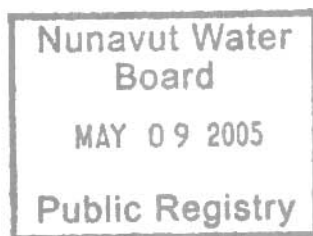


| INTERNAL |    |
|----------|----|
| PC       | dp |
| MA       |    |
| FO       |    |
| LA       |    |
| DS       |    |

|      |  |
|------|--|
| RC   |  |
| ED   |  |
| CH   |  |
| BRD  |  |
| EXT. |  |



## REPORT

Environmental Screening of the  
Proposed Site Remediation  
at the Former FOX-C DEW Line Site  
at Ekalugad Fjord, Nunavut

PUBLIC WORKS AND GOVERNMENT  
SERVICES CANADA, WESTERN REGION

PROJECT NO. ABC50626

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REPORT TO

Public Works and  
Government Services Canada,  
Western Region

Environmental Screening of the  
Proposed Site Remediation  
at the Former FOX-C DEW Line Site  
at Ekalugad Fjord, Nunavut

---

March 31, 2005

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## EXECUTIVE SUMMARY

Public Works and Government Services Canada (PWGSC), on behalf of Indian and Northern Affairs Canada (INAC) is planning to complete the clean up and remediation of the former FOX-C Intermediate DEW Line Site on Baffin Island. Various stages of clean up of the site have been ongoing since 1985. The first phase of PWGSC's clean up and remediation consisted of a detailed site assessment and preliminary consolidation of existing wastes at the site. The second phase involves the remediation of the site. As required under the *Nunavut Land Claim Agreement (NLCA)* and the *Canadian Environmental Assessment Act (CEAA)*, the remediation activities proposed for FOX-C must undergo an environmental screening.

The remediation at FOX-C is scheduled to begin in 2006 with completion in 2007. Mobilization activities will begin in September 2005 with demobilization to follow remediation activities in the winter of 2007. Activities will consist of contaminated soil excavation/remediation, dump area remediation, collection and disposal of hazardous and non-hazardous debris, and demolition and disposal of site facilities.

The remediation activities at FOX-C will interact with the environment through vehicle and machinery emissions, waste disposal, surface disturbance and the provision of employment to local inhabitants. 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 objectives of the activities are to clean up and return sites to as close to natural conditions as is possible. Specifically, the remediation will mitigate and/or control the release of contaminants into the environment. The environmental effects of the activities are assessed as being of low magnitude and not significant. The activities will benefit the area through the short-term employment of local individuals and through the clean up of the site.

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## 1.0 INTRODUCTION

The former FOX-C Intermediate DEW Line Site has been undergoing various stages of clean up since 1985. Indian and Northern Affairs Canada (INAC) has requested Public Works and Government Services Canada (PWGSC) Western Region to complete the remediation of the site over the next several years. In 2004, PWGSC completed a detailed site assessment, preliminary waste consolidation, and general site clean up at the site. This is to be followed by the implementation of a remediation plan. This Environmental Screening assesses the potential impacts of the proposed remediation of the FOX-C DEW Line Site.

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## 2.0 REGULATORY CONTEXT

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### 2.1 Permits, Licences, and Authorizations - Current Regulatory Regime

Development of the Project will involve a number of distinct undertakings and activities, requiring authorizations from a variety of federal, territorial, Inuit, and resource co-management agencies. Table 2-1 provides a preliminary listing of permits, licences, and authorizations that may be required to develop the Project. The specific permits, licences, and authorizations that will be required will depend on the final configuration of the Project and all related activities, and may include others not listed here. Regulatory procedures that must be followed differ for each permitting, licencing, or authorizing agency. The application for a permit, licence, or authorization will usually initiate a review of the Project under one or more environmental assessment processes, unless the proposed activity has been explicitly exempted from assessment.

Within Nunavut, INAC regulates land use on Crown (or federal) lands, whereas Nunavut Tungavik Incorporated (NTI) and the regional Inuit associations regulate subsurface and surface land use on Inuit Owned Lands. The Nunavut Water Board regulates water use in Nunavut. Environmental screening and assessment is the responsibility of the Nunavut Impact Review Board (NIRB). The *Nunavut Land Claim Agreement (NLCA)* establishes these new boards and regulatory processes, with the *Nunavut Land Claim Settlement Act* and the *Nunavut Act* being the federal legislation enabling the implementation of the provisions of the *NLCA*. Depending on the activity, environmental screening and assessment may also have to accommodate the requirements of the federal *Canadian Environmental Assessment Act (CEAA)*, in addition to the requirements of NIRB.

**Table 2-1: Permits, Licences, and Authorizations That May Be Required**

| Activity   | Permit/Approval  | Legislation  | Agency   |
|--|--|--|--|
| <b>Remediation</b>   |  |  |  |
| Route and site clearing, laydown and staging areas, borrow sources | Land Use Permit / Quarry Permit/ Permit to Access Inuit Owned Land                 | <i>Nunavut Land Claims Settlement Act Territorial Lands Act and Regulations*</i><br><i>Federal Real Property Act &amp; Regulations</i> | Nunavut Tungavik Incorporated, Kivalliq Inuit Association, Lands Division INAC |
| Construction of watercourse crossings affecting fish habitat       | Authorization or Letter of Advice for Works or Undertakings Affecting Fish Habitat | <i>Fisheries Act*</i>  | Fisheries and Oceans Canada  |
| Water use and waste water disposal at bridge crossings             | Water Licence  | <i>Nunavut Waters Act</i>  | Nunavut Water Board  |
| Transportation, use of heavy equipment                             | Vehicle Registration or Permit   | <i>Motor Vehicles Act (Nunavut)</i>  | Nunavut Department of Community Government and Transportation                  |
| Transportation of dangerous goods                                  | Certificate / Permit   | <i>Transportation of Dangerous Goods Act</i>   | Transport Canada<br>Nunavut Department of Sustainable Development              |
| Sewage disposal, food premises, sanitation at camps                | Permit / Criteria  | <i>Public health Act (Nunavut)</i>   | Nunavut Department of Health and Social Services                               |

\* Indicates legislation triggering CEAA

## 2.2 Existing Environmental Assessment and Review Process

This section provides a summary of the typical regulatory provisions for environmental assessment pursuant to the *NLCA* and the *CEAA*, as outlined in the agreement, enabling legislation, guidelines, and operational procedures, that may apply to any project within Nunavut.

Article 12 of the *NLCA* establishes processes for the screening and review of project proposals on land and marine areas within the Nunavut Settlement Area (including Inuit Owned Lands, Commissioners lands, and Crown lands) and to the Outer Land Fast Ice Zone. The NIRB was established in 1996, under Article 12.2.1 of the *NLCA*, as an institution of public government with responsibilities for environmental assessment. The NIRB's primary functions are to screen and review the ecosystemic and socio-economic effects of project proposals, and to make recommendations to the federal or territorial Minister(s) responsible for authorizing such projects to proceed. The NIRB also can issue recommendations for monitoring of project effects, but the responsibility for enforcement of such provisions lies with the agency issuing a permit, licence, or authorization. The NIRB's objectives are to protect the ecosystemic integrity of Nunavut, and to protect and promote the existing and future well-being of the residents and communities of Nunavut, and of Canada.

The FOX-C DEW Line Site is on federal lands that are regulated by INAC. As the Responsible Authority, INAC requires that an environmental screening be conducted in accordance with the *CEAA*. Where a proposed project in Nunavut involves a *CEAA* trigger, federal and territorial governments and the NIRB work together to harmonize the environmental screening process. This process is intended to provide information for the federal authorities to support the screening of the project pursuant to the



requirements of *CEAA*. As such, the study has been conducted in a manner that is consistent with the *NLCA* and *CEAA* and the guidance documentation of the NIRB, the Canadian Environmental Assessment Agency and INAC.

The initial step in obtaining approval for a project proposal within the Nunavut Settlement Area is the submission of an application for a permit, licence, lease, or approval to an authorizing agency (*i.e.*, government department, Designated Inuit Organization, regulatory board). It is important to note that more than one authorization may be required for undertakings and activities on land or water.

The authorizing agency is responsible for initial processing of the application. Where regional land use plans are in place, the application is forwarded to the Nunavut Planning Commission (NPC) for review of conformity with the land use plan. Where a project proposal conforms to an approved land use plan, or if a variance has been approved, the NPC forwards the project proposal application to the NIRB for screening. If no approved land use plans exist, project proposal applications are referred directly by the authorizing agency to the NIRB for screening.

The initial steps of the screening involve notification of the proponent and authorizing agencies, establishment of a timeline for a screening determination (where not specified by regulation), and distribution of the project proposal application to appropriate stakeholders. Taking into account all comments received from stakeholders regarding the project proposal, existing scientific information, Inuit traditional knowledge, and the information provided by the proponent, the NIRB then reviews the potential effects of the project and the level of public concern about and/or in support of the project proposal. Once the screening has been completed, the NIRB will produce a Screening Decision Report that documents its determination as to whether the project proposal should be approved without further review, abandoned or modified by the proponent, or subject to review under Part 5 or 6 of the *NLCA*.

If the NIRB determines that the project proposal should proceed without further review, the NIRB may include in its Screening Decision Report terms and conditions to be attached to the authorizations to be issued. The authorizing agency will include the NIRB terms and conditions in the final authorization. However, where the authorizing agency disagrees with the recommended terms and conditions, the agency must provide the NIRB with a rationale for omissions from the final authorization. Monitoring of adherence to terms and conditions is the responsibility of the authorizing agency. The NIRB will complete its screening and issue its Screening Decision Report to the authorizing agency (or agencies) within applicable legislated timelines to allow the agencies to meet their legislative requirements. However, should an agency have no legislated time limits regarding the issuance of permits, NIRB will provide its Screening Decision Report within "an acceptable time period".

When the Screening Decision Report indicates that a review is required, the Minister may:

- refer the proposal to the Minister of Environment for review by a federal environmental assessment panel;
- refer the proposal back to the NIRB for a review of ecosystemic and socio-economic impacts; or
- inform the proponent that the proposal should be abandoned or modified and resubmitted to NIRB.

The scope of the project has been determined pursuant to Section 15.1 of CEAA. Discussions with PWGSC were undertaken to establish the scope of the project, the scope of the environmental screening and the establishment of Valued Environmental Components (VECs). Factors considered in the environmental screening include those prescribed in Section 16.1 (a) to (e) of CEAA, listed below:

- (a) *the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;*
- (b) *the significance of the effects referred to in paragraph (a);*
- (c) *comments from the public that are received in accordance with this Act and the regulations;*
- (d) *measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project; and*
- (e) *any other matter relevant to the screening, comprehensive study, mediation or assessment by a review panel, such as the need for the project and alternatives to project, that the responsible authority or, in the case of a screening, the Minister after consulting with the responsible authority may require to be considered.*

Cumulative environmental effects have been considered pursuant to Section 16.1(a) of CEAA for likely future projects. No additional factors have been prescribed under Section 16.1(e) by INAC for inclusion in the potential cumulative environmental effects assessment analysis.

The existing conditions of the project area environment, with respect to the identified VECs, are characterized in this report. Potential interactions of specific project activities with the environment are identified and the environmental effects are evaluated in consideration of appropriate mitigation measures.

### 3.0 ENVIRONMENTAL ASSESSMENT CONTACTS

|   |  |
|---|--|
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## 4.0 PROJECT DESCRIPTION

The Department of Indian Affairs and Northern Development (DIAND) wishes to implement a remedial action plan at the abandoned military station, intermediate DEW Line site FOX-C, located at Ekalugad Fjord, Nunavut. Remediation assessment activities at the site were carried out in the summer of 2004 to quantify the volume of contaminated soil and hazardous materials at the site and to conduct a waste audit on all non-hazardous materials. Potential gravel and rock borrow sources and suitable locations for an engineered landfill were also identified.

The former DEW Line site was constructed in 1957 and subsequently closed and abandoned in 1963. The site has not been formally occupied since 1963. Assessments completed in 1985 and 1994 and the detailed site assessment in the summer of 2004 have confirmed the presence of various hazardous materials and contaminated soil.

DIAND has requested PWGSC to assume responsibility for cleaning and remediating the site. PWGSC developed a work plan for a detailed site assessment in 2004 which was carried out to address this responsibility. The results from the detailed site assessment were used to develop a remediation work plan which is proposed to be carried out in 2006 / 2007, with initial site preparation commencing in September 2005.

The full Project consists of two components:

1. a detailed site assessment and preliminary waste consolidation at the FOX-C DEW Line Site (conducted in summer 2004); and
2. the implementation of a remedial action plan for the site (scheduled to commence in 2005).

This environmental screening focuses on the second component, the implementation of a remedial action plan.

### 4.1 Project Location

The site description and history information is extracted from Reimer et al. (1994) and PWGSC's work plan for FOX-C (UMA Engineering Ltd. 2005).





Details of the facilities and equipment that were used during the operation of this site have been documented by Andzans and Associates (1984) and are similar to those observed at other Intermediate sites. The site was abandoned as part of the DEW Line system in October 1963, and the responsibility for the site was taken over by DIAND.

In 1963, Ekalugad Fjord was reserved for scientific use by government or university groups. Although the site was never used as a research station, a botanical survey was conducted in the area in July 1967.

Environmental assessment of the FOX-C DEW Line site was initiated in 1986 when DND and Environment Canada visited the site to remove contaminants such as PCBs and POLs and identify areas of buried materials that could pose environmental risks in the future. Their findings identified a number of drum caches with many of the drums still containing product. These were left in place. Removal of PCB-containing equipment was conducted and elevated PCB concentrations were noted in soil samples at several areas. Various sampling and clean-up activities have been conducted at the site during the 1990s.

The site was revisited in 1994 by the Environmental Sciences Group of Royal Roads Military College at which time a detailed surface soil sampling program was completed. Their investigations identified soil contamination exceeding Tier I and Tier II DEW Line Clean-up Criteria (DCC) near the module train, garage, warehouse, dumps, crashed aircraft and construction camp. However, these investigations did not include assessment of hydrocarbon contamination that has the potential to be a significant source of contamination at the site. Analysis of paint, barrel contents, and asbestos has also been conducted.

A detailed site assessment and preliminary waste consolidation was conducted in 2004. The detailed site assessment involved:

- assessment of the existing landfills including delineation of landfill boundaries, identification and quantification of hazardous materials in the landfills, and determination of whether the landfill is releasing deleterious substances into the surrounding environment;
- contaminated soil delineation including areal and vertical limits of the contamination on-site;
- hazardous materials inventory including identification and quantification of materials that will require specialized disposal and a sampling of barrels containing liquid;
- assessment of new landfill location and borrow sources including a survey of the site to tie in all site structures, borrow sources, landfill areas and assessed locations;
- site-specific risk assessment to quantify the risk to human and ecological receptors;
- site assessment of the lake to determine if contamination has occurred;
- an evaluation of the condition of the site roads;
- an airstrip evaluation to confirm condition of the airstrip for further activities; and
- a waste consolidation of barrels in non aquatic areas of the site.

Based on the results and reports generated from the assessment activities, a remediation plan was developed.

---

### 4.3 Objectives of the Remediation Program

The objectives of the remediation program at FOX-C are to remediate the site to an acceptable level of environmental risk by:

- removing contaminated soils;
- stabilizing existing dumps;
- developing engineered landfill facilities;
- collecting and disposing of surface debris;
- demolishing and removing exiting site facilities; and
- physically restoring the site.

---

### 4.4 Existing Infrastructure

UMA Engineering Ltd. (2005) provides several drawings and photographs describing the FOX-C DEW Line site. These are presented in Appendix A of this report. Site infrastructure consists of the following:

- module train;
- warehouse and garage;
- Inuit house (dormitory);
- Petroleum, Oil, Lubricants (POL) pumphouse;
- quonset hut;
- wooden hut in the lake area;
- collapsed communications antenna;
- refuelling pipeline;
- four 75,500-L POL tanks;
- two 22,700-L mobile fuel tanks;
- upper storage shed;
- paint shed;
- lower storage shed;
- one 7,600-L fuel tank;
- four dump sites; and
- a lake airstrip.

The FOX-C site includes upper and lower portions, as shown in Figure 4-2. The Lower Site, which includes beach and lake areas is on IO Lands, as is the lower portion of the access road to the Upper Site. The Upper Site and portions of the access road are located on Crown Lands.



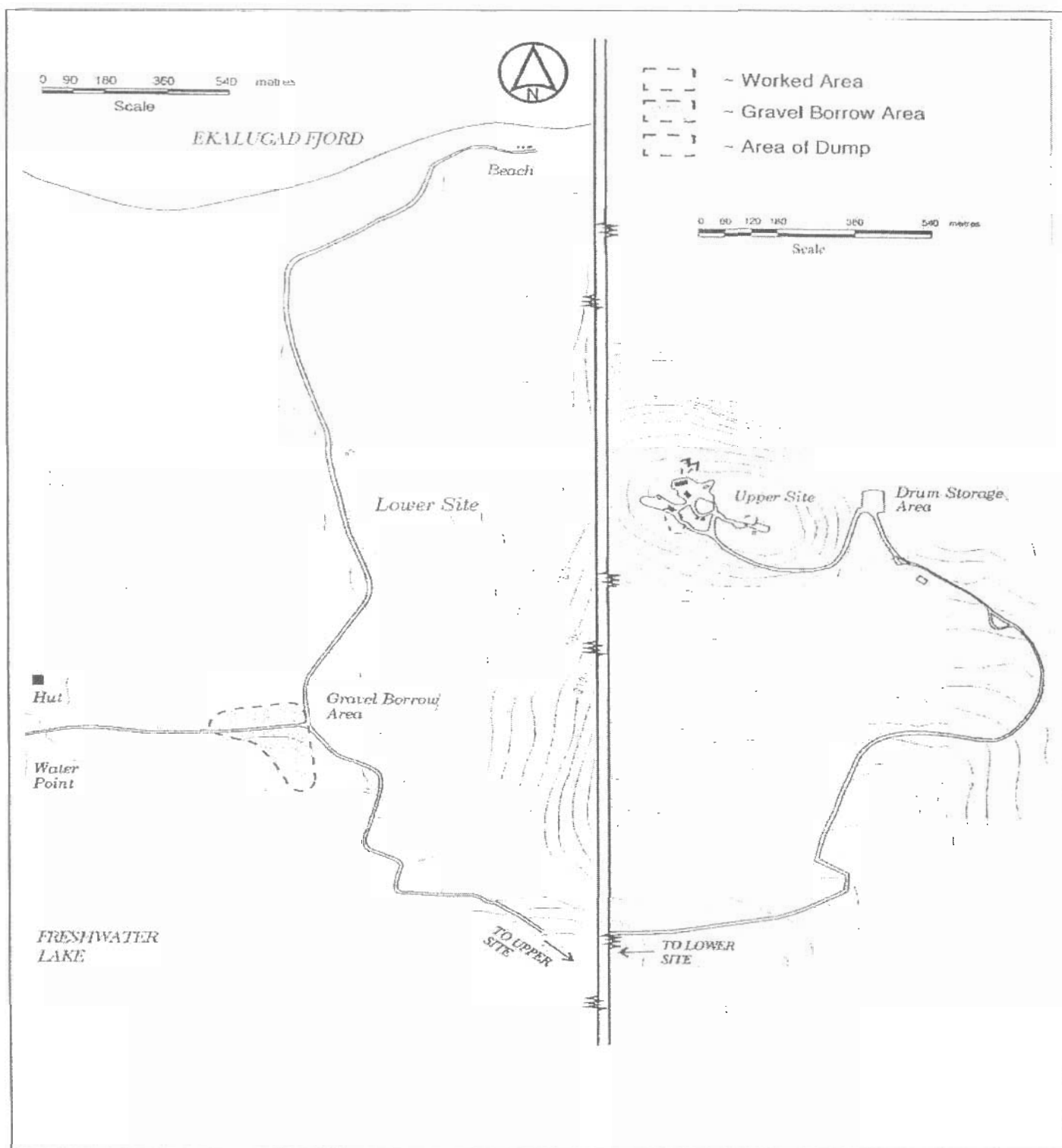


Figure 4-2: General Site Layout – FOX-C DEW Line Site

## 4.5 Project Activities

The remediation activities at FOX-C are described below. The work plan has been developed by UMA Engineering Ltd. (2005). Their drawings showing the remediation sites described below are presented in Appendix A.

### 4.5.1 Contaminated Soil Remediation

There is a total of approximately 1455 m<sup>3</sup> of contaminated soils on the FOX-C site.

Table 4-1 details the locations of the soils, their contaminants of concern and the proposed remediation options for each area. In general, Tier I, petroleum hydrocarbons (PHC) and metals-contaminated soils can be covered with fill and regraded. CEPA-contaminated soils must be excavated and disposed of at an off-site approved facility. All soils contaminated with Hydrocarbons F1/F2 from the Beach POL area will be land farmed.

**Table 4-1: Contaminated Soils at FOX-C**

| Location                                      | Contaminant of Concern <sup>1</sup> | Tier II Volume m <sup>3</sup> | Notes <sup>1</sup>   | Remediation Option <sup>1</sup>   |
|---|-------------------------------------|-------------------------------|--|---|
| Beach Area – POL Tanks                        | PHCs (F2)                           | 340                           | PHC contaminated soils to depth of 1.2 m   | <ul style="list-style-type: none"><li>• Landfarm</li><li>• Excavate and dispose off site</li></ul>  |
| Beach Area – Barrel Dump #1                   | Metals                              | -                             | Potentially 340 m <sup>3</sup> of chromium contaminated soils to depth of 0.3 m. Elevated levels may be due to naturally occurring chromium. | <ul style="list-style-type: none"><li>• No remediation required relative to Tier II criteria</li></ul>  |
| Beach Area – Dump #2                          | Metals                              | -                             | Potentially 680 m <sup>3</sup> of chromium contaminated soils to depth of 0.3 m. Elevated levels may be due to naturally occurring chromium. | <ul style="list-style-type: none"><li>• No remediation required relative to Tier II criteria.</li></ul>   |
| Water Lake Area – Heli-pad Surface Stains (2) | PHCs (F3)                           | 75                            | PHC contaminated soils to depth of 0.6 m.  | <ul style="list-style-type: none"><li>• Cover with granular fill</li><li>• Excavate and dispose as Intermediate Fill in on-site NHW Landfill</li></ul>  |
| Drainage Course Stain                         | PHCs (F3/F4)                        | 6                             | 18 m <sup>2</sup> area at 0.3 m depth = 6 m <sup>3</sup>   | <ul style="list-style-type: none"><li>• Cover with granular fill</li><li>• Excavate and dispose as intermediate fill in on site NHW Landfill</li></ul>  |
| Mid-station Area – Existing Pad               | PHCs (F3/F4), PAHs                  | 75                            | Can excavate pad, off pad consists mostly of boulders with little contaminated soil infill.  | <ul style="list-style-type: none"><li>• Leave existing pad soils in place and build NHW Landfill over.</li><li>• Excavate and dispose off pad soils as intermediate fill in on-site NHW Landfill.</li></ul> |
| Mid-Station Area – Barrel Dump #2             | PHCs (F3/F4)                        | 50                            | Covers an area of 1800 m <sup>2</sup> , mostly of boulders with little soil contaminated infill material.                                    | <ul style="list-style-type: none"><li>• Cover with granular fill</li></ul>  |



**Table 4-1: Contaminated Soils at FOX-C**

| Location                                  | Contaminant of Concern <sup>1</sup>             | Tier II Volume m <sup>3</sup> | Notes <sup>1</sup>  | Remediation Option <sup>1</sup>   |
|---|---|-------------------------------|---|---|
| Mid-Station Area – Barrel Dump #6         | PHCs (F3/F4)                                    | 60                            | Two areas with an area of 1800 m <sup>2</sup> , mostly boulders with little soil contaminated infill.   | <ul style="list-style-type: none"> <li>• Cover with granular fill</li> </ul>  |
| Upper Station – Main Dump                 | Tier I / II?<br>PCBs, PHCs                      | 30                            | PCB / Hydrocarbon contamination   | <ul style="list-style-type: none"> <li>• Delineate Tier II PCB Soils and provide on site or off site disposal</li> <li>• Excavate and dispose of Tier I soils as intermediate fill in on-site NHW landfill</li> </ul>       |
| Upper Station – Main Dump                 | Tier II Metals                                  | 15                            | Copper, Lead, Zinc and Chromium contamination   | <ul style="list-style-type: none"> <li>• Excavate and dispose as Intermediate fill in on-site NHW Landfill</li> </ul>   |
| Upper Station – South of Module Train     | Tier I PCBs                                     | 7                             | PCB Contamination   | <ul style="list-style-type: none"> <li>• Excavate and dispose as intermediate fill in on-site NHW Landfill</li> </ul>   |
| Upper Station – West of Module Train      | PHCs (F2/F3)                                    | 14                            | Hydrocarbon contamination   | <ul style="list-style-type: none"> <li>• Landfarm</li> <li>• Excavate and dispose off-site</li> </ul>   |
| Upper Station – Warehouse                 | PHCs (F2/F3/F4)                                 | 15                            | Warehouse AST contamination   | <ul style="list-style-type: none"> <li>• Landfarm</li> <li>• Excavate and dispose off-site</li> </ul>   |
| Upper Station – Gravel pad West of Garage | PHCs (F3)                                       | 140                           | Depth = 0.5 to 0.75 m   | <ul style="list-style-type: none"> <li>• Cover with granular fill</li> </ul>  |
| Upper Station – D8 Cat                    | PHCs (F2/F3)                                    | 4                             | Depth = 0.15 m  | <ul style="list-style-type: none"> <li>• Cover with granular fill</li> </ul>  |
| Upper Station – West of Garage Building   | Tier I PCBs, Metals                             | 1                             | PCB Contamination (3.8 ppm) over 5 m <sup>2</sup>   | <ul style="list-style-type: none"> <li>• No remediation relative to metals exceeding Tier II criteria</li> <li>• Excavate and dispose Tier I contaminated PCB soils as intermediate fill in on-site NHW Landfill</li> </ul> |
| Upper Station – East of Garage Building   | Tier I PCBs<br>PHCs (F3)                        | 15                            | PCBs at 3.8 ppm PHC contamination over 40 m <sup>2</sup>  | <ul style="list-style-type: none"> <li>• Excavate and dispose as intermediate fill in on-site NHW Landfill</li> </ul>   |
| Upper Station – Garage Dump               | Tier I PCBs, PHCs (F2/F3/F4),<br>Tier II Metals | 8<br>35<br>330                | Metals contamination depth = 0.2 m<br>PCB contamination<br>Hydrocarbon Contamination covers an area of 1100 m <sup>2</sup> with a depth 0.3 m | <ul style="list-style-type: none"> <li>• Contaminated soils to be dealt with as part of landfill remediation</li> </ul>   |
| Upper Station – POL Storage               | PHCs (F2/F3)                                    | 200                           | Hydrocarbon contamination covers an area of 650 m <sup>2</sup> with a depth of 0.3 m.   | <ul style="list-style-type: none"> <li>• Landfarm in place</li> </ul>   |
| Surface stain – Antenna Base Area         | PHCs (F3/F4)                                    | 25                            | Hydrocarbon contamination   | <ul style="list-style-type: none"> <li>• Cover with granular fill</li> <li>• Excavate and dispose as intermediate fill in on-site NHW Landfill</li> </ul>   |

**Table 4-1: Contaminated Soils at FOX-C**

| Location                                   | Contaminant of Concern <sup>1</sup> | Tier II Volume m <sup>3</sup> | Notes <sup>1</sup>              | Remediation Option <sup>1</sup>                                     |
|--|-------------------------------------|-------------------------------|---------------------------------|---|
| Surface Stains – NW of Module Train        | Tier I PCBs, PHCs (F3/F4)           | 10                            | PCB / Hydrocarbon contamination | • Excavate and dispose as intermediate fill in on-site NHW Landfill |
| Total volume of soil requiring remediation |                                     | 1,455 m <sup>2</sup>          |                                 |   |

- 1) AST = Aboveground Storage Tanks  
 2) NHW = Non-hazardous Wastes  
 3) PAHs = Polycyclic Aromatic Hydrocarbons  
 4) PCBs = Polychlorinated Biphenyls  
 5) PHCs = Petroleum Hydrocarbons  
     F1 = C6 – C10  
     F2 = C11 – C16  
     F3 = C17 – C34  
     F4 = C35 +

## 4.5.2 Dump Area Remediation

### 4.5.2.1 Main Dump

The Main Dump is located approximately 20 m northeast of the module train on the north side of the summit on a steep slope with bedrock ridges and small plateaus. The Main Dump contains mainly scattered surface debris, including barrels and miscellaneous wood and metal. It covers an area of approximately 5000 m<sup>2</sup>. There is no specific area containing concentrated debris, however the geophysical survey conducted indicates two small barrel cache locations within the dump. The environmental investigation found contaminated soil areas with exceedances of Tier I PCBs. Because the buried debris is located upgradient of the contaminated soil it may be the source for the contamination.

Because the Main Dump is considered a debris area with contaminated soil rather than a landfill, the proposed remediation falls under the general site clean up methodology including removal and disposal of all surface debris and excavation and disposal of Tier I soils in the NHW Landfill. Any soils with PCB levels exceeding Tier II criteria will be shipped off site for disposal. The two areas containing barrels are considered concentrated surface debris areas and the barrels will be collected and disposed of in the NHW Landfill.

### 4.5.2.2 Garage Dump

The Garage Dump is located on the edge of the summit, just off the station pad to the south and southeast of the garage. The Garage Dump includes scattered surface debris including barrels and miscellaneous wood and metal. The Garage Dump does not have a specific area where there is significant concentrated debris although one small barrel cache was found in the dump area. The geophysical survey identified two small areas with exposed debris including Lobe A with dozer tracks and miscellaneous metal debris and Lobe B which consists of a barrel cache.