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

ENVIRONMENTAL PROTECTION PLAN

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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

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

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.

.6 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.

2.2 PROJECT ACTIVITIES

.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.

.2 The construction camp shall meet all requirements of Section 01591 of the Contract Specifications.

.3 Locate the construction camp and/or associated storage areas in areas of previous disturbance, or as proposed on the Contract Drawings, to minimize damage to previously undisturbed areas.

.2 Access

.1 Access to the CAM-M site is provided by regularly scheduled aircraft, charter aircraft and barge.

.2 Local access to construction, demolition, clean up and other work areas is generally via existing road networks. Graded areas, located near the beach landing area, and/or in the vicinity of the Station Area, are to be used for temporary storage of materials.

.3 Do NOT interfere with NWS operations at the site.

.3 Water Supply

.1 The existing water supply lake at the CAM-M site may be used as a potable water source, providing that the cumulative water withdrawal rate by NWS and the Contractor does not adversely affect fish habitat. An alternative water supply is to be located, tested and approved in accordance with the Water Use License. The Contractor shall routinely monitor water quality to ensure that it meets or exceeds the Guidelines for Canadian Drinking Water Quality.

.4 Waste Management

.1 Provide waste management for all facilities operated by the Contractor.

.2 Only domestic and human waste shall be collected and disposed of in a wastewater treatment system. This excludes items such as waste oil and liquids containing hazardous material. The wastewater shall be disposed of in accordance with the wastewater discharge criteria provided in Section 01560 of the Contract Specifications.

.3 Non-hazardous solid wastes, generated as part of the operation of the construction camp, are to be disposed of on site in an extension to an existing landfill. Domestic non-hazardous wastes may be incinerated and disposed of, as described above.

.5 Fuel Handling and Storage

.1 Transport fuel to the site and store in approved facilities, as described in Section 4, at the construction camp, storage compound or existing fuel storage facilities, if available.

.6 Equipment and Vehicle Use, Storage and Maintenance

.1 Transport equipment and vehicles to the site, store in approved locations, use only for contracted work, and maintain as required.

.4 Excavation of Contaminated Soil

.1 The definition of contaminated soil has been established in accordance with the DEW Line Clean Up Criteria as shown in Table 2.1. Soils contaminated at levels above DCC Tier I but less than DCC Tier II criteria are to be landfilled on site. These criteria are designed to be protective of the Arctic ecosystem.

.2 Complete all work related to the excavation and disposal of contaminated soils in accordance with Section 02066 of the Contract Specifications.

TABLE 2.1
DEW LINE CLEAN UP CRITERIA (DCC)
FOR CONTAMINATED SOIL

Substance	Criteria	
	DCC Tier I (ppm)	DCC Tier II (ppm)
Arsenic (As)	--	30
Cadmium (Cd)	--	5
Chromium (Cr)	--	250
Cobalt (Co)	--	50
Copper (Cu)	--	100
Lead (Pb)	200	500
Mercury (Hg)	--	2
Nickel (Ni)	--	100
Zinc (Zn)	--	500
Polychlorinated Biphenyls (PCBs)	1	5

.5 Disposal of Hazardous Materials

.1 "Hazardous" materials are defined as follows:
Hazardous materials are wastes or materials that are designated as "hazardous" under Northwest Territorial, or Federal legislation: or as "dangerous goods" under the *Transportation of Dangerous Goods Act* (TDGA). The *Canadian Environmental Protection Act* (CEPA) also regulates material containing PCBs at greater than fifty parts per million (ppm). Specifically identified hazardous materials include: batteries:

asbestos; fuel tank bottom sludges; solvents; PCB-containing liquids; fuels and lubricating oils; alcohols and glycols; and heavy metal-contaminated liquids. Disposal requirements for these hazardous materials are outlined in Table 2.2.

TABLE 2.2
HAZARDOUS MATERIAL DISPOSAL REQUIREMENTS

Hazardous Material	Disposal Requirement
• batteries • heavy metal-contaminated organic liquids • liquids containing organic compounds with chlorine concentrations > 1000 ppm • liquids containing organic compounds with PCB concentrations > 2 ppm and < 50 ppm • liquids containing organic compounds other than those described above	licensed treatment/disposal facility
• asbestos	double bag and dispose of in on-site engineered landfill
• fuel tank bottom sludges • fuels, lubricating oils, alcohols and glycols	licensed treatment/disposal facility or on-site incineration
• liquids and solids containing organic compounds with PCB concentration > 50 ppm	licensed storage, or disposal at the Alberta Special Waste Management System Facility - Swan Hills, Alberta

.2 Hazardous materials may be encountered during sorting of site and demolition debris. Collect and sort hazardous materials using equipment suitable for the task.

.3 If a substance is discovered that is suspected to be explosive, immediately eliminate all ignition sources in the area (including smoking, flares or flames in the immediate area). Clean up the material and dispose of only under the supervision of a permitted explosives expert. If fire or heat threatens the area of the potentially explosive material, all personnel will move to a distance of at least 1000 m from the material. Implement the procedure outlined in the Contractor's Contingency Plan for dealing with such substances.

.4 Test any suspected radioactive material and handle, package and dispose all confirmed radioactive materials as outlined under the TDGA and the Atomic Energy Control Act.

.5 Transport hazardous materials in accordance with the Transportation of Dangerous Goods Regulations, as applicable.

.6 Conduct all work related to hazardous materials in accordance with Section 02090 of the Contract Specifications.

.3 Areas not to be disturbed include the operating LRR facilities including satellite ground terminals and fuel storage tanks, as described in the Contract Specifications and Drawings.

.13 Demobilization

.1 Following the completion of clean up activities, remove all equipment, remaining fuel, supplies, and the construction camp from the site.

3.0 REGULATORY OVERVIEW

3.1 INTRODUCTION

.1 The Contractor shall comply with all applicable environmental laws, regulations and requirements of Federal, Territorial, and other regional authorities, and will acquire and comply with such permits, approvals and authorizations as may be required. The Contractor is subject to and must comply with those permits and approvals obtained on behalf of and by DND to conduct this work. The Contractor, through all project phases, shall work in close cooperation with regulatory authorities and DND to ensure compliance.

3.2 FEDERAL ACTS, REGULATIONS AND GUIDELINES

.1 Several federal Acts, regulations, and guidelines affect project activities across all Canadian jurisdictions. The most relevant to the DEW Line Clean Up EPP are outlined below:

.1 The *Canadian Environmental Protection Act* (CEPA) is a comprehensive piece of environmental legislation that regulates toxic substances from their production or import, to consumption, storage and disposal. This Act also incorporates the former Ocean Dumping Regulations and PCB Storage Regulations.

.2 The *Transportation of Dangerous Goods Act* and Regulations promote public safety in the transportation of dangerous goods. The Act applies to all handling, offering for transport and transporting of dangerous goods by any means of transport whether or not the goods originate from or are destined for any place or places in Canada.

.3 The *Fisheries Act* protects fish and fish habitat from pollution, negative alteration or disturbance, or impediments to fish movement. Fisheries and Oceans Canada will be given the opportunity to review permit applications or restoration plans submitted by other agencies.

.4 The *Arctic Waters Pollution Prevention Act and Regulations* govern development and shipping activity in Arctic waters adjacent to the mainland and islands of the Canadian Arctic, to ensure the continuing welfare of the residents of the areas, and to protect the ecological balance in water, ice and land areas.

.5 The *Migratory Birds Convention Act* provides for the protection of designated migratory species, including birds of prey, their habitats, and the regulated harvest of certain species.

.6 The *Canada Wildlife Act* provides for the involvement of the Government of Canada in cooperative research and management programs involving wildlife species normally the responsibility of provinces or territories. This is particularly relevant to rare and endangered species or species such as caribou which seasonally move across various regulatory boundaries.

.7 The *Canada Shipping Act* regulates shipping activities under the jurisdiction of Canada. Regulations cover technical standards of operation safety and pollution aspects related to shipping activities in Canadian waters.

.8 The *Navigable Waters Protection Act* pertains to the erection of structures or facilities used to support or impede navigation in waters under the jurisdiction of Canada.

.9 The *Territorial Lands Act* provides the authority for administering and protecting lands under the direct control of the Minister of Department of Indian Affairs and Northern Development (DIAND) (Territorial Lands). The following regulations are pursuant to this act:

- The Territorial Land Use Regulations provide regulatory control for maintaining sound environmental practices for any land use activities on Territorial lands. These regulations require that land use permits be issued for such operations as work involving the use of heavy equipment, establishment of camps, use of explosives, and clearing of lines, trails and rights-of-way, including construction of access roads.
- The Territorial Quarrying Regulations establish the fee schedule and procedures for extracting Crown-owned limestone, granite, slate, marble, gypsum, loam, marl, gravel, sand, clay or stone from Territorial Lands. The regulations specify permits, applications, staking and dimensions of quarries.

.10 The *Northwest Territories Waters Act* and Regulations provide for the conservation, development and use of the water resources of the Northwest Territories and for the establishment of a Water Board to license all such water usage and waste disposal activities.

.11 *Canada Labour Act* and Regulations under the Act is the Labour code for all Federal Employees or activities on Federally owned or controlled land. Private Provincial or Territory employees are governed by the Provincial/Territorial Labour Acts, even when working on Federal lands or facilities. The labour acts control such things as statutory holidays, maximum work hours and minimum wages.

.12 *Atomic Energy Control Act* and Regulations describe the packaging requirements and approvals needed for the transportation of radioactive materials.

.13 *Explosives Act* and Regulations define explosives, the permitting requirements needed to use explosive substances, packaging, handling and transporting requirements, and safety requirements.

.14 National Fire Code (NFC) establishes the standard for fire prevention, fire fighting and life safety in buildings in use, including standards for the conduct of activities causing fire hazards, maintenance of fire safety

equipment and egress facilities, standards for fire extinguishers, etc. In addition, the NFC establishes the standard for prevention, containment and fighting of fires originating outside buildings which may present a hazard to a nearby community, and sets the standards for the storage and handling of dangerous goods, flammable liquids and combustible liquids.

.2 The following guidelines were used as reference in the development of the DEW Line Clean Up Protocol and Contract Specifications. These guidelines are identified as reference materials only.

.1 Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments indicate the degree of treatment and effluent quality that will be applicable to all wastewater discharged from existing and proposed Federal installations.

.2 National Guidelines for the Landfilling of Hazardous Waste (CCME Report, April 1991) are to be used by regulators, designers, owners, and operators of hazardous waste facilities. They cover site selection, design, construction, closure and post-closure care, monitoring, and operation. They are intended for new, not existing facilities.

.3 Guidelines for Preparation of Hazardous Material Spill Contingency Plans identify factors that should be considered in the development of hazardous material spill contingency plans and the information that should be incorporated into a comprehensive contingency plan.

.4 Code of Good Practice on Dump Closing or Conversion to Sanitary Landfill at Federal Establishments (1977) outlines the guidelines to improve operation and properly close existing dumps. It is intended to promote a consistent approach to the clean up of existing dumps to prevent contamination of water, air and land and to ensure that the best particular control technology is used.

.5 Code of Practice for Used Oil Management in Canada describes environmentally sound options for the handling, storage, collection, transportation, recycling, reuse and disposal of used oils in Canada. It is intended to provide guidance for used oil generators and to regulatory authorities in the formulation of provincial or regional used oil management strategies.

.6 Canadian Environmental Quality Criteria for Contaminated Sites compiled by the Canadian Council of Ministers of the Environment (CCME) provide numerical limits for contaminants in soil and water intended to maintain, improve, or protect environmental quality and human health at contaminated sites. The criteria are intended to provide general technical and scientific guidance to provincial, federal, territorial, and non-governmental agencies in the assessment and remediation of contaminated sites across Canada. They serve as bench marks against which to assess the degree of contamination at a site.

.7 Canadian Drinking Water Guidelines are also compiled by CCME for Canadian Drinking Water Quality for specified uses of water likely of concern at contaminated sites.

3.3 NORTHWEST TERRITORIES ACTS, REGULATIONS AND GUIDELINES

.1 The Territorial Government and DIAND jointly administer the part of the NWT which contains the CAM-M DEW Line site. The Territorial seat of government and the DIAND regional office are in Yellowknife. The DIAND district office is located in Iqaluit. In addition to the Federal and Territorial Acts and Regulations identified in Clause 3.2, the clean up of the CAM-M site is governed by the following:

.1 *The Explosive Use Act* provides controls for surface blasting other than for mining purposes.

.2 *The NWT Wildlife Act* provides for the protection of wildlife and wildlife habitats as well as regulated harvest of selected species.

.3 *The NWT Environmental Protection Act* provides for protection of the environment from the discharge of contaminants, clean up of contaminants and unsightly premises. In addition, the powers of inspectors as well as offenses and penalties are defined. The Act applies only to situations not authorized by other Canadian Acts in the NWT. The following guidelines under the NWT Environmental Protection Act may be applicable to the cleanup of the CAM-M site:

- Guideline for the Management of Waste Antifreeze;
- Guideline for the Management of Waste Asbestos:
- Guideline for the Management of Waste Batteries:
- Guideline for the Management of Waste Solvents:
- Guidelines for the General Management of Hazardous Waste in the NWT; and
- Guideline for the Management of Waste Paint.

.4 The Spill Contingency Planning and Reporting Regulations outline requirements for filing of a contingency plan and for reporting of spills.

.5 The Northwest Territories Archaeological Sites Regulations, pursuant to the *Northwest Territories Act*, protects archaeological sites in the Northwest Territories from disturbance and prohibits the removal of archaeological specimens, except under permit.

.6 *Safety Act*: Occupational Health Regulations outline the health and safety standards to be maintained at workplaces to ensure the health and safety of persons.

.7 Guidelines for Removal of Materials Containing Friable Asbestos outline guidelines to be used to remove friable asbestos.

3.4 NUNAVUT

.1 In 1990, leaders of the federal and territorial governments, and the president of the Tungavik Federation of Nunavut (TFN) signed an Agreement-in-Principle establishing Nunavut, a land claim settlement area incorporating almost two million square kilometres of the present NWT. Inuit ratification of the document was achieved in November 1992, and the Land Claim Agreement was signed by the Federal government, GNWT and TFN in May 1993. Nunavut Tunngavik Incorporated (NTI), established on April 1, 1993, is an Inuit corporation in charge of implementing the Nunavut Land Claims Agreement.

.2 There are no Nunavut specific requirements for work being conducted within the DND DEW Line site reservation. As a partner in the clean up process, there will be, however, representatives from the NTI present on the site. It should be noted that certain activities may result in reporting requirements. These would include reporting any archaeological finds to the Inuit Heritage Trust. The Contractor shall comply with any reporting requirements outlined in the Nunavut Land Claims Agreement.

3.5 OTHER

.1 Transportation and disposal of hazardous wastes is to be conducted by licensed waste handlers, in compliance with the appropriate legislation.

3.6 PERMITS

.1 The Contractor involved in the site clean up process will be required to acquire and pay for all necessary permits, approvals and authorizations associated with the Contractor's site operations, and with the handling, transport and disposal of hazardous material. A partial list of these requirements is presented in Table 3.1.

TABLE 3.1
LIST OF APPLICABLE AUTHORIZATIONS FOR CLEAN UP ACTIVITIES

Authorization	Authority	Activity to Which Authorization Applies	Contact	Minimum Turnaround Time	Responsibility for Permit Application
Land Use Permit	Territorial Land Use Regulations (NWT)	Camps, heavy equipment, explosives, new roads, fuel storage and use, landfill, terrain protection, waste disposal.	Indian and Northern Affairs Canada P.O. Box 1500 Yellowknife, NT X1A 2R3 (867) 920-8165	42 days	DND
Quarrying Permit/ License	Territorial Quarry Regulations (NWT)	Extraction, staking, dimensions.	Indian and Northern Affairs Canada P.O. Box 1500 Yellowknife, NT X1A 2R3 (867) 920-8165	42 days	DND
Authorization for Works or Undertakings Affecting Fish Habitat	Fisheries and Oceans Canada (NWT)	Stream crossing, culverts, drainage, siltation and erosion control, effluent discharge.	Government of Canada - Dept. of Fisheries and Oceans (867) 920-6640	1 week	Contractor
Transportation Permits	Transportation of Dangerous Goods Act	Shipping.		Advance notification 30 days	Contractor
Transportation Permits	International Air Transport Association Dangerous Goods Regulations	Air transport.		Advance notification 30 days	Contractor

TABLE 3.1
LIST OF APPLICABLE AUTHORIZATIONS FOR CLEAN UP ACTIVITIES

Authorization	Authority	Activity to Which Authorization Applies	Contact	Minimum Turnaround Time	Responsibility for Permit Application
Water Use and Waste Disposal Licenses	Northwest Territories Water Act	Water use and waste disposal.	NWT Water Board (867) 920-8191	8 weeks	Contractor - for camp operation requirements and clean up activities, as required.
Archaeological Research Permit [1]	Northwest Territories Act, Archaeological Sites Regulations	Investigation of archaeological sites, mitigation, monitoring.	Prince of Wales Northern Heritage Centre (867) 920-8084	3 weeks	DND
Fishing Licenses	Department of Renewable Resources	Recreational fishing.			Personal applications only.
Firearms Acquisition Certificates	RCMP	Use and storage of firearms.	Any RCMP detachment	6 weeks	Personal applications only.

[1] Only required in the event that heritage resources are discovered during clean up activities.

4.0 GENERAL ENVIRONMENTAL PROTECTION MEASURES

4.1 GENERAL

.1 The lands associated with the CAM-M, Cambridge Bay site, have distinctive biophysical characteristics associated with arctic environments. Potential impacts related to the clean up of the site include degradation of the permafrost regime, disturbance of existing vegetation, uncontrolled erosion, point source contamination, and disruption of terrestrial and wildlife populations, as well as human health impacts. The procedures and requirements provided in this section are intended to be protective of these ecosystem components.

4.2 CONSTRUCTION CAMP

.1 Siting

.1 At the CAM-M site, the Contractor can elect to use commercial facilities in the Hamlet of Cambridge Bay, or establish a separate construction camp on the site.

.2 Locate the camp site in an area with minimal ground cover. A potential construction camp site has been identified on the Construction Drawings.

.3 Locate the construction camp in an area that is as close as practical to the main area(s) of clean up and where possible, on an existing gravel pad or former borrow area.

.4 Do not impede surface drainage, and maintain a distance of at least 30 metres from the nearest water body.

.5 Avoid ice-rich substrates and protect permafrost by construction of gravel pads and/or elevation of heated buildings on wooden supports.

.6 Avoid areas containing archaeological resources.

.7 Do not interfere with LRR/LSS activities in accordance with provisions of the Site Use Restrictions (SUR).

.2 Equipment and Vehicle Use and Maintenance

.1 Restrict vehicle and mobile equipment travel at the site to established roads, stream crossings and work pads.

.2 Overland movement of equipment and vehicles is not allowed where damage to the vegetation or underlying soils may occur.

.3 Following heavy rains, vehicle and heavy equipment use outside of road and work pad areas is not permitted until the soil has drained sufficiently to prevent excessive rutting, and until authorized by the Engineer.

.4 Mobile equipment and vehicle operators shall yield the right-of-way to wildlife where safe to do so. Do not operate vehicles in a manner which harasses any species of wildlife.

.5 Perform vehicle and equipment servicing in designated areas only, where special care can be taken to contain, handle and dispose of maintenance fluids, parts, and waste.

.6 Conduct fuelling and lubrication of equipment in a manner that avoids spillage of fuels, oils, greases and coolants. When refuelling equipment, operators shall use leak-free containers and reinforced rip- and puncture-proof hoses and nozzles. Operators are to be in attendance for the duration of the refuelling operation and are to ensure that all storage container outlets are properly sealed after use.

.3 Storage and Handling of Fuel and Other Hazardous Substances

.1 Locate fuel storage facilities such that there is no interference with LRR/LSS activities.

.2 Store fuel in self-dyking containers, or position over an impervious liner and surround by an impervious dyke of sufficient height to contain not less than 110% of the capacity of the tank.

.3 Avoid sites that slope towards waterways or other environmentally sensitive areas; exhibit ponding or flooding; or have high groundwater tables, excessive seepage, or ice-rich (thaw-sensitive) soils. Avoid archaeological resources.

.4 Smoking is prohibited within 7.5 metres of the fuel storage facility. Provide appropriate signage as detailed in Section 01546 of the Contract Specifications.

.5 Inspect fuel storage facilities at least once each week for the duration of the project. Make available fire-fighting equipment for immediate access at each fuel storage facility.

.6 Store all barrels containing fuel and/or other hazardous materials in an elevated position either on their side with bungs facing the 9 and 3 o'clock position or on pallets, upright, banded and encased in overpack containers.

.7 All barrels shall be individually identified. The label shall be to industry standards and shall provide all information necessary for health and safety, and environmental purposes. Make available, to all personnel, Material Safety Data Sheets (MSDS) for all materials maintained in the construction camp.

.8 Treat all waste petroleum products including used oil filters as hazardous material, and handle and dispose of following the requirements detailed in Section 02090 of the Contract Specifications. Do not use waste oil for dust suppression. Report all fuel spills to the Engineer and, as provided by legislation, to the applicable government authorities, as indicated in Section 7.0.

.9 Conduct regular inspections of all machinery hydraulic, fuel, and cooling systems. Repair leaks immediately.

.10 Preassemble and maintain emergency spill equipment including at least two fuel pumps, empty 200 litre barrels and absorbent material sufficient to clean up a 1,000 litre spill at all permanent fuel storage sites and work camps (see Contingency Plans, Section 7.0).

.11 Remove all barrels, redundant fuel storage facilities and associated materials and equipment from the site at the conclusion of the work.

.4 Water Management

.1 The existing water supply at CAM-M may be used as a potable water source providing such use does not adversely affect fish habitats.

.2 Potable water must be treated where required to protect human health. The camp water supply shall be remote from sources of contamination.

.3 Provide a standard chlorination or iodisation unit for treatment of potable water, and test potable water for bacteria as required by the appropriate public health ordinances.

.4 Obtain a Water Use Licence from the NWT Water Board for the development of alternative water sources, as required, and comply with all conditions of the license.

.5 Water withdrawals must not endanger fish or draw down the water level so as to adversely affect fish habitat. Water withdrawal rates are not to exceed 10% of existing stream flow or 10% of total water body volume.

.6 Equip all water intake hoses with screens with a mesh size of 2.5 millimetres or less to prevent the intake of fish.

.5 Domestic Waste Management

.1 Dispose of all kitchen wastes and other non-hazardous wastes in an on-site landfill unless otherwise specified. The landfill selection is to be determined jointly by the Contractor and Engineer. The location is not to interfere with NWS Operations.

.2 Temporarily store kitchen wastes in metal, animal-proof containers to prevent scavenging of waste by wildlife and reduce scattering of debris.

.3 The Contractor, in consultation with the Engineer, will determine acceptable options for sewage disposal. Each construction camp shall provide primary sewage treatment, using a portable septic tank system or equivalent, prior to discharge.

4.3 ROAD CONSTRUCTION AND MAINTENANCE

.1 Existing roads and trails provide access to most sources of aggregate, potable water and/or landfill locations. The 1984 DIAND report "Land Use Guidelines: Access Roads and Trails" shall be followed so that road and trail maintenance shall emphasize preservation of the permafrost regime, vegetation patterns, existing surface drainage patterns, water quality and stream flows.

.2 Establishment of new roads off the DND Reserve is subject to the terms of the Land Use Permit.

.3 Avoid any archaeological resources during construction. Do not site roads within 30 metres of any other ecologically sensitive areas. Ice-rich soils, especially peatlands, are also to be avoided during road construction.

.4 Prepare the road bed with a sufficient thickness of fill to prevent terrain damage. Install culverts to maintain natural cross drainage and prevent ponding. These culverts shall be removed from such roads and drainage restored at the end of the clean up operations.

.5 Monitor access roads for signs of erosion and take remedial action where necessary. Do NOT use oil for dust control. Dust suppression, if required, is to be effected with water only.

4.4 STREAM CROSSING AND DIVERSION

.1 Adhere to all government regulations, licensing requirements/procedures and inspections regarding the protection of water quality and stream integrity to prevent destruction of spawning areas. Obtain Authorization from Fisheries and Oceans Canada for any works or undertakings affecting fish habitat including alterations, diversions, or crossings.

.2 Prevent siltation of waterways and disruption of streambeds, using the following procedures:

- .1 Minimize activities adjacent to watercourses.
- .2 Install cofferdams, silt barriers, or other suitable barriers.
- .3 Do NOT operate equipment in waterways.
- .4 Do NOT use Streambeds for borrow material.
- .5 Do NOT dispose of excavated fill, waste material or debris in waterways.
- .6 Avoid concentrations of fish during activities adjacent to waterways.
- .7 Do NOT ford streams at or immediately upstream of locations containing concentrations of fish.

.3 When removing culverts, the following procedures are to be followed to minimize disruption to stream beds and potential fish habitat:

.1 Schedule removal of culverts to avoid concentrations of fish if such concentrations exist.

.2 Install or construct cofferdams of non-erodible material, silt barriers, or other suitable methods to control siltation downstream of the work area.

.3 Reshape site to conform to grade of adjacent stream bank following removal of the culvert.

.4 Use riprap or other suitable methods, if required, to stabilize the bank at the worksite.

.5 Remove all silt controls following completion of work, and ensure the grade of the streambed is restored.

4.5 BORROW PIT AND QUARRY DEVELOPMENT AND OPERATION

.1 The Northwest Territories has specific permit requirements for opening and operating gravel pits and quarries outside the DLCU reservation for CAM-M shown on the drawings. The Quarry Permit can be expected to have site-specific provisions for environmental protection. DIAND issues permits under the *Territorial Quarrying Regulations*. Permit environmental protection conditions are for the purpose of minimizing the impact of development and extraction activities on surface drainage patterns, water quality, soil erosion, vegetation and, in some cases, wildlife or fish.

.2 Comply with all terms and conditions of the Quarry Permit, including recontouring/reclaiming and site clean up prior to site abandonment.

.3 Minimize the number of borrow pits opened by using existing borrow pits and aggregate stockpiles where feasible. Use of alternate sources is subject to approval by the Engineer.

.4 Avoid all archaeological resources during the siting of borrow areas. Borrow areas are to be located at least 30 metres from the nearest water body providing potential fish habitat, and other sensitive resources.

.5 Strip organic overburden, if present, and stockpile separately for use in restoring the borrow area.

.6 Following excavation, recontour the area to restore natural drainage patterns and work overburden into the recontoured borrow area to prevent erosion. Provide drainage and run-off control using diversion ditches and sediment filters, as required, to prevent sediment-laden run-off from reaching water bodies.

.7 During aggregate extraction, control vehicle and equipment operations in areas adjacent to the borrow pit to minimize the extent of disturbance.

.8 Stockpile aggregate on ice-poor, well drained ground such that surface drainage is not impeded. Locate the stockpile area a minimum of 30 metres from archaeological resources, water bodies, and other sensitive resources.

.9 If archaeological features or artifacts are encountered during borrow pit operations, notify the Engineer, avoid the area of the find, and restrict activities to other areas of the pit until further instructions are received. (See Section 5.0.)

.10 Development of additional borrow areas that are not identified on site plans will be at the discretion of the Engineer and shall meet all siting criteria and permit requirements as discussed above.

4.6 HAZARDOUS MATERIAL PROCESSING AREAS

.1 Develop a hazardous material processing area for the processing of hazardous materials in accordance with Section 02090 of the Contract Specifications.

.2 Locate the hazardous material processing area a minimum of 30 metres from the nearest archaeological site or water body, on ice-poor, well drained soil, and as close to the location of work as is practicable.

.3 Control movement of vehicles and equipment between the hazardous material processing area and work site to prevent the spread of potentially hazardous material and contaminated soils along roadways.

4.7 CONTAMINATED SOILS

.1 DEW Line Clean Up Criteria (DCC) have been established as remediation criteria for contaminated soil. Locations of contaminated soil are delineated on the Drawings. Soils exceeding the DCC criteria are to be removed as detailed in the Contract Specifications and Drawings.

.2 Minimize disturbance to adjacent areas during excavation.

.3 Avoid spillage of material during transportation between the excavation site and the disposal location.

.4 Following excavation of DCC Tier II soil, decontaminate excavation equipment as detailed in Section 02066 of the Contract Specifications.

.5 A program of confirmatory testing of contaminated areas will be carried out by the Owner as outlined in the Contract Specifications.

4.8 LANDFILL CLOSURE AND DEVELOPMENT

.1 Install geocomposite clay liners where indicated on the Contract Drawings. Cover landfills with granular fill material to provide a minimum cover thickness as indicated on the Contract Drawings. Regrade the landfill areas to restore natural drainage patterns and topography.

.2 Provide drainage controls such as diversion ditches and sediment filters, as required, to prevent runoff from reaching water bodies during closure, remediation and construction of landfills.

4.9 DISPOSAL OF SITE DEBRIS

.1 Collect, sort and dispose of hazardous and non-hazardous site debris in accordance with Section 02219 of the Contract Specifications.

.2 Test contents of intact barrels and dispose of as described in the Contract Specifications, Section 02090.

.3 Handle and dispose of asbestos according to the methods described in the Contract Specifications, Section 02081.

.4 Workers are to wear appropriate protective clothing when handling potentially hazardous material as directed in Section 02090 of the Contract Specifications.

.5 Minimize off-road activity during collection of site debris.

.6 Avoid releasing any hazardous materials into the environment during the handling of hazardous materials. Invoke the emergency response plan (Section 7.0) and take appropriate action in the event of a spill or other emergency situation.

4.10 DEMOLITION OF BUILDINGS AND STRUCTURES

.1 Carry out demolition, sorting and disposal of hazardous and non-hazardous demolition waste in accordance with Section 02060 of the Contract Specifications.

.2 Do NOT dismantle or disturb structures containing nests actively occupied by birds of prey during the nesting season (see Section 5.0).

4.11 MARINE VESSEL MOVEMENTS

.1 It is anticipated that marine vessels will be used for the transport of equipment and materials to and from the CAM-M site. Under certain circumstances, marine vessels can adversely affect wildlife. Sea mammals and flocks of waterfowl are to be avoided by all shipping.

.2 To minimize disruption to hunting and fishing activities, vessel traffic shall be restricted to traditional shipping lanes, where they exist. Vessel operators are to avoid marked fishing gear that may be encountered near shore.

.3 Inform all marine vessel operators of all applicable EPP requirements when scheduling arrangements are made or at other appropriate periods prior to the arrival of the vessel at the site.

4.12 AIRCRAFT MOVEMENTS

.1 It is anticipated that fixed wing commercial and, if required, chartered aircraft will be used at the CAM-M construction site to transport personnel, perishable supplies and various construction materials and equipment.

.2 Where concentrations of birds or mammals are known to be near construction sites, charter pilots shall be advised to maintain an altitude of at least 500 metres and preferably 1,000 metres, above ground or water, when passing over these areas. Low-level flights to observe or photograph wildlife shall not be permitted.

.3 Inform all charter aircraft pilots of all applicable EPP requirements when scheduling arrangements are made or at other appropriate periods prior to the arrival of the aircraft at the site.

4.13 TRANSPORTATION OF HAZARDOUS MATERIALS

.1 Store hazardous materials in accordance with Section 02090 of the Contract Specifications and ensure that each storage area is separated from the nearest water body by a 30 metre buffer zone; at beach storage areas consideration must be given to the reach of sea ice and storm tides.

.2 Shipping

.1 The *Transportation of Dangerous Goods Act* (TDGA) and the *International Air Transport Association* (IATA) Dangerous Goods Regulations govern the shipment of hazardous goods within Canada. If shipping out of Canada, Canadian regulations and regulations of the destination country both apply. Requirements of the International Marine Dangerous Goods Code (IMDGC) must be addressed in international waters (e.g., near Greenland).

.2 Any material classified as hazardous by the TDGA must be accompanied by the appropriate TDG shipping documents. The documents are to state the shipper, the receiver and all carriers involved in the transport of the shipment. Non-hazardous materials are also to be accompanied by a document indicating ownership and responsibility of the receiver.

.3 Package all hazardous material in accordance with the Transportation of Dangerous Goods Regulations.

.4 For TDG classification 9.3, dangerous goods in quantities larger than 5 kilograms or 5 litres, and for wastes that contain more than 500 grams of PCB mixture (a mixture with PCB concentration > 50 ppm), the following procedures apply:

.1 Complete a waste manifest for each shipment, specifying a unique reference number and DND's waste generator number, to accompany the shipment to the final destination.

.2 Document on the manifest the origin and destination of the shipment.

.3 All manifests are to be reviewed and signed by the Engineer prior to submission.

.4 Deliver the manifest to the initial carrier and forward to the relevant government agencies within two days of sending the shipment.

.5 On receipt of the dangerous goods, the receiver shall send a copy of the manifest to the sender, the carrier of the shipment, and the relevant government agencies within two working days.

.6 The Contractor is responsible for submitting the signed TDG shipping documents and waste manifests to the relevant parties as detailed in the TDG Regulations.

.7 Notify provincial and territorial governments of any shipments of PCB mixtures which pass through their borders.

.5 Test any waste of unknown TDGA hazard to determine whether any transport hazard exists according to the regulations. Package any substance which is considered hazardous under the TDGA in accordance with the regulations and the national standard Performance Packaging for Transportation of Dangerous Goods. For shipment off-site by air, the IATA Dangerous Goods Regulations and its standards will apply. Both the TDGA and the IATA regulations specify the packaging requirements for dangerous or hazardous goods according to risk.

.3 Labelling

.1 Label and placard packages according to class and division of the hazardous item. Requirements may differ between the IATA and TDGA regulations. A label or placard design is unique to each classification.

.2 Label all packages on at least two sides and write the name of the hazardous substance beside the label. Placard large containers as defined by the class and division with the TDG product identification number clearly displayed. The product identification number is indicated by the substance name in the regulations.

4.14 EXPLOSIVES

.1 BLASTING SHALL NOT OCCUR UNLESS SPECIFIC PERMISSION IS GRANTED BY THE NORTH WARNING SYSTEM AND THROUGH THE SITE ENGINEER. The use of explosives is potentially dangerous to human and animal health. The following procedures apply:

.1 Comply with all provisions as detailed in the SUR.
.2 Obtain all necessary permits and licenses.
.3 Handle, transport, store, and use explosives and all other related hazardous material in accordance with all applicable laws, regulations and orders of regulating authorities.
.4 Electric detonation methods are PROHIBITED.
.5 Restrict use of explosives to authorized and certified/licensed personnel who have been trained in their use.
.6 Minimize defacement of landscape features and other surrounding objects controlling the scatter of blasted material beyond the cleared working area.
.7 Minimize shock or instantaneous peak noise levels.
.8 Prevent scatter from blasting from reaching fuel or hazardous substance storage locations. A minimum distance of 300 metres in rocky terrain, and 1,000 metres in the presence of metal is required.
.9 Do NOT conduct blasting in the vicinity of concentrations of wildlife.
.10 Restrict blasting to above water and a minimum of 100 metres from concentrations of fish.

4.15 WORK SITE CLEAN UP AND ABANDONMENT

.1 Remove all buildings, fuel barrels, vehicles, equipment and surplus materials from the site following completion of work.

.2 Stabilize all large earthwork slopes. Gravel access roads required for operation and maintenance may remain.

.3 Regrade all disturbed areas to restore natural drainage patterns.

5.0 PROTECTION MEASURES FOR VALUED ENVIRONMENTAL COMPONENTS

5.1 GENERAL

.1 This section describes the required protection measures for the valued environmental components identified at the CAM-M, Cambridge Bay site. The Contractor shall comply with all requirements described in this section.

5.2 HUMAN HEALTH AND SAFETY

.1 Potential hazards to human health and safety are present at the CAM-M site in the form of hazardous materials and contaminated soil, hazardous local terrain and unpredictable weather conditions. Hazardous material and contaminated soil have the potential to enter water bodies and the food chain, and thereby affect vegetation, fish, wildlife and the health of people who travel, hunt and fish in these areas. Site debris may present a physical hazard to people travelling through these locations.

.2 Take all necessary precautions when handling and transporting hazardous materials and contaminated soil to ensure that the materials do not come into contact with site personnel or local residents. Site workers shall wear protective clothing as directed in Section 02090 of the Contract Specifications when handling hazardous materials.

.3 All site personnel working on or in the vicinity of clean up operations must be trained in, made aware of, and adhere to the requirements of the Workplace Hazardous Materials Information System (WHMIS) program.

.4 Outdoor recreation activities of site personnel have the potential to adversely affect nearby fish, wildlife and heritage resources. Although recreational time will be limited, some staff will undoubtedly wish to leave camp for recreational purposes. Subject to camp rules and the requirements of territorial fishing licenses and regulations, staff may be permitted to leave the site for recreational purposes. Normal precautions for Arctic travel include: provision for rapidly changing weather conditions; possible bear encounters; filing a trip plan; first aid kit, survival kit and insect repellant.

.5 Personal firearms are not permitted in the construction camp. However, each camp superintendent shall keep sufficient weapons (including one for backup or replacement) for defence in the event of a bear encounter which threatens human safety. When not in use, all weapons shall be locked as per all applicable legislation and access controlled by the camp superintendent.

.6 All country foods must be stored as to preclude the attraction of wildlife. This should include the need to store all foods in properly refrigerated areas that are indoors, in the construction camp.

5.3 LOCAL RESOURCE USE

.1 The community of Cambridge Bay is located approximately three kilometres from the site. Local residents fish and hunt, including traditional hunts of sea mammals, in the general vicinity of the site. A potential concern involves physical conflicts between ship traffic and fishing nets, near shore pollution incidents during ship-to-shore transfer of fuel and equipment, shore-to-ship transfer of hazardous materials, and shoreline terrain damage during beach landing area preparation.

.2 Clean up activities and related shipping shall not interfere with local resource use in excess of levels normally encountered by established local activities and shipping. To minimize disruption to hunting and fishing activities, vessel traffic shall be restricted to traditional shipping lanes where they exist. Vessel operators are to avoid marked fishing gear that may be encountered near shore.

.3 Schedule annual meetings with local associations to discuss these issues and to minimize any potential problems. This will include consultation to confirm the scheduling and locations of hunting and fishing activities. Assign a contact person to answer questions and address concerns of local residents or resource users.

5.4 LOCAL ECONOMY AND CONTACT WITH LOCAL RESIDENTS

.1 Cambridge Bay, with a population of over 1,000 people, offers a wide variety of services. Impacts and potential impacts of the clean up activities on the local economy are for the most part predicted to be positive. Benefits may accrue to Inuit and northern residents from employment prospects and training opportunities.

.2 Maximize employment and business opportunities in the north, in accordance with the guidelines in the Contract Specifications. Provide communication with the community of Cambridge Bay to keep them informed of contracts and significant project developments for which local businesses and individuals may be qualified to work.

.3 Schedule regular meetings with the community of Cambridge Bay to discuss ongoing work and to address any community concerns. Briefing meetings with all camp personnel are required to discuss and explain Camp rules which must be established to minimize conflict with local residents.

5.5 AESTHETIC VALUE

.1 It is anticipated that the clean up activities will have an overall positive effect on the aesthetic value of the CAM-M site in that redundant buildings and structures will be demolished, and all disturbed areas (landfills, debris piles, sewage outfalls and borrow pits) will be restored as closely as possible to their original appearance. Construction personnel are to ensure that their activities do not contribute to any additional degradation of the local environment.

5.6 SURFACE WATER AND FISH HABITAT

.1 The removal of the contaminated soil from the sewage outfall and remediation of main landfills requires general drainage maintenance. These activities have the potential to degrade the quality of surface water if executed improperly. Siltation, erosion and a decrease in water quality can result.

.2 Arctic char and arctic grayling are known to exist in the water supply lake near the station. In addition, abundant lakes and ponds, as well as streams in the general vicinity may contain other fish species, and fish may appear in large numbers during spawning and migration. The timing of spawning and migrations is dependent upon the species; however, in rivers and streams, concentrations may be observed at any time during the ice-free period.

.3 The following applies to work adjacent to waterways:

.1 Prevent siltation of water bodies supporting fish by the use of berms or silt fences as required, and by minimizing activities adjacent to watercourses.
.2 Do NOT operate equipment in waterways.
.3 Do NOT use streambeds for borrow material.
.4 Do NOT dispose of excavated fill, waste material or debris in waterways.
.5 Survey areas immediately upstream and for 100 m downstream of proposed work areas to determine presence of concentrations of fish.
.6 Avoid concentrations of fish during culvert removals and work adjacent to waterways.
.7 Do not ford streams at or immediately upstream of locations containing concentrations of fish.
.8 Restrict blasting to above water and more than 100 m from concentrations of fish.
.9 Where possible, conduct in-stream work during low flow periods.
.10 When removing culverts:
- slope banks to conform to grade of adjacent stream bank as applicable; and
- if required, stabilize bank using erosion resistant material.

.4 Obtain authorization from Fisheries and Oceans Canada for alterations or crossings of any water body constituting fish habitat. (See Section 3.0.)

5.7 PERMAFROST SOILS

.1 Poorly drained soils are typically ice-rich, and thus susceptible to permafrost degradation. The top layer of soil provides a protective thermal barrier that prevents permafrost degradation. The often poorly developed organic layer and typically sparse vegetation cover results in soils that are easily eroded. Erosion removes the thermal protection and causes permafrost degradation. Vehicle and equipment traffic, and soil excavation can disturb the surface layer and degrade the permafrost.

.2 Minimize disturbance to permafrost soils by restricting vehicle and heavy equipment traffic to existing roads and designated work areas unless approved by the Engineer.

.3 Minimize activity in areas adjacent to work areas.

.4 Do NOT operate vehicles or heavy equipment off-road following heavy rain or melting snow until the soil has dried sufficiently to prevent excess rutting.

.5 Install appropriate drainage and erosion control structures along access roads, where required.

.6 Implement the following procedures during facility siting and excavations to minimize disruption of permafrost:

- .1 Site facilities such as work camps and storage areas such that they do not impede surface drainage or result in ponding. Construct gravel pads or use other appropriate methods to protect ice-rich soil from thermal or physical damage.
- .2 Minimize extent of disturbance during excavations.
- .3 Promptly backfill excavated areas with granular fill as indicated on the Contract Drawings and Specifications.
- .4 Minimize the development of new borrow areas.
- .5 Do NOT store materials directly on unprotected ground.
- .6 Regrade disturbed areas to restore natural drainage patterns.

.7 Repair rutting that impedes local drainage or exposes permafrost in ice rich soils to the satisfaction of the Engineer.

5.8 COASTAL MARINE RESOURCES

.1 The coastline adjacent to Cambridge Bay on Victoria Island is used by marine mammals and seabirds for feeding, migration and breeding. These mammals and birds are particularly vulnerable to oil spills since they spend a significant amount of time on the surface; some may occur in large concentrations.

.2 Seabirds are also vulnerable to disturbance during the nesting period. Species such as fulmars, murres, and terns nest in colonies that may be disrupted by low-flying aircraft and close approaches by ships.

.3 Where concentrations of birds and mammals are known to be near construction sites, advise chartered aircraft pilots to maintain an altitude of at least 500 metres and preferably 1000 metres above ground or water when passing over these areas. Low-level flights to observe or photograph wildlife shall not be permitted. Inform charter aircraft pilots of all applicable EPP requirements when scheduling arrangements are made or at other appropriate periods prior to the arrival of the aircraft at the site.

.4 Marine mammals and flocks of seabirds must be avoided by all shipping. Where feasible, ships shall maintain a minimum distance of 1 km from known seabird colonies.

.5 During transfer of fuel to land-based storage tanks, equip the hoses or pipes with properly functioning and approved check valves to prevent backflow of fuel in the case of failure. Attend all fuel transfer operations at all times. In the event of a spill of fuel, implement the appropriate contingency plan as detailed in Section 7 of this EPP.

5.9 TERRESTRIAL RESOURCES

.1 Peary caribou, muskoxen, arctic fox, raptors (birds of prey), waterfowl and other wildlife have been reported at the CAM-M site. Polar bear encounters in the vicinity of the Station appear to be rare. Concern for human/wildlife contact, which may include wildlife harassment, habitat degradation or dangerous encounters, is based on the potential for disruption of activities and increased wildlife mortality. Wildlife mortality may also result from consumption of waste or contaminated substances.

.2 Protect wildlife from avoidable impacts using the following procedures:

.1 EMPLOY A DEDICATED BEAR MONITOR(S) AT ALL TIMES.
.2 Require all on-site personnel to be familiar with the contents of "Safety in Bear Country".
.3 Do NOT feed, injure or harass wildlife.

.4 Ensure that clean up activities do Not interfere with wildlife movement through the area.

.5 Do NOT disturb birds nesting on site.

.6 Vehicle, vessel and aircraft movements shall conscientiously avoid all known concentrations of wildlife or areas known to be frequented by important species or concentrations of wildlife.

.7 Do NOT attempt to chase, catch, divert, follow or otherwise harass wildlife by aircraft, vehicle, boat or on foot.

.8 Control refuse and make inaccessible to bears and other scavengers.

.9 In the event of unanticipated or unavoidable contact with mammals, particularly polar bears, act in accordance with the contingency plan (Section 7.0). Familiarize all individuals working at or visiting the site with this plan as part of their orientation to the work site.

.10 Equipment and vehicles shall yield to wildlife, where possible.

.11 Except in the vicinity of the airfield, advise charter aircraft pilots not to fly at elevations lower than 500 metres above ground or water.

.12 In the event that wildlife are spotted from the air, aircraft shall not make descents for observation or photography.

.13 Domestic or wild pets are not allowed in camps with the exception of controlled watch dogs.

.14 Project personnel shall not be permitted to possess personal firearms. The only firearms allowed on site shall be for protection from bears and shooting of animals exhibiting aberrant behaviour. The firearms shall be controlled by the camp superintendent.

.15 Report vehicle collisions with wildlife, encounters with troublesome animals, and/or the presence of potentially troublesome animals to the Engineer and to the District Wildlife Officer.

.3 At the CAM-M site, several species of avifauna have been observed, including Rough-Legged Hawk, nesting in a communication dish at the Station, shorebirds nesting in high concentrations in the vicinity of the sewage outfall, and Snow Buntings, eiders, ptarmigan, plovers and turnstones all nesting in the general vicinity of Station facilities.

.4 Disruption of avifauna during the nesting period can result in reproductive failure. The arrival of avifauna at specific locations in the Arctic is influenced by weather conditions and other factors. Inclement weather or a delayed spring melt may delay arrival by several weeks. In general however, the chronology of arrival, nesting, and departure is relatively consistent between years.

.5 Typically within two weeks of arrival, nesting commences and continues for one to two months until the young leave the nest. Following this, the birds feed in preparation for the fall migration and depart by mid to late September.

.6 The migration and breeding chronology of major groups of birds is shown in Table 5.1.

.1 Schedule work to minimize impacts on these species.

.2 Specifically avoid raptors because of their comparatively low abundance and their position at the top of the food web. Minimize impacts on these species by scheduling disruptive activities outside of the nesting period and by discouraging nesting at work areas.

.3 Removal of nest material from structures may prevent Rough-Legged Hawks from nesting; however, if the nest is occupied upon arrival at the site for commencement of clean up activities, proceed with demolition only after the young have left the nest.

.7 The population of Rough-Legged Hawks was low in 1994 and it is possible that nests will not be active during the clean up period.

TABLE 5.1
APPROXIMATE NESTING AND BREEDING CHRONOLOGY FOR BIRDS OBSERVED NEAR THE CAM-M SITE

Group or Species	Arrival	Nesting Period		Length of Breeding Season	Departure
		From	To		
Peregrine falcon (central)	Mid-May	Early June	Late August	65-75 days	Late September
Rough-Legged Hawk	Late May to Early June	Early June	Late August	65-75 days	Late September
Waterfowl	Late May to Early June	Early to Mid-June	Mid to late July	25-38 days	Early September
Shorebirds	Late May to Early June	Early June	Early to late July	20-25 days	Late August

.8 Shorebirds are expected to begin arriving in early June. They commence nesting during early June and the young leave the nest soon after hatching. The young develop over the remainder of the summer and the birds begin to congregate for the migration south.

.9 Conduct removal of raptor nests at Cambridge Bay in consultation with the Northwest Territorial Department of Renewable Resources.

5.10 HERITAGE RESOURCES

.1 DEW Line sites are often located in areas which have been seasonally settled or visited by Inuit over the past 1000 years: by their Palaeo-Eskimo predecessors for as many as three thousand years before the Inuit: and by Europeans and Eurocanadians over the past four centuries. Archaeological sites and recent camps and cemeteries exhibiting evidence of the presence of former occupants have been found on or adjacent to all of the DEW Line stations. Many of the sites have been disturbed by previous DEW Line activities. The traditional and scientific value of heritage resources is greatly diminished if they are disturbed or moved. Archaeological sites in the Northwest Territories are protected by law, and disturbance of archaeological sites and collection of archaeological specimens is prohibited except under the terms of an archaeological research permit.

.2 At the CAM-M site, two recent sites were identified, as shown on the Contract Drawings. A small cairn is located 600 m north of the station and a 1 m long hunting blind is located on the east side of the small lake to the south/southeast of the station. The work activities at the site will not adversely affect these known resources; however, given the nature of the environment in the region, there is some potential for future finds.

.3 Obtain a generic pamphlet from the regulatory authorities for use at the site, which illustrates typical site and artifact types, and describes procedures to follow in the event of encountering an archaeological site.

.4 In the event that heritage resources are discovered during clean up activities, the following procedures apply:

- .1 Report discovery of archaeological site or artifacts immediately to the Engineer.
- .2 Do NOT disturb archaeological sites or artifacts discovered and cease work in that area until appropriate authorities are notified.
- .3 Report all archaeological finds in accordance with Section 7.4 of this EPP.
- .4 Do NOT resume activities in the vicinity of the find until confirmation and direction from the Engineer is received.

.5 Reports of archaeological sites found shall include:

- .1 the identify of the person making the discovery;
- .2 description of the site location, including topography, landmarks, etc.:
- .3 the nature of the activity resulting in the discovery;

.4 description of the archaeological site, including size, features or details visible, supplemented by sketches or photographs;

.5 actions currently taken to protect the archaeological features; and

.6 extenuating circumstances.

.6 All personnel are to be discouraged from visiting archaeological and other heritage sites.

6.0 ENVIRONMENTAL INSPECTION

6.1 GENERAL

.1 As part of its overall commitment to a strategy of environmental protection and quality assurance, the Owner intends to employ a dedicated environmental inspection staff to monitor its own compliance with the EPP and all applicable laws, regulations, permits, guidelines and standards.

.2 The environmental inspection staff will be a part of the DEW Line Clean Up Project Management Office (PMO). The PMO has been formed as per the Terms of Reference of the Memorandum of Understanding between the Director General Environment and Defence Construction Canada (DCL).

.3 The Owner will be represented at the site by the Engineer who will report to the DCL Contract Manager. Environmental inspection staff at each site will report to the Engineer.

.4 The Contractor will maintain regular contact with the environmental inspection/Quality Assurance team. This will include, but is not limited to:

- attendance at regular meetings as scheduled with the inspector
- immediately reporting concerns over any aspect of this EPP
- immediately reporting any spills or other event that may have an effect on human or environmental health and/or safety.

7.0 CONTINGENCY PLANS

7.1 GENERAL

.1 The following generic contingency plans present the prescribed course of action to be followed in the case of unanticipated events during clean up such as fuel or chemical spills, potentially dangerous wildlife encounters, and the discovery of heritage resources. The plans will enable persons in a particular contingency situation to maximize the effectiveness of the environmental protection response and meet all regulatory requirements for reporting to the appropriate authorities.

.2 Submit to the Engineer for approval detailed spill contingency plans for the site. Identify response capabilities by detailing response times, and types and volumes of spills to which the Contractor can respond to. The following information is required as a minimum:

.1 a description of pre-emergency planning:
.2 personnel roles, lines of authority and communication:
.3 emergency alerting and response procedures:
.4 evacuation routes and procedures, safe distances and places of refuge:
.5 emergency phone numbers:
.6 directions/methods of getting to the nearest medical facility;
.7 emergency decontamination procedure:
.8 emergency medical treatment and first aid:
.9 emergency equipment and materials;
.10 emergency protective equipment;
.11 procedures for reporting incidents: and
.12 spill response and containment plans for all materials which could potentially be spilled.

7.2 FUEL AND HAZARDOUS MATERIAL SPILLS

.1 The objective of the fuel-related contingency plan is to protect the environment by minimizing the impacts of spill events through clear and concise instructions to all personnel.

.2 A variety of fuels, and liquid and dry chemicals will be in use at the CAM-M site during clean up. The greatest volumes will likely involve Arctic diesel fuel. Other substances such as acids, solvents, lubricants, hydraulic fluid, antifreeze, fuel additives and engine coolants also pose potential environmental and safety hazards. For simplicity, POL and minor chemical spills will be considered together. As chemicals are usually stored and transferred in barrels of 205 litres or smaller capacity, any spill quantity is likely to be small.

.3 Based on the hazardous materials identified for disposal, Emergency Response Plans (ERPs) are not required during transport under the TDG regulations. If materials identified for disposal are listed on Schedule XII of the TDG regulations and are in volumes exceeding those specified in that schedule, register an ERP with the Director General of the Transport of Dangerous Goods Directorate. The ERP is to contain information such as the nature and risks of the particular dangerous good and contact names and numbers for emergency assistance.

.4 If a spill or a dangerous occurrence is discovered during transport in excess of those volumes listed in Part 9, Table 1 of the TDG regulations, the person who has management or control of the goods at that time must immediately notify the Emergency Authority in the province where the occurrence took place. The appropriate authorities are listed in Part 9, Table 2 of the TDG regulations. The person must also notify his/her employer, the owner of the vehicle on which the goods were carried, and the owner of (consigner) the dangerous goods. The person's employer is then required to issue a written report to the Director General within 30 days of the occurrence in the form detailed by the TDG regulations.

.5 The most common pollution incidents will probably involve spills of arctic diesel or aircraft fuel onto land or water resulting from:

- human error during transfer operations between holding tanks;
- rupture of lines, tanks, valves, dykes or barrels from deterioration or damage;
- seepage from fittings or valves;
- accidental spills during POL transport via vehicle or aircraft; and
- equipment failure.

.6 A person in control of a substance at the time of a spill shall report the spill via the appropriate spill response line. Quantities of substances which represent "a spill" are listed in Schedule B of the NWT Spill Contingency and Reporting Regulation NWT Reg R-068-93. Advise the Engineer of all spills.

.7 In the event of a spill, protection of human health and safety is paramount. Contamination of personnel involved in clean up is a real possibility as is contamination of the surrounding workplace and environment.

.1 The individual discovering a spill shall:

.1 Warn people in the immediate vicinity and evacuate the area if necessary.

.2 Identify the spilled material if possible, and take all safety precautions before approaching it.

.3 Attempt to immediately stop the leakage and contain the spill, if safe to do so.

.4 Report to the Engineer the spill location, type of material, volume and extent, status of spill (direction of movement), and prevailing meteorological conditions.

.5 In the event of a shoreline spill, provide information about beach location, contaminated area, beach characteristics, presence of wildlife and archaeological sites which might be threatened.

.2 Both the Contractor and the Engineer have specific responsibilities in responding to a spill event. These are described as follows:

.1 Contractor's Responsibilities:

.1 Ensure response crew members are appropriately trained.

.2 Practice spill prevention by performing regular maintenance on all POL systems, and by using proper methods for the handling of POL products.

.3 Provide personnel, materials, and equipment necessary for adequate response to POL and hazardous materials spills.

.4 Establish communications and verbally report all spills to the Engineer as soon as practical.

.5 Isolate and eliminate all ignition sources.

.6 Ensure safety and security at the spill site.

.7 Stop or reduce discharge, if safe to do so.

.8 Make every effort to contain the spill by dyking with earth or other barriers on land and containment booms on water.

.9 Assess potential for fuel/chemical recovery.

.10 Deploy on-site crews to mobilize pumps, empty 205 L drums, hand tools and absorbents to the spill site.

.11 Request assistance, if required, from DND (through the Engineer) and the Canadian Coast Guard.

.12 Hire additional assistance, if required, from northern residents, local communities, and commercial spill response firms.

.13 Follow all guidelines and regulations for disposal of spilled materials, associated debris, contaminated soil and water as established by appropriate government agencies.

.14 Assess potential terrain and wildlife disturbance, erosion and archaeological site disturbance in any areas to be affected by clean up operations and contact relevant authorities.

.15 Document all events/actions.

.16 Report the spill to the Spill Report Line and follow up with a written spill report. This report shall summarize the initial report information; confirmation of spill volume; actions taken; future remediation/monitoring requirements; and a sketch map and/or photographs of the spill area.

.3 Be familiar with bear deterrent procedures and ensure that at least one designated staff member is competent with the camp firearms. Be familiar with the GNWT "Safety in Bear Country" manual and make available a reference copy at the site office.

.4 Collisions with large mammals such as caribou, bears and muskoxen may occur. Operators of vehicles and equipment shall make every effort to avoid such encounters. Congregations of animals near food or garbage are a potential problem which can be overcome by proper disposal of food wastes. Concentrations of scavenging animals such as wolves, foxes and bears increase the risk of diseases, particularly rabies, and danger to personnel. The following precautions and actions are to be taken at each site:

.1 The killing of wildlife for any reasons at variance with the Wildlife Act and regulations is an offence. Coordinate procedures for handling wildlife problems and incidents with the regional GNWT wildlife office.

.2 Advise personnel to maintain watch for bears and immediately report any sighting to the Engineer. Immediately notify all personnel of the sighting. If the threat of attack is considered significant, assign a full time bear monitor to the site.

.3 Use vehicles, noisemakers and, if necessary, a firearm to frighten the bear away from the site.

.4 Shoot the bear only if the bear returns repeatedly, refuses to leave or directly threatens human safety. Killing is considered a last resort and, if at all possible, contact the appropriate wildlife officer and alert them to the problem. If a bear is to be shot, assign the task only to a person familiar with and competent with the camp firearm. Wounded or otherwise aggravated bears can be extremely dangerous.

.5 Report the death of a bear to the Engineer and the appropriate GNWT wildlife officer who will issue instructions as to disposal of the carcass and the formal reporting procedures to be followed.

.6 Due to the possibility of rabies, shoot any animal which bites a human and retain the carcass intact pending instructions from the appropriate wildlife officer. If possible, notify the wildlife officer before any drastic action is taken. Seek medical advice for treatment of animal-inflicted wounds from the appropriate medical facility.

7.4 HERITAGE RESOURCES

.1 Avoid all archaeological sites at the CAM-M site during clean up activities.

.2 Unrecorded archaeological sites containing such remains as habitation structures, hunting blinds, food caches and graves, and objects such as tools, utensils and butchered animal bone may be inadvertently discovered and disturbed during clean up activities. All site personnel are prohibited from knowingly disturbing any archaeological or other heritage site or collecting any artifacts. Removing artifacts is a criminal offence.

.3 In the event of finding heritage resources:

.1 Cease site work immediately in the area; do NOT remove any artifacts or other associated objects from the site unless their integrity is threatened in any way.

.2 Mark the site's visible boundaries and avoid the area during clean up activities.

.3 Report the discovery of the site immediately to the Engineer and the Prince of Wales Northern Heritage Centre and Inuit Heritage Trust by phone or fax and comply with any site protection instructions issued. Do not engage in any archaeological excavation activities.

.4 Prepare reports of any discovery for the respective regulatory authority and DND/PMO indicating:

- the identity of the person making the discovery;
- the nature of the material;
- the nature of the activity resulting in its discovery;
- the location of the find including a description of the site location, topography, landmarks, etc.
- a description of the archaeological site including size, features or details visible, supplemented by sketches or photographs;
- protection measures instituted;
- the present location of any heritage material removed for safekeeping; and
- extenuating circumstances.

7.5 KEY CONTACT LIST

.1 24 Hour Spill Report Line

.1 In the event of a spill, contact the 24 Hour Spill Report Line and provide with all the relevant details.

- Telephone: (867) 920-8130 Fax: (867) 873-6924

.2 Environment Canada, as lead agency shall then be contacted by officials to ensure the appropriate response. The lines are staffed 24 hours a day and can also be used to coordinate a response in the event of a non-spill emergency outside of normal working hours.

DEW LINE CLEAN UP PROJECT
CAMBRIDGE BAY, NWT

SITE USE RESTRICTIONS

1.0 PURPOSE

1.1 The purpose of these restrictions is to ensure that while DEW Line Clean Up (DLCU) activities are underway at CAM-M (the Cambridge Bay Long Range Radar Site), there will be no interference with ongoing operations of the North Warning System (NWS).

2.0 GENERAL CONDITIONS

2.1 The NWS sites, while the property of Department of National Defence (DND) and the responsibility of North Warning System Office (NWSO), is in the custody of the NWS Operation and Maintenance (O&M) Contractor, presently FRONTEC Logistics Corp. It is O&M Contractor personnel who operate and maintain the site. Their rules and regulations concerning conduct, posted on site, must be obeyed. Failure to comply with these procedures, regulations and rules will result in expulsion from the site.

2.2 The Cambridge Bay site serves as an NWS Long Range Radar (LRR) and Logistics Support Site (LSS) and will be occupied for the duration of the project.

2.3 The DLCU Contractor will respect all NWS installations in the vicinity of the work and confirm the condition of existing facilities with Site Engineer.

2.4 The DLCU Contractor shall make good any damage resulting from Contractor's use of any access roads or working areas on the site. The DLCU Contractor shall plan his work so that all site accesses are kept open during construction.

2.5 The DLCU Contractor must use the site in strict accordance with this document, the North Warning System Environmental Protection Order (NWO 12.01), North Warning System POL Spill Contingency Plan, the contract specifications, and the NWS LSS Manager's briefing.

2.6 The DLCU Contractor must not unreasonably encumber the site with materials or equipment, and must store products and equipment in a manner which will not interfere with operations of the NWS station or unrestricted access to the airstrip or sealift beach.

2.7 The DLCU Contractor will provide all temporary facilities including the design, supply, construction, maintenance, operation and removal of the facilities and services required to support the clean up of the site. The DLCU Contractor may choose to upgrade and use those buildings scheduled for demolition as part of his construction camp.

2.8 Temporary facilities shall be provided as specified at the work site, and any other location where temporary facilities are essential to the work. Temporary facilities shall satisfy Federal, Provincial, Territorial and local authorities having jurisdiction, comply with the requirements the NWS POL Spill Contingency Plan prepared by Frontec Logistics and North Warning System Order NWO 12.01 'Environmental Protection'.

3.0 COMMUNICATIONS

3.1 The point of contact for the NWS and the NWS O&M Contractor at CAM-M is the CAM-M LSS Manager who is responsible for all NWS and NWS O&M contractor activities on site. It is imperative that CAM-M LSS Manager be aware of all activities occurring at the site.

3.2 The point of contact for the NWSO (North Warning System Office, Ottawa) is the NWS OPI (North Warning System, Office of Primary Interest) for the DLCU Project. Contact between the DLCU Project and the NWS OPI shall be maintained through the Site Engineer.

3.3 Land in and about the Cambridge Bay airport is owned by the Government of the Northwest Territories. The NWS maintains facilities in this area including the hangar, ATB, aircraft refueller and associated aircraft POL tanks, and POL tanks and facilities located at and adjacent to the sealift beach.

3.4 The point of contact for activities related to the Cambridge Bay Airport is the Airport Manager. The DLCU Contractor shall schedule his work with due regard to potential conflicts that may arise due to those operations, and shall ensure compliance with all requirements set out by the Airport Manager.

3.5 Radio, telephone and fax communications are the responsibility of the DLCU project and the DLCU project contractor. Limited telephone communications are available through the CAM-M site facilities on a non-interference basis with site operations and other activities ongoing at the site.

Installation of dedicated telephone lines into NWS facilities at CAM-M from the town of Cambridge Bay must be approved by and coordinated with the NWS and the CAM-M LSS Manager.

PROCEDURES FOR THIRD PARTY SUPPORT

Third Party Support (TPS) includes all transport, meals, accommodations, equipment, facilities (laboratory and office space) available to federal government representatives as well as response to requests (such as response to a request to connect the DLCU Contractor's power cables to site power) and required inspections of the site and equipment required by these Site Use Restrictions.

TPS may be provided on the condition that it does not interfere with normal site operations, and after a complete and accurate TPS request has been submitted and approved. All costs associated with the provision of TPS are the responsibility of the DLCU project.

All requests for TPS must be forwarded to the NWS OPI (North Warning System Office of Primary Interest) for the DLCU Project using the form attached as Annex A. The OPI is currently designated as DAEPM(R&CS 2-3-5), J.D. Boissonneault (Telephone (613-992-9743, FAX (613) 996-4366).

All TPS requests arising from the DLCU Contractor will be provided through the Site Engineer.

Requests for TPS will be reviewed by NWSO and forwarded to the NWS O&M Contractor for action.

The DLCU Project must submit a yearly forecast of TPS requirements not later than 120 days prior to the anticipated start of the construction season, and must provide a monthly update of these requirements when changes are required.

The yearly forecast shall include:

a) number, type and intended use of equipment and vehicles:
b) the anticipated time and duration of the requirement:
c) the number of persons anticipated; and
d) the nature of TPS required (meals, accommodation etc.).

12.0 ELECTRICAL POWER

12.1 Normal electrical power (120/208 Volt, 3 phase, 60 Hz) is available to the DLCU Contractor for construction office trailers (lighting and heating) and small tools etc.

12.2 Power at CAM-M will be hooked up to the source by the NWS O&M Contractor.

12.3 The DLCU Contractor is to install, maintain and remove temporary lines to the satisfaction of the Site Engineer.

12.4 Availability of power is subject to operational requirements and may be discontinued any time without acceptance of any liability for damage or delay caused by its removal. In the event of power shortage or failure, priority will be given to operational requirements.

13.0 WATER

13.1 Water supply is available from the water lake shown on the drawings. Contractor will haul its own water supply. The quality of drinking shall conform with the requirement set out in Environmental Protection Plan. Water for barrel washing and other clean-up activities will be hauled by the Contractor.

14.0 PROJECT GARBAGE AND SEWAGE

14.1 The DLCU Contractor is responsible for the collection and disposal of all garbage and the off site disposal of sewage generated from temporary facilities brought to the site for the duration of the project.

15.0 USE OF ALCOHOL AND DRUGS ON NWS SITES

15.1 All NWS sites are dry sites. Alcohol and/or illegal drugs are not permitted.

16.0 HAZARDOUS AREAS

16.1 Due to the nature of electronic equipment, radiation and high voltage hazards, exist in certain areas of the NWS structures. Care should be taken to observe posted regulations concerning these hazards.

16.2 There are no human health hazards caused by working in the vicinity of NWS radar sites due to the type and power of electronic emissions from the radars.

17.0 HUNTING/FIREARMS AND FISHING

17.1 Hunting is not permitted at any of the sites. Personal firearms are not permitted on site. Fishing is permitted with a valid licence and in strict accordance with existing regulations.

18.0 PHYSICAL

18.1 NWS sites are at remote locations. Personnel who are in need of medical facilities or suffering from a condition that requires a frequent dosage of medication to maintain proper mental and/or physical health should not work at NWS sites.

19.0 SITE SECURITY

19.1 The DLCU Contractor shall be responsible for the safety and security of his personnel, material, equipment and work, whether the equipment is made available to the DLCU Contractor from NWS site as part of on-site support or belongs to the DLCU Contractor.

IRD PARTY SUPPORT REQUEST

ıse print clearly or type)

:_____

IUESTING AGENCY:_____ ORIGINATOR:_____

HORITY (NWSO OPI):_____ TELEPHONE:_____

T PURPOSE:_____

CONTRACT NO.:_____

LSS and/or SITES TO BE VISITED:	ARRIVAL DATE:	DEPARTURE DATE

TOR INFORMATION:

IK	SURNAME & FIRST NAME	EMPL. NO.	GENDER M/F	SEC. LEVEL	COMPANY & POSITION HELD

MMERCIAL TRAVEL:

Flight Number	Arrival Time	Community

ARTER ARRANGEMENTS:

l support for this activity require the use of Government

ıtracted O&M airlift from the LSS to/from a LRR or SRR ?

es and known, estimate the number of flying hours required by aircraft type.

_____ Rotary Wing _____ Fixed Wing

VSO 2-4 authorizing signature. _____

)TE: *Provide a description of the O&M flying support requirement in the body of your request.*

ATERIAL HANDLING FOR SHIPMENT TO THE LSS

______________	Total Weight: ______	Cubic Feet: ______
______________	Total Weight: ______	Cubic Feet: ______
______________	Total Weight: ______	Cubic Feet: ______
______________	Total Weight: ______	Cubic Feet: ______

DDITIONAL REQUIREMENTS:

ɔo you require ground transportation airport to site? Y / N

Do you require rations and quarters on site? Y / N

/ill you be visiting LSS-Goose Bay? Y / N

(If yes, please see LSS-Goose Bay Ramp Pass Application)

'See Annex C)

Do you require access to:

Operations Zone: Y / N

Security Zone: Y / N

COMSEC Area: Y / N

SITE SUPPORT:

ɔ you require the use of site personnel? Y / N

ɔ you require heavy equipment? Y / N

If yes, please specify requirements below:

____

____

____

PLEASE PROVIDE ANY OTHER PERTAIN INFORMATION WHICH MAY BE REQUIRED:

____

____

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