

**Appendix III**  
**DND/NTI Cooperation Agreement**

AGIKATIGEGUTAORYOK

UGUNAGA

NUNAVUT TUNNGAVITKUN TIMIKUTIGIYANIN

UVALO

KOENMIN IHUMAKHUTIVLOGIN KANATAMI

GIVGAKTOKTIGIVLOGO UNA

MINISTAORYOK AGUYAKTULIKIYINI

HALUMAKHIVALEATILOGIN IHOAKHAKHUGILO

TULAEGUYUN IGLUKAKVEN

UGUNANI NUNAVUTMI NUNATAKNIKMI NUNAORYUN

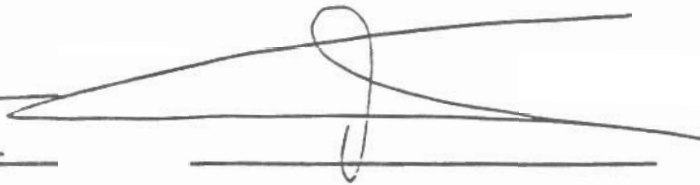
(AVATILIKINIGUN PIVIKHAKAKVEORYUN)



ARTHUR C. EGGLETON  
MINISTAORYOK AGUYAKTILIKIYINI

KANATAOM GAVAMAENI

UVLOANI \_\_\_\_\_



JAMES EETOOLOOK  
HIVULIK TUKLEATA  
IKHIVAOTALEOM  
NUNAVUT TUNNGAVITKUN  
TIMIKUTIGIYANI  
UVLOANI \_\_\_\_\_

[illegible]

٥٢٢

② Flow  
Your copy of original  
16 Nov 98

AGREEMENT  
BETWEEN  
NUNAVUT TUNNGAVIK INCORPORATED  
AND  
HER MAJESTY IN THE RIGHT OF CANADA  
AS REPRESENTED BY  
THE MINISTER OF NATIONAL DEFENCE  
FOR THE CLEAN-UP AND RESTORATION OF  
DISTANT EARLY WARNING SITES  
WITHIN THE NUNAVUT SETTLEMENT AREA

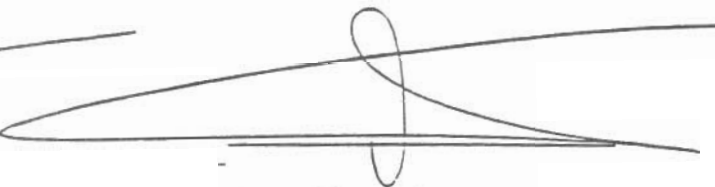
(Environmental Provisions)



Arthur C. Eggleton  
Minister of National Defence

Dated

1 Sep 98



James Eetoolok  
1<sup>st</sup> Vice President  
Nunavut Tunngavik Incorporated

Dated

1 Sep 98

AGIKATIGEGUTA OYOK

UGUNAGA

NUNAVUT TUNNGAVITKUN TIMIKUTIGIYANIN

UVALO

KOENMIN IHUMAKHUTIVLOGIN KANATAMI

GIVGAKTOKTIGIVLOGO UNA

MINISTA OYOK AGUYAKTULIKIYINI

HALUMAKHIVALEATILOGIN IHOAKHAKHUGILO

TULAEGUYUN IGLUKAKVEN

UGUNANI NUNAVUTMI NUNATAKNIKMI NUNAOYUN

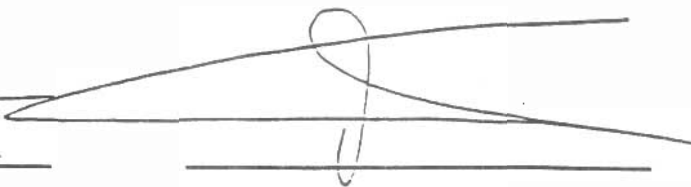
(AVATILIKINIGUN PIVIKHAKAKVEOYUN)



ARTHUR C. EGGLETON  
MINISTA OYOK AGUYAKTILIKIYINI

KANATAOM GAVAMAENI

UVLOANI \_\_\_\_\_



JAMES EETOOLOOK  
HIVULIK TUKLEATA  
IKHIVAOTALEOM  
NUNAVUT TUNNGAVITKUN  
TIMIKUTIGIYANI  
UVLOANI \_\_\_\_\_

## **PREAMBLE**

WHEREAS the Government of Canada (Canada) has modernized the air defences of Canada through a joint USA/Canada project referred to as the North American Air Defence Modernization Project (NAADM);

AND WHEREAS NAADM includes the decommissioning of some of the Distant Early Warning (DEW Line) radar sites and the conversion of others to North Warning System (NWS) radar sites;

AND WHEREAS fifteen DEW Line sites are located on Department of National Defence (DND) reserves within the Nunavut Settlement Area (NSA);

AND WHEREAS DND wishes to undertake an environmental clean-up of the DEW Line sites, facilities and associated areas;

AND WHEREAS the Inuit and the Federal Government have an interest in all activities that occur within the NSA, including, but not limited to, protecting the ecosystem integrity and the existing and future well-being of the residents and communities of the NSA and increasing the participation of Inuit and Inuit Firms in business and employment opportunities in the NSA;

AND WHEREAS DND and NTI are voluntarily entering into this Agreement to establish a framework for the decommissioning, remediation and restoration of the DEW Line sites in the NSA;

NOW THEREFORE, in consideration of the premises and mutual covenants contained herein, the Parties agree as follows:

### **1.0 DEFINITIONS**

**Debris** means hazardous and non-hazardous materials of non-natural origin existing on the surface, or visible and partially embedded within one metre of the surface or within two metres of the surface of any water body at low tide and any structures scheduled for demolition

**DEW Line sites** means the Distant Early Warning Sites listed in paragraph 3.1 below;

DEW Line Clean-up  
Environmental Provisions

**DCL** means Defence Construction (1951) Limited the designated contracting agent for contracting for the Department of National Defence for the Dew Line Clean-up;

**DND** means the Crown in the right of Canada represented by the Minister of National Defence or his delegate

**Engineered Landfill** means a landfill professionally designed to permanently isolate the contents of the landfill from contact with the environment.

**Hazardous materials or substances** means all materials or substances designated as hazardous under territorial or federal legislation at the time of the clean-up of a particular landfill.

**Inuit** has the same meaning as in the NLCA;

**Inuit Owned Lands** has the same meaning as in the NLCA;

**Landfill** means any area where a concentration of non-hazardous and/or hazardous substances or materials or Debris have been buried;

**Minister of National Defence** means the Minister of National Defence or his designate

**Nunavut Settlement Area** has the same meaning as in the NLCA;

**Rules** means the *Rules and Procedures for the Management of Inuit Owned Lands* adopted by NTI, as amended from time to time,;

**Parties** means NTI and DND;

**Regional Inuit Associations (RIA)** means the Qikiqtani Inuit Association, the Kivalliq Inuit Association and the Kitikmeot Inuit Association;

**Relevant RIA** means the RIA in the region in which a DEW Line site is located;

**Work** means all the materials, equipment, goods, services, labour, matters and things done or furnished or required to be done or furnished to perform any DEW Line site decommissioning, remediation or restoration activity.

## 2.0 OBJECTIVES

- 2.1 The objectives of this Agreement are to establish a broad environmental framework for participation of the Inuit in the clean-up of the DEW Line Sites in the NSA and to achieve cost effective and an environmentally sound DEW Line clean-up as described herein.
- 2.2 DND and NTI will enter into a corollary agreement with respect to economic benefits for the Inuit and Inuit firms including provisions for training (this agreement may or may not involve regional negotiations).

## 3.0 GENERAL

- 3.1 **Scope.** This Agreement relates to the decommissioning, remediation, restoration and related activities of the following DEW Line sites:

PIN 2 - Cape Young  
PIN 3 - Lady Franklin Point  
PIN 4 - Byron Bay  
CAM M - Cambridge Bay  
CAM 1 - Jenny Lind Island  
CAM 2 - Gladman Point  
CAM 3 - Shepherd Bay  
CAM 4 - Pelly Bay  
CAM 5 - Mackar Inlet  
FOX M - Hall Beach  
FOX 2 - Longstaff Bluff  
FOX 3 - Dewar Lakes  
FOX 4 - Cape Hooper\*  
FOX 5 - Broughton Island  
DYE M - Cape Dyer

\* Prior to the signing of this Agreement the clean-up of Cape Hooper (FOX 4) had already begun under a separate set of understandings. Therefore only the post clean-up provisions of this Agreement will apply to this site

- 3.2 **Precedent.** This Agreement is not to be construed as a precedent for any other activities of DND, Canada or any third party. Nothing in this Agreement shall be interpreted or used to define the rights of the Parties, Canada or any third party in relation to any matter under the NLCA or to interpret any Article of the NLCA except for the purpose of this Agreement.;
- 3.3 **Urgency.** The Parties mutually agree to recognize the urgency of the matters dealt with in this Agreement and to perform all required actions as expeditiously as possible.
- 3.4 **Nunavut Land Claims Agreement.** The Parties recognize and acknowledge their respective obligations to comply with the NLCA in connection with all Work.
- 3.5 **Inuit Owned Lands.** All use of and access to Inuit Owned lands by DND, Contractors and subcontractors for the purposes of the Work is subject to the NLCA and the Rules, to the extent that the Rules are not inconsistent with the NCLA.
- 3.6 **Clean-up Schedule.** The commencement and completion of the Work will take place in accordance with the attached Appendix A. The Parties will use their best efforts to adhere to Appendix A.
- 4.0 **Steering Committee**
- 4.1 There shall, during the duration of this Agreement, be a Steering Committee to monitor progress, develop recommendations and suggest alternative solutions for achieving the commitments set forth in this Agreement by:
- (a) reviewing progress in achieving the commitments set out in this Agreement;
  - (b) ensuring that any perceived deficiencies with respect to the Work or to commitments under this Agreement discussed and, where agreed, are expeditiously acted upon;
  - (c) considering other items of mutual concern, as appropriate;

- (d) requesting the Environmental Working Group (EWG), established in accordance with section 7 of this Agreement, to undertake additional study and formulate recommendations to the Steering Committee.
- 4.2 The Steering Committee shall consist of four members, two to be named by DND and two to be named by NTI. It shall meet at least twice a year and at the request of any Party at mutually agreed upon times and locations. In order to place an item in the agenda, a Party shall provide that item to the other Party not less than ten working days before each scheduled meeting. The Steering Committee shall operate on the basis of unanimous agreement.
- 4.3 Recommendations agreed to by a majority of the members of the EWG will be incorporated into the site specific plan referred to in section 23 of this Agreement or into the post-clean-up methodology as the case may be. Where either DND or NTI disagree with the EWG recommendations, it will raise the issue at the Steering Committee for discussion in accordance with clause 4.4. If the Environmental Working Group is deadlocked ( ie 2-2) on any issue, including scoring of the risk assessment matrix and landfill remediation, the Steering Committee will discuss the situation and attempt, in good faith, to arrive at a consensus. The Parties pursuant to clause 4.5 may, where appropriate, seek independent advice.
- 4.4 Should unanimous agreement not be reached at the Steering Committee the following approach will be used:
- (a) Prior to Clean-up Commencing - the clean-up will not commence until the issue is resolved to the satisfaction of both Parties.
  - (b) Clean-up has commenced - the clean-up will continue in accordance with the site specific clean-up plan. If the issue is not included in the site specific plan then DND will proceed based on the advice provided by its consultants. DND and NTI will continue to attempt to arrive at a consensus.

In either event, both Parties continue to have the option of involving the provisions of section 5 of this Agreement if unanimous agreement cannot be reached. If unanimous agreement is reached at a later date or there is an arbitration decision which differs from the actions taken by DND, the new decision will be implemented.

4.5 The Steering Committee shall, with the agreement of the members, acting reasonably, invite representatives of Government departments, Inuit organizations, non-governmental organizations, Contractors, Subcontractors and others to provide advice or information as required. If requested by the other Party, DND and NTI agree to provide each other with all relevant scientific and technical information, with the exception of:

- advice to Ministers or Inuit Boards of Directors
- negotiating strategies
- commercially confidential third Party information
- personal information

4.6 The Parties each shall be responsible for their respective costs associated with participating in Steering Committee meetings.

## 5.0 **ARBITRATION**

5.1 If DND and NTI disagree on any question of fact or mixed question of law and fact related to the interpretation, implementation or operation of this Agreement, with the exception of any matter within the jurisdiction of the Arbitration Board under the NLCA, either party may by written demand refer the dispute to arbitration in accordance with the following provisions.

5.2 An arbitration Panel consisting of a single arbitrator who both Parties agree is qualified to arbitrate the question in dispute will render a decision on the dispute. If DND and NTI cannot agree on a single arbitrator then a decision will be rendered by an Arbitration Panel consisting of three similarly qualified arbitrators, one of whom shall be chosen by NTI, one by DND and the third by the two so chosen, which third arbitrator shall be the chairperson. If within fifteen days of having received a written demand, or such extended time as the parties agree, a party fails to either agree to a single arbitrator or to appoint an arbitrator, or if the two arbitrators appointed by the parties do not agree upon the third arbitrator, then upon written application by either party such third arbitrator shall be appointed by the superior court having jurisdiction in the NSA.

- 5.3 The arbitration proceedings shall be held within thirty days following the appointment of the Arbitration Panel in a location agreed upon by the Parties or, if the Parties are unable to agree, as determined by the arbitration panel. The timing for the panel hearing may be extended by mutual consent of the Parties, not unreasonably being withheld.
- 5.4 The arbitration panel shall have jurisdiction to determine all questions of fact, questions of mixed law and fact and to make an award, including interim relief, payment of interest, and costs. If an arbitration panel makes no decision as to costs, each party shall bear its own costs and an equal share of the other costs of the arbitration, including the remuneration and expenses of the arbitration panel.
- 5.5 The Arbitration Panel shall render a decision, in writing, within thirty days of the completion of the arbitration hearing and state the reasons on which it is based. The decision is final and binding and is not subject to appeal. Pursuant to section 17(3)(b) of the *Federal Court Act*, the Parties agree that the Federal Court Trial Division shall have jurisdiction to review the decision of an arbitration panel on any grounds set out in section 18.1(4) of the *Federal Court Act*.
- 5.6 Where a party to an arbitration fails to comply with any of the terms of the decision of the arbitration panel, any party to the arbitration may file in the office of the Registrar of the superior court having jurisdiction in the NSA, a copy of the decision in the prescribed form, whereupon the decision shall be entered in the same way as a judgement or order of that court, and is enforceable as such.
- 5.7 The territorial *Arbitration Act* shall apply in any arbitration under this Agreement to the extent that it is not inconsistent with this Agreement, unless otherwise agreed by the parties.
- 5.8 The arbitration panel may, on application, allow any to participate in an arbitration as an intervenor, if in the arbitration panel's opinion the interest of that person may be directly affected by the arbitration, and on such terms as the arbitration panel in its discretion may order.
- 5.9 Unless the parties otherwise agree, the proceedings and Board's decision shall be made public.

## 6.0 Environmental Risk Assessment Matrix

6.1 All landfills will be scored by the EWG in accordance with the Environmental Risk Assessment Matrix as set out in Appendix B of this Agreement. The construction of this matrix takes into account two conservative assumptions:

- The contents of the landfills are unknown and all potential contaminants (ie substances typically used at DEW Line sites) may be present in the landfill
- If a contaminant comes into contact with receptors, it could have an adverse impact on those receptors regardless of the exposure duration or concentration

6.2 Landfills scoring 105 points or more are classified as potentially high environmental risk (Class A) and will be excavated. Landfills with a score of 100-104 points will be considered on a case by case basis to determine whether they should be excavated or considered as Class B landfills.

6.3 Landfills with a score in the range 75 to 99 points are classified as moderate environmental risk (Class B). An engineered leachate containment system will be provided for these landfills to mitigate against potential environmental risks. The landfill engineers under contract to DCL will take into consideration any suggestion of the EWG regarding the design of the leachate containment facility. In specific cases where an engineered leachate containment system cannot be constructed, the EWG will recommend whether complete excavation or partial excavation with a leachate containment system is required.

6.4 Landfills with scores of 75 or less are classified as low environmental risk (Class C). The remediation approach for these landfills will be the placement of an engineered cover following collecting, sorting, and appropriate disposal of debris where it may impact on the integrity of the landfill. Hazardous debris will be removed and disposed of in accordance with federal regulations. Generally, the final thickness of cover material will be approximately 0.75 metres, but may vary depending on site specific conditions.

6.5 Scores that fall within plus or minus five points of 75 points will be considered on a case by case basis.

- 6.6 The scoring of Category C: Receptors of the matrix will take into account local/traditional knowledge in accordance with the procedures set out in Section 8 of this Agreement. The primary focus for the collection of local/traditional knowledge will be on the local community and an Inuit representative who is familiar with the DEW site under assessment.
- 6.7 The scoring of the landfills will take place before the clean-up at that DEW site commences and the site specific clean-up plan is finalized.
- 7.0 **Environmental Working Group**
- 7.1 An Environmental Working Group (EWG) will be established. The EWG will consist of four members, two chosen by each of the Parties. The members will be qualified engineers and/or scientists with expertise in environmental remediation and clean-up in northern climates.
- 7.2 The EWG will, for each of the landfills prior to the clean-up of that site, be responsible for the scoring of the risk assessment matrix, interpreting the results and recommending a remediation solution in accordance with this Agreement. If a majority of the members of the EWG are in agreement with the EWG recommendations then DND will include these recommendations in its site specific plans which are referred to in section 23 of this Agreement. If the EWG is deadlocked then the issue will be referred to the Steering Committee as per section 4.3 of this Agreement.
- 7.3 During the monitoring period, the EWG will also examine the results of the monitoring program in accordance with the methodology set out in section 20 of this Agreement and report to the Steering Committee on the results of their investigation. Should changes to the monitoring plan and/or additional remediation be required, the EWG will make recommendations to the Steering Committee on what action should be taken as per section 4.3 of this Agreement.
- 7.4 The EWG will go on-site during the pre-cleanup delineation phase of the project to assemble information required, including local/traditional knowledge as per section 8 of this Agreement, to score the risk assessment matrix. DND will contribute \$10,000 per site to NTI to defray the cost incurred by its EWG members and a community representative selected by the relevant RIA (NTI Representative). DND will also provide the NTI representative transportation

costs whenever the NTI representatives are travelling to a site or to a community with the DND representatives on a DND charter. DND will also provide meals and accommodation for the NTI representative while at the site.

- 7.5 The EWG will also act as a resource to the Steering Committee and will upon request from the Steering Committee investigate certain matters and produce reports or studies for consideration by the Steering Committee. Both Parties agree to cover the costs of their members of the EWG to undertake such work.

#### 8.0 Local/Traditional Knowledge

- 8.1 Traditional and local knowledge for use in the scoring of the risk assessment matrix will be collected during the Pre-Cleanup Delineation phase of the DEW Line clean-up project.
- 8.2 An Inuit representative familiar with the DEW site and traditional use of the area around the site will be chosen by the relevant Regional Inuit Association to be on site during the pre-construction delineation phase of a site clean-up. The Inuit representative will work closely with the EWG to identify Inuit use of the area, wildlife patterns, and past events and occurrences that may have impacted on landfills (i.e. dumping, hazardous waste storage, natural occurrences) in order to assist in the scoring of the matrix.
- 8.3 DND and NTI will attempt to establish a community DEW Line Clean-up Committee which would facilitate the flow of local knowledge to the EWG prior to, and during, the site visit.
- 8.4 The EWG will visit the local community (ies) most affected by the DEW site. The EWG will conduct one-on-one interviews with a number of residents and will also meet with the Hamlet Administration Officer and/or the Hamlet Mayor, the local Hunters and Trappers Association, and relevant community organizations to obtain information concerning the traditional use of the area by the community. The Community Land and Resource Committee (CLARC) will be consulted if Inuit Owned Land is affected in any way.
- 8.5 In anticipation of these community consultations, DND, in consultation with NTI will prepare an information package in English and the relevant Inuit language for

use in the community consultations. The package will include maps of the site and the surrounding area along with sample questions (see Appendix D) that would facilitate discussion.

- 8.6 DND will provide NTI with at least six months notice regarding the site visit in a given season. Six weeks notice will be provided regarding the dates for the community visit. DND will attempt to arrange the timing for the community consultation to avoid harvest time when members of the community might be on the land. NTI in conjunction with the EWG will arrange the interviews with the various community associations and individuals.
- 8.7 The EWG will document all information collected during the community consultations. This information will be provided to DND, NTI, the relevant RIA and the host community.
- 8.8 All information collected from the interviews will be considered during the matrix scoring and will be given equal consideration with conventional scientific knowledge collected during the site visits.
- 8.9 Prior to the actual clean-up, DND will conduct a community information session to inform the residents of the scope of the Work and other relevant facts. In the case of CAM 4, there will be a community information session during the summer of 1998 at the option of the RIA. For Fox 5, in addition to this community information session, the EWG will be consulting the community of Broughton Island on FOX-5 as part of its work on scoring landfill evaluation matrices, during the summer of 1998 and DND will provide a limited public information session at that time.
- 9.0 **CEPA Soils**
- 9.1 Soils at concentrations exceeding federal regulations (referred to herein as "CEPA" soils) will be removed from the site and disposed of in a licenced facility in accordance with those federal regulations.
- 10.0 **Tier II Soils**
- 10.1 Tier II soils are defined in Appendix E of this Agreement.

10.2 Tier II soils will be excavated and placed in an engineered, lined, containment facility (Tier II Disposal Facility). After excavation, the area will be backfilled with sufficient clean fill to provide an effective layer over any remaining Tier I soils and to meet the requirement of clause 22 of this Agreement . A schematic of a Tier II Disposal facility is presented in Appendix K. Tier II soils may also be placed in a similarly engineered cell of a larger landfill. The location of the Tier II Disposal Facility will be selected in order to minimize potential environmental impact in a cost-effective manner. In some cases Tier II soils may be transported from one DEW site to another depending on soil volumes and project economics.

10.3 Confirmatory testing will be conducted in accordance with the methodology outlined in section 13 of this Agreement.

#### 11.0 Tier I Soils

11.1 Tier I Soils are defined in Appendix E of this Agreement.

11.2 Tier I soils will be excavated to a depth of to 30 cm if the soil is located on a flat or gently sloping area such as a gravel pad unless delineation testing indicates a lessor depth of contamination. In such a case, a suitable safety margin will be excavated. Where Tier I soils are located on slopes greater than 3:1 (horizontal:vertical), the contaminated soils will be excavated to a depth of up to 60 cm. After excavation, the area will be backfilled with sufficient clean fill to provide an effective layer over any remaining Tier I soils and to meet the requirement of clause 22 of this Agreement .

11.3 Tier I soils will be placed in a professionally engineered landfill where they may be used as intermediate fill.

11.4 During the pre clean-up delineation phase prior to going to tender for the clean-up, testing to determine the presence or absence of Tier II contaminated soil below the Tier I soils will be conducted.

#### 12.0 Hydrocarbon Soils

12.1 Hydrocarbon contamination will be based initially on the measurement of Total

will investigate areas of concern identified by NTI and/or its representatives who will be on-site during the delineation work. Risk assessment consideration will be given to soils that act as sources of contaminants to nearby aquatic environments even if the contaminants are below the relevant DCC criteria. The method of delineation will follow the grid as set out in Appendix F of this Agreement.

- 13.2 Confirmatory testing of contaminated areas, other than Tier I soils, will be conducted after contaminated soils have been excavated. Confirmatory testing will be conducted in accordance with the protocol outlined in Appendix F of this Agreement.
- 13.3 Should there be evidence to suggest that some contaminated areas were missed during the pre clean-up delineation work, these areas will be investigated in accordance with the pre clean-up delineation methodology.
- 13.4 During the confirmatory testing phase, NTI may assign a qualified observer to the site.
- 13.5 Appropriate quality assurance measures acceptable to the EWG will be taken to ensure the accuracy of all analytical work in the field or in laboratories.

#### 14.0 Debris

- 14.1 Debris will be collected and sorted into hazardous and non-hazardous components. Hazardous debris will be disposed of in accordance with Federal regulations. Non-hazardous debris will be buried in a professionally engineered landfill, provided there is a suitable location and sufficient gravel is available. Appendix C contains additional details concerning the destination of collected debris.
- 14.2 All debris which is attributable to the operation of any DEW site and is within two metres of the surface at low tide or within two metres of the surface of an inland water body will be removed by DND.

#### 15.0 Off Site Contamination and Debris

- 15.1 Where there is reasonable evidence of additional off site contamination or debris

Petroleum Hydrocarbons (TPH) where the TPH value is greater than or equal to 2500 ppm. Should the soils contain Tier I or Tier II contamination, they will be treated in accordance with the relevant sections of this Agreement. These hydrocarbon areas will be identified on site as part of the pre-construction delineation testing.

12.2 Each contaminated area will be evaluated qualitatively by the EWG using the checklist outlined in Appendix J of this Agreement.

12.3 Where remediation is required, one of the following options will be used:

- aerating the hydrocarbon contaminated soil in place to reduce hydrocarbon contaminant concentrations
- use of hydrocarbon contaminated soil as intermediate fill within an engineered landfill
- landfilling in a Tier II Disposal facility
- bioremediation using a landfarming or bio-pile processes
- soil washing
- other equivalent technologies recommended by the EWG

12.4 Based on site specific conditions, the EWG will recommend the most appropriate of the remediation options outlined in clause 12.3 in accordance with section 4.3 of this Agreement. The appropriateness of the options will take into consideration the environmental sensitivity of the area. Factors which will be considered in the selection of the method are:

- type of contaminant (ie fuel or lubricating oil)
- total volume of hydrocarbon contaminated soils on site (mobilization costs, ability to treat the soil)
- concentration of hydrocarbons within the soil (effectiveness of treatment process)
- type of soil

### 13.0 Pre Clean-up Delineation and Confirmatory Soil Testing

13.1 A comprehensive pre clean-up delineation program will be designed to ensure that all contaminated soil and contaminated building material will be identified . DND

will investigate areas of concern identified by NTI and/or its representatives who will be on-site during the delineation work. Risk assessment consideration will be given to soils that act as sources of contaminants to nearby aquatic environments even if the contaminants are below the relevant DCC criteria. The method of delineation will follow the grid as set out in Appendix F of this Agreement.

13.2 Confirmatory testing of contaminated areas, other than Tier I soils, will be conducted after contaminated soils have been excavated. Confirmatory testing will be conducted in accordance with the protocol outlined in Appendix F of this Agreement.

13.3 Should there be evidence to suggest that some contaminated areas were missed during the pre clean-up delineation work, these areas will be investigated in accordance with the pre clean-up delineation methodology.

13.4 During the confirmatory testing phase, NTI may assign a qualified observer to the site.

13.5 Appropriate quality assurance measures acceptable to the EWG will be taken to ensure the accuracy of all analytical work in the field or in laboratories.

#### 14.0 Debris

14.1 Debris will be collected and sorted into hazardous and non-hazardous components. Hazardous debris will be disposed of in accordance with Federal regulations. Non-hazardous debris will be buried in a professionally engineered landfill, provided there is a suitable location and sufficient gravel is available. Appendix C contains additional details concerning the destination of collected debris.

14.2 All debris which is attributable to the operation of any DEW site and is within two metres of the surface at low tide or within two metres of the surface of an inland water body will be removed by DND.

#### 15.0 Off Site Contamination and Debris

15.1 Where there is reasonable evidence of additional off site contamination or debris

Petroleum Hydrocarbons (TPH) where the TPH value is greater than or equal to 2500 ppm. Should the soils contain Tier I or Tier II contamination, they will be treated in accordance with the relevant sections of this Agreement. These hydrocarbon areas will be identified on site as part of the pre-construction delineation testing.

12.2 Each contaminated area will be evaluated qualitatively by the EWG using the checklist outlined in Appendix J of this Agreement.

12.3 Where remediation is required, one of the following options will be used:

- aerating the hydrocarbon contaminated soil in place to reduce hydrocarbon contaminant concentrations
- use of hydrocarbon contaminated soil as intermediate fill within an engineered landfill
- landfilling in a Tier II Disposal facility
- bioremediation using a landfarming or bio-pile processes
- soil washing
- other equivalent technologies recommended by the EWG

12.4 Based on site specific conditions, the EWG will recommend the most appropriate of the remediation options outlined in clause 12.3 in accordance with section 4.3 of this Agreement. The appropriateness of the options will take into consideration the environmental sensitivity of the area. Factors which will be considered in the selection of the method are:

- type of contaminant (ie fuel or lubricating oil)
- total volume of hydrocarbon contaminated soils on site (mobilization costs, ability to treat the soil)
- concentration of hydrocarbons within the soil (effectiveness of treatment process)
- type of soil

13.0 **Pre Clean-up Delineation and Confirmatory Soil Testing**

13.1 A comprehensive pre clean-up delineation program will be designed to ensure that all contaminated soil and contaminated building material will be identified . DND

which, subject to clause 15.2, is attributable to the operation of a nearby DEW site, DND will undertake testing to determine the extent of the contamination in consultation with NTI and remediate the site in accordance with the relevant sections of this Agreement.

15.2 Should the evidence clearly demonstrate that other individuals or organizations have contributed significantly to the contamination or debris, then NTI and DND will endeavour to obtain the third Party (ies) agreement to contribute its pro-rated share of the investigation and clean-up costs before the investigation and clean-up commences. If the third party does not agree to pay their share of the costs, DND has the option, where practical, to clean up its share of the contamination, or in the alternative, waiting until there is third party agreement regarding payment of the investigation and clean-up costs. The investigation and clean-up will be in accordance with the clean-up protocol outlined in this Agreement.

15.3 NTI will endeavour to identify areas of concern prior to the delineation phase of the clean-up.

#### **16.0 PCBs in Paint**

16.1 PCBs in paint will be treated in accordance with applicable federal regulations. Changes to these regulations will be dealt with in accordance with section 25.1 of this Agreement.

#### **17.0 Materials Containing Lead-based Paints**

17.1 Materials containing lead-based paints will be placed in a professionally engineered landfill. Should regulations or guidelines be issued which direct otherwise, the implementation of this change will be dealt with in accordance section 25.1 of this Agreement.

#### **18.0 Barrels**

18.1 The testing and disposal of POL tank sludge, waste oil, petroleum products, antifreezing agents, solvents and barrels will be handled in accordance with the criteria as set out in Appendix G.

## **19.0 Borrow Material**

- 19.1 DND will attempt to minimize new excavation of borrow materials required for the clean-up activities. Where possible, existing sources of borrow material will be used. All borrow areas will be regraded to match the surrounding topography.

## **20.0 Monitoring Program**

- 20.1 The monitoring program will identify an actual or potential landfill failure. Remedial action will be undertaken if leachate is present at levels greater than the site specific baseline concentrations at the time of the landfill completion. Action taken as result of the monitoring program will ensure the integrity of the landfills and thereby the health of the Inuit is protected on a continuing basis.
- 20.2 Following the completion of the clean-up for a site, DND will commence a monitoring program in accordance with Appendix H of this Agreement.
- 20.3 The monitoring program will have three phases. The objective of each phase are identified in Appendix H.
- 20.4 Monitoring results will be communicated to both Parties in the form of a comprehensive report.

## **21.0 Research Proposals**

- 21.1 NTI, on behalf of communities, may raise at the Steering Committee, items, including the need for hydrographic mapping, which could involve the requirement for research and investigation. These proposals will be discussed and evaluated at the Steering Committee. If the Steering Committee decides that the proposals are consistent with the objective of the clean-up which is to protect the environment from contaminants entering the food chain or involve direct DEW site related impacts which could cause significant economic impact, DND will fund the agreed upon research activities.
- 21.2 Where the proposals are broader in nature and not solely restricted to DND DEW