.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.