
7:00-8:00pm (presentation) 8:00-10:00pm (questions)

Attendees: 15 - Joseph (interpreter)

C (English) – Lots of exploration activity in the area. A mining company is doing a presentation next week.

C (Inuktitut) – I've been through the area on the way to Kugaaruk and I know about the DEW line

Q (Inuktitut) – If there is a landfill would it leak into water and rivers?
A (English) – No, we will continue to monitor any landfill we construct to ensure it is not leaking [Lou].

Q (Inuktitut) – Where are the contaminants going?
A (English) – All of the contaminated soil will be shipped south for disposal. Only the debris will remain onsite in a newly constructed landfill [Lou].

Q (Inuktitut) – Who do we contact for hiring labourers?
A (English) – We aren't sure who the Contractor will be yet, but we expect approximately 30-40 workers will be required to complete this work. We will be back to let you know about hiring once a Contract is awarded [Lou].
C: (Inuktitut) – Due to high cost of unemployment I'm happy to have jobs and happy to know contaminants are being removed.

Q (Inuktitut) – Do you need PCB contractors? Have you found a Contractor for PCB cleanup?
A (English) – Not yet, but we'll be evaluating Contractor's based on their experience with similar work [Lou].
C (Inuktitut) – I helped on the site (DND) last year and PCB's were a priority. Since they (USA) ruined our land they should give us money.

Q (Inuktitut) – How are the contaminants being removed?
A (English) – We are evaluating the best route and are looking for your input. The material will be shipped offsite by CAT Train using specialized containers [Lou].

Discussion ensued regarding some possible routes via CAM-3 or the nearby rivers.

Q (Inuktitut) – I remember the site with a lot of barrels around. What's happening to the buildings that are still onsite?
A (English) – Because of the level of contamination they will be demolished and disposed of either onsite or shipped offsite [Lou].

Q (Inuktitut) – How long will the clean up take?
A (English) – We expect the clean up to take one full summer plus there will be some long term monitoring [Lou].
C (Inuktitut) – Due to the high unemployment we're happy to see job opportunities. I would like to see those that haven't had opportunity to get jobs.

Q (Inuktitut) – Thank you for coming to share information and to talk about job opportunities. Has a study been done to check the risk of the site for humans and animals?
A (English) – Yes, we've found that there is little to no risk to humans or wildlife, but, we're still going to clean up the site [Lou].

Q (Inuktitut) – Our community needs employment and we have very little training.
A (English) – The Contract that is selected will be providing training as part of the clean up work for this project [Lou].
C (Inuktitut) – Due to the high unemployment in Taloyoak I want to see jobs kept to local communities.

Q (Inuktitut) – Is there a risk for cancer or illness from this site?
A (English) – PCB's can be carcinogenic, but there is very little contamination on the site and someone would have to spend a lot of time there for there to be any risk.

C (Inuktitut) – I worked at CAM-3 and got married there and I seem to remember all the heavy equipment was brought to CAM-D using a Hercules.

Gjoa Haven
April 28, 2006
9:00-10:00am (presentation)

Attendees: 2 - Simon (interpreter)

C (English) – Simpson Lake is also known as Kook (sp?)

Kugaaruk
April 28, 2006
7:00-8:00pm (presentation)

Attendees: 3 - Chris (interpreter)

C (English) – February, March and early April are better times of year for community meetings.