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**REACTIVITY DATA**

*Stability:* Stable                      *Conditions to Avoid:* None

*Materials with which Substance is Incompatible:*

Fuming inorganic acids may degrade material  
Strong caustics  
Hydrazines and Hydrozides

*Hazardous Polymerization:* Will not occur

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**SPILL, LEAK, AND DISPOSAL INFORMATION**

*Spill and Leak Response:*

Spills of this product are considered NON-HAZARDOUS.

*Preparing Wastes for Disposal:*

Waste disposal must be in accordance with appropriate federal, provincial, and local regulations. This product, if unaltered by the handling, may be disposed of as a non-hazardous waste. If this product has been used to clean up hazardous chemicals or materials, then the residue **MUST** be treated as a hazardous waste, including proper disposal.

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**SPECIAL HANDLING INFORMATION**

*Ventilation and Engineering Controls:*

As required for the chemicals or materials being cleaned up with this product.

*Respiratory Protection:*

As required for the chemicals or materials being cleaned up with this product.

*Eye Protection:*

As required for the chemicals or materials being cleaned up with this product.

*Hand Protection:*

As required for the chemicals or materials being cleaned up with this product.

*Body Protection:*

As required for the chemicals or materials being cleaned up with this product.

*Work and Hygiene Practices:*

Use normal workplace and hygiene practices when using this product in its UNALTERED state.

*Storage and Handling Practices:*

Store in dry area away from moisture. Handle bags with normal caution to prevent damage.

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**LABELLING**

No precautionary statements or DOT labels required.

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**TOTAL ABSORB INC.**

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**DEPARTMENT OF NATIONAL DEFENCE  
SPECIFICATIONS FOR THE CLEAN UP  
OF THE  
CAM-M - CAMBRIDGE BAY  
DEW LINE SITE**

**ENVIRONMENTAL PROTECTION PLAN**



Prepared by:

**UMA Engineering Ltd.**

In association with:

**Jacques Whitford Environment Limited  
The SGE Group Inc.**

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## LIST OF ACRONYMS

CCME	Canadian Council of Ministers of Environment
CEPA	Canadian Environmental Protection Act
DCC	DEW Line Clean Up Criteria
DCL	Defence Construction (1951) Ltd.
DEW Line	Distant Early Warning Line
DIAND	Department of Indian Affairs and Northern Development
DND	Department of National Defence ("Owner")
EARP	Environmental Assessment and Review Process
EPP	Environmental Protection Plan
GNWT	Government of Northwest Territories
IATA	International Air Transport Association
IMDGC	International Marine Dangerous Goods Code
LRR	Long Range Radar
LSS	Logistic Support Site or Station
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheets
NFC	National Fire Code
NTI	Nunavut Tunngavik Incorporated
NWS	North Warning System
NWT	Northwest Territories
PCB	Polychlorinated biphenyl
PMO	Project Management Office
POL	Petroleum, Oils and Lubricants
SRR	Short Range Radar
SUR	Site Use Restrictions
TDGA	Transportation of Dangerous Goods Act
TFN	Tungavik Federation of Nunavut
WHMIS	Workplace Hazardous Materials Information System

## 1.0 INTRODUCTION

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### 1.1 SCOPE AND OBJECTIVES

- .1 This Environmental Protection Plan (EPP) has been prepared to detail mitigative measures for potential environmental impacts associated with the construction and clean up activities at the CAM-M, Cambridge Bay site as identified during the Environmental Screening Process. Environmental Screenings are a formal part of the Federal Environmental Assessment and Review Process (EARP). These screenings and all available environmental and engineering information were used to prepare the EPP. Although the *Canadian Environmental Assessment Act* is now in effect, this project was initiated under EARP and is subject to the requirements of the process.
- .2 The EPP is to be implemented by the Contractor through appropriate actions and the application of contingency plans. The EPP is designed to be used during clean up activities in conjunction with the Contract Drawings and Specifications. It forms part of the Contract Documents and reference to it can be found throughout the Contract Specifications.
- .3 The EPP provides:
  - .1 an overview of the activities involved in construction of a work camp, clean up and demolition activities, and closure of those portions of the DEW Line site not required as part of the North Warning System (NWS) (Section 2.0);
  - .2 an overview of the regulatory environment which includes legislation and regulations from federal and territorial authorities. It also describes the requirements of other regional agencies. (Section 3.0);
  - .3 a description of the general environmental protection measures required to minimize or avoid potential adverse effects (Section 4.0);
  - .4 a description of protection measures required for specific valued environmental components at the CAM-M, Cambridge Bay site (Section 5.0);
  - .5 details related to environmental inspection responsibilities and procedures (Section 6.0); and
  - .6 contingency plans describing emergency actions and reporting requirements (Section 7.0).
- .4 The protection measures described herein are to be implemented by the Contractor to minimize or avoid potential adverse environmental impacts. These procedures are considered appropriate for known and anticipated situations and conditions. However, should certain procedures or protection measures prove impractical, imprudent or insufficient in field situations, appropriate modifications or substitutions are to be proposed by field personnel, reviewed and approved by the Engineer in consultation with regulatory officials.

## 2.0 PROJECT DESCRIPTION OVERVIEW

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### 2.1 PROJECT RATIONALE

- .1 In March 1985, Canada and the United States signed a Memorandum of Understanding (MOU) agreeing to modernize the North American Air Defence System. The memorandum sets out the requirements for replacement of the Distant Early Warning (DEW) Line with an upgraded system called the North Warning System (NWS).
- .2 Of the original 42 DEW Line sites, 21 sites were closed in 1963 and are currently under the administration of the Department of Indian Affairs and Northern Development (DIAND). Of the remaining 21 DEW Line sites in the Canadian Arctic, eight were converted to NWS Long Range Radar (LRR) sites, eight to NWS Short Range Radar (SRR) sites, and the remaining five were decommissioned completely. CAM-M, Cambridge Bay is a LRR/LSS site and will continue to be occupied.
- .3 Environmental investigations of the DEW Line sites were carried out to identify the principal contaminants and determine the impact of these substances on the Arctic ecosystem. In addition, an evaluation of past waste disposal practices, specifically landfill locations, contamination sources and potential for contaminant migration, were conducted at each site. Based on the information obtained during the environmental studies, the DEW Line Clean Up Protocol was developed and provided a consistent approach to the clean up of the sites.
- .4 Following the environmental investigations, engineering site assessments were conducted to obtain the information required to develop clean up drawings and specifications, and included surveys of contaminated areas, characterization of debris and landfill areas, investigation of proposed landfill development areas and identification of granular borrow sources.
- .5 The environmental and engineering surveys at the CAM-M site were carried out over the period of 1989 to 1994 and documented the environmental implications and potential effects of the clean up work. An environmental and engineering site investigation was carried out in 1996 with the objectives of more accurately delineating known contaminated areas, characterizing stained areas, and verifying overall site conditions. The need for mitigation, monitoring and/or actual project activity modifications was also identified.



- Specific to the CAM-M, Cambridge Bay site, the primary clean up requirements are as follows:
- demolition and disposal of infrastructure no longer required for the operation of the NWS LRR/LSS site;
  - excavation and disposal of contaminated soils;
  - closure of four existing landfills; and
  - cleanup of one dump site/landfill area.

6.

## PROJECT ACTIVITIES

2.2

1. The clean up activities are based on the DEW Line Clean Up Protocol which targets contaminated soil, landfills, and demolition and exposed debris for cleanup. The following sections outline the major activities to be performed in the clean up of the CAM-M site. Detailed requirements are described in the Contract Specifications and Drawings. It is intended that the EPP be read in conjunction with these documents to determine all project requirements.

2.

The major clean up activities include the following:

- mobilization;
- establishment of a construction camp, including:
  - access and supply routes,
  - water supply,
  - waste management,
  - fuel handling and storage,
  - equipment and vehicle use, storage and maintenance;
- excavation of contaminated soil;
- collection and disposal of site debris;
- disposal of hazardous material;
- disposal of non-hazardous materials;
- construction of a Tier II soil disposal area;
- demolition of existing facilities;
- closure of existing landfills;
- development of granular borrow areas;
- site grading; and
- demobilization.

3.

### Construction Camps

1.

#### Siting

1. Two alternatives are available for camp accommodations at CAM-M: commercial facilities in the Hamlet of Cambridge Bay, or establishment of a separate construction camp on the site.