CAM-E(Keith Bay) Remediation Project

Water Use Licence Application for Site Remediation Activities

Submitted by the Department of Indigenous and Northern Affairs Canada (INAC)

July, 2016

Indigenous and Northern Affairs Canada | Affaires autochtones et du Nord Canada

Nunavut Regional Office (NRO)
P.O. Box 2200
Iqaluit, NU, X0A 0H0

July 11, 2016

Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut
X0B 1J0

RE: WATER USE LICENCE (WUL) APPLICATION FOR CAM-E (KEITH BAY) FOR FORMER CAM-E (KEITH BAY) DEW LINE SITE REMEDIATION PROJECT

The Department of Indigenous and Northern Affairs Canada (INAC) is submitting the enclosed application for Water Use Licence for the remediation of the former Intermediate Distance Early Warning (DEW) Line site at CAM-E, Keith Bay. All supporting documents are attached.

INAC completed site investigations at CAM-E in 2013 and plans to commence remedial activities on the site starting from July, 2016.

In addition to applying for the Water Use Licence (WUL), INAC has also applied for a Land Use Permit (LUP) with the Land Administration Department, INAC. Site remediation activities will take place on the Crown Land; no activities will be performed on Inuit Owned Lands (IOL). Therefore, no IOL permit or exemption certificate is required for this project.

Should you have any questions or require any clarifications, please contact the undersigned or the Project Manager, Dele Morakinyo at dele.morakinyo@aandc-aadnc.gc.ca, or by telephone at (819) 934-9224

Regards,

Charlotte Lamontagne,
A/Director, Lands & Contaminated Sites (NRO)
(On behalf of the Proponent: David Rochette)
Tel: (867) 975-4578;
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Canada

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Section 1

General Water License Application

General Water Licence Application
(Application for a new Water Licence)

Document (Template) Date: May 2011

Application Submission Date: *July 13, 2016*
Month/Day/Year

P.O. BOX 119
GJOA HAVEN, NUNAVUT
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NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

GENERAL WATER LICENCE APPLICATION
(APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

LICENCE NO:
(for NWB use only)

1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address)

Charlotte Lamontagne, A/Director, Lands & Contaminated Sites
On behalf of the proponent: David Rochette, Regional Director General
Department of Indigenous & Northern Affairs Canada (INAC)
P.O. Box 2200, Iqaluit, NU X0A 0H0

Phone: *(867) 975 4578*
Fax: *(867) 975 4736*
e-mail: *charlotte.lamontagne@aandc-aadnc.gc.ca*

2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address)

SAME AS IN BLOCK 1

Phone: _____
Fax: _____
e-mail: _____
(Attach authorization letter.)

3. NAME OF PROJECT (including the name of the project location)

CAM-E (Keith Bay) Site Remediation Project

4. LOCATION OF UNDERTAKING

Project is located 75 km east of Kugaaruk, Nunavut

Project Extents

NW: Latitude: (68° 18' 13.4" N) Longitude: (88° 5' 10.7" W)
NE: Latitude: (68° 18' 13.4" N) Longitude: (88° 10' 51.39" W)
SE: Latitude: (68° 14' 10.8" N) Longitude: (88° 10' 51.39" W)
SW: Latitude: (68° 14' 10.8" N) Longitude: (88° 5' 10.7" W)

See Appendix F

Camp Location(s) - Extents

TBD

5. **MAP** - Attach a topographical map, indicating the main components of the undertaking.

NTS Map Sheet No.: *057A08N* Map Name: *Topo Map of CAM-E* Map Scale: *1:50,000*
See Appendix F

6. **NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☑ Crown Land Use Authorization from Indigenous and Northern Affairs Canada (INAC)
Date (expected date) of issuance: *September 01, 2016* Date of expiry: *October 30, 2021*

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: __Date of expiry:__

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other: _____
Date (expected date) of issuance: _____ Date of expiry: _____

Name of entity(s) holding authorizations: *Department of Indigenous and Northern Affairs Canada (INAC)*
_____

7. **NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION**

Indicate the land use planning area in which the project is located.

☐ North Baffin
☐ South Baffin
☐ Akunniq
☐ Keewatin
☐ Sanikiluaq
☑ West Kitikmeot

Is a land use plan conformity determination required?

☐ Yes ☑ No

If Yes, indicate date issued and attach copy _____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is

not required. *NPC letter dated January 27, 2016 (See Appendix H)*

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

☑ Yes ☐ No

NIRB's Screening Decision Report

If Yes, indicate date issued and attach copy _____*May 13, 2016*_____
If No, provide written confirmation from NIRB confirming that a screening determination is not required.

(See Appendix I)

9. DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.

Site remediation operations to include:

1. *Mobilization/Demobilization of equipment, Materials / wastes and personnel*
2. *Enhancement of access routes and site routes*
3. *Camp set-up and operation*
4. *Hazardous material removal & off-site disposal*
5. *Construction and operation of on-site non-hazardous waste landfill*
6. *Construction and operation of on-site Tier II landfill*
7. *Building and structure demolition, removal and disposal in the on-site landfill*
8. *Non hazardous materials / Debris consolidation and off-site disposal*
9. *Excavation & treatment/off-site disposal of contaminated soils*
10. *Quarrying of gravel and overburden materials*
11. *Landfarm construction/ operation/decommissioning*
12. *Site regrading*
13. *Construction/decommissioning of sewage lagoon*

See: Appendices A1, A2 – Executive Summary in English and Inuktitut
Appendix B – CAM-E Phase III Environmental Site Assessment Report
Appendix C – CAM-E Remedial Action Plan (RAP)
Appendix D – Current Project Schedule
Appendix F – Site Maps

All site remediation activities will take place on Crown Land. No activities on Inuit Owned Lands (IOL).

10. OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

Location – CAM-E is an abandoned Intermediate DEW Line site which is being cleaned up by INAC.

Methods - Various remedial options were proposed and evaluated, for each waste stream at the site, in the Remedial Action Plan (Appendix C). The technically superior option is adopted for each waste stream. For instance, non-hazardous wastes will be disposed of in the on-site landfill while hazardous materials will be packaged and shipped off-site for disposal in facilities licenced to accept each waste stream. For full details on the remedial options that would be adopted on this project, please refer to the Appendix C.

11. CLASSIFICATION OF PRIMARY UNDERTAKING - Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial
☐ Agricultural
☐ Mining and Milling (includes exploration/drilling/exploration camps)
☐ Conservation
☐ Municipal (includes camps/lodges)
☐ Recreational
☐ Power
☑ Miscellaneous (describe below):

See Site Remediation (Remote Camp Supplementary Questionnaire Completed and enclosed) (Section 2)

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

- ☐ Hydrostatic Testing
- ☐ Tannery
- ☑ Tourist / Remote Camp
- ☑ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
- ☐ Onshore Oil and Gas Exploration Drilling
- ☐ Mineral Exploration / Remote Camp
- ☐ Advanced Exploration
- ☐ Mine Development
- ☐ Municipal
- ☐ General Water Works
- ☐ Power

For both the remote camp and Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil please see the supplementary information in the enclosed "Remote Camp Supplementary Questionnaire Form". (Section 2). Additional supplementary information on remote camp and landfarm are, also, contained in Appendix B and Appendix C.

12. **WATER USE -** Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

- ☑ To obtain water for camp/ municipal purposes
- ☐ To obtain water for industrial purposes
- ☐ To cross a watercourse
- ☐ To alter the flow of, or store water
- ☐ Other: _____
- ☐ To divert a watercourse
- ☐ To modify the bed or bank of a watercourse
- ☐ Flood control

13. **QUANTITY AND QUALITY OF WATER INVOLVED -** For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Name of water source(s) (show location(s) on map):

The proposed source of water at the site is the freshwater lake located at the north east end of area 1 (the main station) not far from the main station airstrip. The source has been proposed because it guarantees sufficient amount of water for use at the site for the construction activities and for camp uses for drinking and washing. It is also very close to the proposed location of the camp. ***(see Appendix F)***

Describe the quality of the water source(s) and the available capacity:

Water samples were collected and analysed from the Freshwater Lake during the Phase III ESA. Though concentrations of coliform found in the water exceeded Health Canada guidelines, with some on-site water treatment system the water can be made potable. On getting to the site, the initial source of drinking water will be bottled water while the treatment, sampling and analysis are on-going until the results of the analysis of samples of treated water from the freshwater lake prove that the treated water from the lake is safe for drinking.

The lakes have sufficient capacity to meet water needs.

Provide the overall estimated quantity of water to be used: _____*13*_____ m^3/day

Provide the estimated quantity(s) of water to be used from each source:

Quantity to be abstracted from the lake will be approximately is 13 m^3/day

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)

Water for camp use. ~ 4.56 m^3/day; Water for construction ~ 8.44 m^3/day

Describe the method of extraction(s):
Raw water from the lake will be pumped either directly into a pipe running between the freshwater lake and the camp or into waiting trucks using a small horsepower pump and water intake pipe equipped with a small mesh screen. The small mesh screen will prevent fish entrapment (See the Location Map of Area 1 in the attached file of drawings)

Estimated quantity(s) of water returned to source(s) _____*0*_____ m^3/day

Describe the quality of water(s) returned to source(s)*: N/A - Used water will not be returned to source; it will be discharged into a waste treatment facility – a temporary lagoon built to treat wastewater generated on-site (more details contained in the exploration and remote camp questionnaire*

14. **WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

- ☑ Sewage
- ☑ Solid Waste
- ☑ Hazardous
- ☑ Bulky Items/Scrap Metal
- ☐ Animal Waste
- ☐ Other (describe): _____
- ☑ Waste oil
- ☑ Greywater
- ☐ Sludges
- ☑ Contaminated soil and/or water

See: Section 2 – Exploration and Remote Camp Supplementary Questionnaire
Appendix C – CAM-E Remedial Action Plan.

15. **QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

This project's remedial action plan (RAP) contains treatment options proposed for the different waste streams at the site. These options will be used for both the historical wastes generated through previous uses and waste generated from camp operations during remediation. The summary of these options are presented in the table below.

Type of Waste	***Composition***	***Quantity Generated***	***Treatment Method***	***Disposal Method***
Sewage	*Black water from toilets*	*50 l/day x 38 people= 1,900 litres/day*	*Sewage Lagoon or treatment plant*	*Discharge effluent meeting criteria on the land*
Waste Oil	*Oil*	*< 600 litres (l)*	*Collected in drums*	*Shipped south for recycling or disposal*
Solid Waste	*Camp waste*	*1.0 cubic metre*	*Incineration*	*Packaged and*

(Camp)	*(Paper, packaging, food, etc.)*	*per day*	*(combustibles only)*	*shipped off-site for disposal*
Grey Water (Camp)	*Water from kitchen sinks and laundry*	100 litres/day x 38 people = 3,800 l/day	*Sewage Lagoon or treatment plant*	*Discharge effluent meeting criteria on the land*
Non-Hazardous Material	*Barrels, demolition wastes, compressed gas cylinders, other scattered site debris*	*~1600 m^3*	*Collect, shred, compact for on-site disposal*	*Dispose of in the on-site NHW landfill*
Hazardous Material	*PCB and/or lead amended paints*	*~1050 m^3*	*Partial abatement of poorly adhered paint, Collect lead leached substrate for off-site disposal. cut to small sizes perfectly adhered paint for on-site disposal*	*Dispose abated paint in Tier II facility; dispose paint and substrate off-site; dispose perfectly adhered painted material in NHW landfill*
Hazardous Material	*Batteries*	*~16 pieces*	*Package and containerise*	*Dispose off-site in facilities accepting the waste.*
Hazardous Material	*Asbestos*	*~25 m^3*	*Double bag*	*Dispose in NHW landfill*
Soil (PHC)	*Type B Hydrocarbon Soils*	*~1900 m^3*	*Excavate and treat in landfarm*	*Return clean soil to backfill excavations.*
Soil (PHC)	*Type A Hydrocarbon Soils*	*~1050 m^3*	*Excavate and transfer to Landfill area*	*Dispose of in an on-site NHW landfill*
Soil (other)	*Tier I Soils (low level concentrations of PCB and Lead)*	*~83 m^3*	*Excavate and transfer to Landfill area*	*Dispose of in an on-site NHW landfill*
Soil (other)	*Tier Soils II (Higher level concentrations of PCB and Lead)*	*~3200 m^3*	*Excavate and transfer to secured facility area*	*Dispose of in an on-site Tier II secured facility*
Buried Debris Areas (BDAs)	*8 BDAs (2 class Bs and 6 class Cs*	*~3160 m^3*	*Excavate, grade, compact*	*Remediate each BDA in accordance with AMSRP (INAC 2009).*

For more details, please refer to the RAP document in Appendix C

16. **OTHER AUTHORIZATIONS** – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following: *N/A*

Authorization: _____

Administering Agency: _____

Project Activity: _____

Date (expected date) of issuance: _____ Date of expiry: _____

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.

Environmental Impact Assessment was completed for CAM-E (Keith Bay) site and it is included in Appendix G.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users. *N/A*

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO). *N/A*

20. CONSULTATION – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

Community meeting was held on January 8, 2014 in Kugaaruk, the nearest community to CAM-E (Keith Bay). The meeting was well advertised in the hamlet, on the radio and through posters posted at strategic places in the community. The meeting was attended by the Mayor, council members and the members of the community. The Crown representatives (INAC and PWGSC) at the meeting presented the proposed RAP and satisfactorily answered questions raised by the attendees. A translator was engaged and provided translation in Inuktitut. Additional consultation activities are planned as the project progresses.

21. SECURITY INFORMATION

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002. *N/A*

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

If the applicant is a business entity, provide a list of the officers of the company.

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name. *N/A*

23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.

- *Environmental Site Investigation and Assessments. This document also contains Archaeological*

(Impact) Assessment (Appendix B)
- *Remedial Action Plan (RAP) (Appendix C)*
- *Environmental (Impact) Assessment (Screening level) (Appendix G)*

24. PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction
Proposed Start Date: _*September 2016*____ (month/year) Proposed Completion Date: ____*March 2020*____ (month/year)

Operation
Proposed Start Date: _*September 2016*____ (month/year) Proposed Completion Date: __*March 2020*___ (month/year)

Closure
Proposed Start Date: ___*October 2019*___ (month/year) Proposed Completion Date: ___*March 2020*____ (month/year)

Post - Closure
Proposed Start Date: ____*September 2020*___ (month/year) Proposed Completion Date: ___*October 2021*____ (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction
☑ Winter ☐ Spring ☑ Summer ☑ Fall ☐ All season *(includes Winter Cat Train Mob)*

Operation
☐ Winter ☐ Spring ☑ Summer ☑ Fall ☐ All season

Closure
☑ Winter ☐ Spring ☑ Summer ☑ Fall ☐ All season *(includes Winter Cat Train Demob)*

Post - Closure
☐ Winter ☐ Spring ☑ Summer ☑ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): _____*Five (5)*_____ years

Requested Date of Issuance: _*September 1 2016*__ (month/year) Requested Expiry Date: *October 30 2021* (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.
Will use NWB's Standardized Form for Annual Reporting.

27. **CHECKLIST** – The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

☑ Yes ☐ No If no, date expected _____

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

☑ Yes ☐ No If no, date expected _____

Completed General Water Licence Application form.

☑ Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

☑ Yes ☐ No If no, date expected _____

English Summary of Application.

☑ Yes ☐ No If no, date expected _____

Inuktitut and/or Nunavik & French Summary of Application.

☑ Yes ☐ No If no, date expected _____

Application Fee of $30.00 CDN (Payee Receiver General for Canada). ***N/A*** *- This application is being made by a Department of the Government of Canada*

☐ Yes ☐ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence. ***N/A*** *- This application is being made by a Department of the Government of Canada*

☐ Yes ☐ No If no, date expected _____

28. **SIGNATURE**

Charlotte Lamontagne (For David Rochete – the proponent)	*A/Director, Contaminated Sites*		*July 11, 2016*
Name (Print)	**Title (Print)**	**Signature**	**Date**

Section 2

Exploration / Remote Camp Supplementary Questionnaire

P.O. Box 119
Gjoa Haven, NU X0B 1J0
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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: *Indigenous and Northern Affairs Canada (INAC)* **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: *Matthew McElwaine, Public Works & Government Services Canada (PWGSC)*
   Tel: *780-887-6288* Fax: *780-497-3842* E-mail: *matthew.mcelwaine@pwgsc.gc.ca*

2. Project Manager: *Dele Morakinyo, Indigenous and Northern Affairs Canada (INAC)*
   Tel: *819-934-9224* Fax: *819-934-9229* E-mail: *dele.morakinyo@aandc-aadnc.gc.ca*

3. Does the applicant hold the necessary property rights? *Yes*

4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. *No*

5. Duration of the Project

   ☐ One year or less Start and completion dates: _____
   ☑ Multi Year:

   If Multi-Year indicate proposed schedule of on site activities
   Start: *September, 2016* Completion: *March, 2020*

CAMP CLASSIFICATION

6. Type of Camp

   ☐ Mobile (self-propelled)
   ☑ Temporary
   ☑ Seasonally Occupied: *June 15-September 30*
   ☐ Permanent
   ☐ Other:_____

7. What is the design, maximum and expected average population of the camp?

   The camp will be occupied by an average population of 38 people for a maximum of 75 days each year.

8. Provide history of the site if it has been used in the past.

   CAM-E (Keith Bay) site is a former intermediate Distant Early Warning (DEW) Line site in Nunavut. CAM-E is located about 75 km east of Kugaaruk, Nunavut. The station was constructed in 1957 and was

taken out of service in 1963. In 1965, the responsibility for the site was assumed by the Department of Indigenous and Northern Affairs Canada (INAC).

Facilities constructed at the site included a module train, warehouse, garage, Petroleum, Oil and Lubricant (POL) tanks, Quonset huts, storage pads and a radar tower. A small airstrip (460 m long), located north of the station, was also part of the site infrastructure. A larger airstrip (915 m long) and some Quonset huts were located on the beach plateau approximately 5.6 km away on the tip of Cape Barclay. Currently, all structures at the site have been demolished and the site now consists of scattered debris of the felled structures (including the remains of the module train, radar tower, warehouse, garage, POL tanks and the huts. The site also contains large stockpiles of drums at the main site and several locations of scattered drums all over the site including the beach area, soils contaminated with petroleum products (e.g. gasoline and diesel), soils contaminated with metals (such as lead) and PCBs, asbestos containing materials, batteries, gas cylinders and so on.

Using the Canadian Council of Ministers of the Environment (CCME) National Classification System for Contaminated Sites (NCSCS), CAM-E (Keith Bay) site received a score of 73.3 and has been identified as a Class 1 site meaning that it is a "high priority for action" site. The CCME NCSCS scores contaminated sites by the evaluation of their current and potential impacts on both human health and the environment by identifying contaminant characteristics, exposure pathways and receptors. The NCSCS score for CAM-E was reviewed and approved by FCSAP Expert Support in February 2013.

Due to the site's close proximity to Kugaaruk, residents from Kugaaruk could visit the site for hunting and fishing. There is the potential exposure of these visitors to the physical and chemical hazards at the site, with a potential negative impact on their health. The exposure pathways for the chemical materials, for humans, include ingestion, dermal contact, inhalation, and ingestion of wild game.

The features at the CAM-E (Keith Bay) site, highlighted above, are capable of causing physical and chemical hazards to human health and the environment:

- *Metal framework and some interior walls of the garage and warehouse; remains of plane wreck; felled antennae; collapsed Quonset huts; remains of module building train and small shack; empty bunker; and debris scattered all over the site may constitute physical hazards to visitors to the site.*
- *Some of the surface and partially buried barrels at the site may contain unknown liquids which are leaking from rusted spots on the barrels. These could be sources of chemical hazards. Other sources of chemical hazards include the hazardous debris scattered all over the site, asbestos containing materials on the second generation buildings (when disturbed); PCBs/metal impacted soils; PHCs impacted soils; PCB/lead paints; the batteries etc.*
- *The domestic garbage dump discovered on the site may not have been properly closed and may contain organic and chemical substances and could constitute physical and chemical hazards.*

The main exposure pathway identified for the indigenous animals seen at the site was ingestion although inhalation and dermal absorption were also considered.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The preferred location for the site camp is at Latitude: 68° 17' 16.172" N; Longitude: 88° 7' 9.712" W. The boundary coordinates of the proposed camp will be confirmed during pre-mobilization site visit in late July 2016 and will be reported to NWB. This camp location is proposed after due considerations have been giving to the biogeographical and geomorphological features of the site, and water bodies. The camp location is in an area with minimal to no vegetation which will result in minimal vegetation disturbance when setting up the camp and grading of the camp area. The camp location is also at a safe distance from

water bodies on the site. No nests or animal activity were noted in the area during the site assessments. In the vicinity of the selected camp location there is good drainage and minimal to no tundra ponding.

The camp location suggested is tentative and will be reassessed by the project contractor during the pre-mobilization visit to the site by late July 2016. If there is change in camp location; the new coordinates will be communicated to NWB prior to the commencement of remediation works.

More details:

- *Appendix B:- CAM-E (Keith Bay) Phase III Environmental Site Assessment Report;*
- *Appendix C:- CAM-E (Keith Bay)Remedial Action Plan (RAP);*
- *Appendix F:- Site Maps; and*
- *Appendix G:- Environmental (Impact) Assessment (Screening) Report.*

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

The proposed camp site is on Crown Land. The location has been chosen because it is removed from the main station and the distance will prevent site contaminants from getting to the camp dwellers during construction.

11. Is the camp or any aspect of the project located on:

☑	Crown Lands	Permit Number (s)/Expiry Date: _____*In Process*____
☐	Commissioners Lands	Permit Number (s)/Expiry Date: _____
☐	Inuit Owned Lands	Permit Number (s)/Expiry Date: _____

All site remediation activities will take place on Crown Land. There will be no activities on Inuit Owned Lands (IOL).

12. Closest Communities (direction and distance in km):

Kugaaruk ~ 75 km east of site;

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

Yes. Community meeting was held on January 8, 2014 in Kugaaruk, the nearest community to CAM-E (Keith Bay). The meeting was well advertised in the hamlet, on the radio and through posters posted at strategic places in the community. The meeting was attended by the Mayor, council members and the community members in the community. The Crown representatives (INAC and PWGSC) at the meeting presented the proposed RAP and satisfactorily answered questions raised by the attendees. A translator was engaged and provided translation in Inuktitut.

There were no concerns raised during the meeting. Community members are quite pleased that the site is about to be remediated. Some information provided by the community members (e.g. the location of archaeological sites such as a grave located on the site, were considered while developing the final RAP. The Archaeological sites will be preserved and not destroyed during remediation.

Four (4) additional community meetings are planned for the project and they will be held in Kugaaruk:

- *Pre-Mobilization Community Meeting (about May/June 2016) – To make the community members to be aware that the project is about to start, recruit employees and subcontractors for the project*

- *Inter-Season1 Community Meeting (May/June 2017) – to provide update on the first year and recruit for the second year*
- *Inter-Season2 Community Meeting (May/June 2018) – to provide update on the 2nd year and recruit for the third year*
- *Project Completion Community Meeting (October 2019) – to inform the community on project completion and future plans for the site (i.e. information on Long Term Monitoring program for the site.)*

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

No. It is anticipated that the activities will have no adverse impact on traditional water use and local fish and wildlife habitats. An Environmental Impact Assessment (Screening) study was conducted to evaluate the potential impacts of the project. For the most part, the report concluded the project will have a net positive effect on the environment. Some potential adverse effects, identified, will be minimized or completely removed through the implementation of the proposed mitigation and monitoring plans and project design.

More Details – Appendix G – Environmental (Impact) Assessment (Screening) Report

PURPOSE OF THE CAMP

15.
- ☐ Mining (includes exploration drilling)
- ☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
- ☑ Other ___*Contaminated Site Remediation*___(Omit questions # 16 to 21)

16. Activities (check all applicable) *Not Applicable (N/A)*

- ☐ Preliminary site visit
- ☐ Prospecting
- ☐ Geological mapping
- ☐ Geophysical survey
- ☐ Diamond drilling
- ☐ Reverse circulation drilling
- ☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- ☐ Other: _____

17. Type of deposit (exploration focus): *N/A*

- ☐ Lead Zinc
- ☐ Diamond
- ☐ Gold
- ☐ Uranium
- ☐ Other: _____

DRILLING INFORMATION

18. Drilling Activities *N/A*

- ☐ Land Based drilling

☐ Drilling on ice

19. Describe what will be done with drill cuttings? *N/A*

20. Describe what will be done with drill water? *N/A*

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable. *N/A*

22. Will any core testing be done on site? Describe. *N/A*

SPILL CONTINGENCY PLANNING

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

A Fuel and Hazardous Materials Spill Contingency Plan has been written for this site and is included with this application. The plan was prepared in accordance with the NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998 and A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002. The procedures in the plan will be adopted at CAM-E in the event of fuel or hazardous material spill. Any additional documentation developed prior to or during the construction relating to health and safety issues, will be submitted to the Board at and when they are available.

See Appendix E – Fuel and Hazardous Materials Spill Contingency Plan

24. How many spill kits will be on site and where will they be located?

There will be at least two drum spill kits present at the CAM-E (Keith Bay) site each capable of absorbing 174 L of liquid hydrocarbons. Both kits will be located near the fuel containment area. A smaller spill kit will be located by the pump used to transport non-potable water. Two standard spill packs, each capable of absorbing 40 L of liquid hydrocarbons will be available; a task crew will be accompanied by at least a spill pack each time they are working on the field.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Types and approximate quantities of fuels:

Diesel: ~ 1904 numbers of 205 L drum;
Gasoline: ~ 20 numbers of 205 L drum;
Aviation Fuel: ~ 20 numbers of 205 L drum;
Propane: ~ 2 numbers of 100 LBS container.

Method of Storage & MSDS Sheets:

Fuel from drums will be transferred into dyked tanks, each having a capacity of 4000L. Electric pump will be used to transfer fuel from the tanks to the site vehicles and equipment. All fuel transfers will be done in a lined area only by authorized employees. The containment area will be located on flat, even ground at a

distance of no less than 30 m away from the camp and any natural drainage area or water body. Propane will be stored in 45 kg (100 lb) certified tanks near the kitchen tent.

Contractor will comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding employee training, use, handling, storage and disposal of hazardous materials, and regarding labeling and provision of Material Safety Data Sheets (MSDS), as required by WHMIS

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Freshwater Lake (see Appendix F)

27. Estimated water use (in cubic metres/day):

☑ Domestic Use: *4.65 m^3 /day* _____ Water Source: *Fresh water Lake*
☐ Drilling: _____ Water Source: _____
☑ Other: *8.44 m^3/day (Construction Activities)* Water Source: *Fresh water Lake*

Total water use: *13 m^3/day*

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guideline*) Describe:

Non-potable water will be pumped to the camp via a small horsepower pump and water intake pipe placed overland and equipped with a small mesh screen. The pump will be placed at least 30 m from water bodies and a spill kit will be sited near the pump.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

Freshwater lake was sampled and analyzed during the Phase III Environmental Site Assessment. Though concentrations of coliform found in the water exceeded Health Canada guidelines, with some on-site water treatment system the water can be made potable. On getting to the site, the initial source of drinking water will be bottled water while the treatment, sampling and analysis are on-going until the results of the analysis of samples of treated water from the freshwater lake prove that the treated water from the lake is safe for drinking.

Raw water from the lake will be pumped either directly into a pipe running between the freshwater lake and the camp or into waiting trucks using a small horsepower pump and water intake pipe equipped with a small mesh screen. The small mesh screen will prevent fish entrapment (See the Location Map of Area 1 in the attached file of drawings). Coliform testing will be conducted on a regular basis throughout the construction season and further testing will be carried out on other parameters as required. A potable water treatment system and polishing unit capable of bringing the raw water to drinking standard will be brought to site by the project contractor.

30. Will drinking water be treated? How?
Drinking water treatment will only be required if the tested parameters do not meet the CDWQ guidelines. A potable water treatment system and polishing unit capable of bringing the raw water to drinking standard will be brought to site by the project contractor.

31. Will water be stored on site?

Non-potable water may be temporarily stored in barrels or tanks on-site; however, no reservoir or other more permanent structure will be constructed.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

☑ Camp Sewage (blackwater)

The camp sewage will consist primarily of human waste from toilet use with an estimated flow of 40 L/person /day making a total flow of about 1.52 m³/day (for 38 people). The project contractor will decide on whether to use a sewage lagoon or any other appropriate treatment method (e.g. compact moveable wastewater treatment plant) to treat the sewage generated from the site. The plan that is eventually selected by the contractor will be forwarded to NWB as soon as it is available. The contractor's chosen option will treat the sewage to meet the following discharge criteria:

1. *Oil and grease – none visible;*
2. *pH – 6 to 9;*
3. *TSS – 180 mg/L;*
4. *BOD – 120 mg/L; and*
5. *Fecal Coliforms – 10,000 CFU/dl*

If the contractor builds a sewage lagoon, the maximum fluid depth in the lagoon will not exceed one metre. The lagoon will have the capacity that holds sewage generation for a construction season. The location of the lagoon will be a minimum of 30 m from the construction camp or other temporary facilities and drainage paths, and a minimum of 30 m from water bodies supporting aquatic life and downwind of the construction camp (based on the prevailing wind direction).

After site remediation, the lagoon(s) will be appropriately decommissioned following all applicable regulations and guidelines for sewage lagoon decommissioning in Nunavut.

☑ Camp Greywater

The camp greywater will consist primarily of wastewater generated from the kitchen and bathroom sinks and showers. This waste could be treated in the sewage lagoon or be directed to a discharge pit excavated a minimum 30 m from the camp, any natural drainage course, or water body. Upon completion of site activities the pit will be filled in and finished to grade.

☑ Solid Waste

Combustible solid waste will be incinerated on-site using an approved incinerator unit. All non-combustible solid waste will be disposed of off-site (with the other non-hazardous wastes) at a southern facility.

☑ Bulky Items/Scrap Metal

All scrap metal and bulky items will be disposed off-site to a southern facility.

☑ Waste Oil/Hazardous Waste

All waste oil and hazardous waste will be consolidated and shipped off-site, in accordance to the Transportation of Dangerous Goods Act, for disposal at an approved southern facility.

☑ Empty Barrels/Fuel Drums

Empty barrels will be collected, crushed and disposed of off-site at a southern facility.

☐ Other:

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

Combustible solid waste will be the only solid waste incinerated on-site. Non-combustible solid wastes will be shipped offsite for disposal at a southern facility. Specifications for the type of incineration system to be used at the site will be provided by the successful contractor, following contract award. These details will be forward to NWB prior to mobilization to site.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

All hazardous wastes generated during site / camp operations will be shipped, together with the existing hazardous wastes on the site, to an approved southern facility. Similarly, all non-combustible non-hazardous waste generated during site / camp operations will be shipped, together with the existing non-hazardous wastes on the site, to an approved southern facility

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for all sumps (if applicable).

N/A

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?
N/A

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

All wastewater treatment and solid waste incineration equipment will be proven for use in the north. Specifications for the type of equipment used, and contingency plans in place, will be provided following contract award and prior to mobilization to the site.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

After remediation, the temporary camp facilities will be removed from the site. The site will be stabilized; all wastes and materials, slated for off-site transport, will be removed and shipped off-site to southern facilities. The site will be fully regraded to ensure proper drainage.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

- ☑ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ☑ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- ☑ Socio-Economic Environment (Archaeology, Land and Resources Use,
- ☑ Demographics, Social and Culture Patterns, etc.)
- ☑ Other: *See list Below*

Bibliography:

- *WESA (2011) - Limited Environmental Investigation – EK004 Keith Bay CAM-E (Phase 1/2 Environmental Site Assessment);*
- *Stantec (2013) - Phase III Environmental Site Assessment CAM-E (Keith Bay), Nunavut.*
- *Stantec (2014) - Remedial Action Plan (RAP)*
- *Stantec (2014) - Archaeological Assessment Report CAM-E (Keith Bay), Nunavut*
- *Stantec (2014) – Environmental Impact Assessment Report CAM-E (Keith Bay), Nunavut*

REGULATORY INFORMATION

40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

- ☑ ARTICLE 13 – *NCLA -Nunavut Land Claims Agreement*
- ☑ NWNSRTA – *The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*
- ☑ *Northwest Territories Waters Regulations, 1993*
- ☑ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- ☑ NWB - Interim Rules of Practice and Procedure for Public Hearings
- ☑ RWED – *Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993*
- ☑ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
- ☑ NWTWB - Guidelines for Contingency Planning
- ☑ *Canadian Environmental Protection Act, 1999 (CEPA)*
- ☑ *Fisheries Act, RS 1985* - s.34, 35, 36 and 37
- ☑ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- ☑ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT

- ☑ Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
- ☑ Public Health Act - Camp Sanitation Regulations
- ☑ Public Health Act - Water Supply Regulations
- ☑ *Territorial Lands Act* and *Territorial Land Use Regulations*; Updated 2000

Appendix A1

Executive Summary – English

CAM-E (KEITH BAY) FORMER DEW LINE SITE REMEDIATION PROJECT

EXECUTIVE SUMMARY

1. BACKGROUND

The Government of Canada has implemented the Federal Contaminated Sites Action Plan (FCSAP) to clean up federally owned contaminated sites which pose risks to human health and/or the environment. Department of Indigenous and Northern Affairs Canada (INAC) has applied, and received funding approval under FSCAP, for the investigation and cleanup of the former CAM-E (Keith Bay) DEW line site, located about 75 km to the east of Kugaaruk, Nunavut.

CAM-E was constructed in 1957 as an Intermediate Distant Early Warning (DEW) Line site. The station was taken out of service in 1963 and in 1965, responsibility for the site was assumed by the Department of Indigenous and Northern Affairs Canada (INAC).

Facilities constructed at the site included a module train, warehouse, garage, Petroleum, Oil and Lubricant (POL) tanks, Quonset huts, storage pads and a radar tower. A small airstrip (460 m long), located north of the station, was also part of the site infrastructure. A larger airstrip (915 m long) and some Quonset huts were located on the beach plateau approximately 5.6 km away on the tip of Cape Barclay. Currently, all structures at the site have been demolished and the site now consists of scattered debris of the felled structures (including the remains of the module train, radar tower, warehouse, garage, POL tanks and the huts. The site also contains large stockpiles of drums at the main site and several locations of scattered drums all over the site including the beach area, soils contaminated with petroleum products (e.g. gasoline and diesel), soils contaminated with metals (such as lead) and PCBs, asbestos containing materials, batteries, gas cylinders and so on.

2. SITE LOCATION/ACCESS

CAM-E (Keith Bay) site is located at approximate Latitude: 68° 17’ 16” N; and Longitude: 88° 7’ 10” W. The nearest community to the site is Kugaaruk; CAM-E (Keith Bay) is about 75 km east of Kugaaruk, and 280 km west of Hall Beach, Nunavut.

CAM-E is accessible by ATV, snowmobile, airplanes, helicopter, CAT train (overland transport) and boat. Historically, it has been difficult to land barges at CAM-E (Keith Bay) because of large ice build-ups in the area. Same heavy ice buildup condition prevents Kugaaruk, the nearest community to CAM-E, to be services by cargo ships. Kugaaruk is serviced by Canadian Coast Guard, which is limited in the size of equipment or quantity of loads it can carry at a time.

A possible approach to take the heavy equipment and supplies to the CAM-E (Keith Bay) site is to sealift the heavy equipment to one of the Nunavut community close to CAM-E and is serviced by shipping companies. The contractor will then do an overland transportation from the community to the site. Possible communities, as recommended by the previous studies and the remedial action plan (RAP) document are Repulse Bay or Taloyoak.

The project contractor could also decide to sealift (in summer) and move his equipment and supplies from the south to Kugaaruk using a cargo shipping company accompanied by Canadian Coast Guard ice breaker. The contractor will then carry out winter overland transport from Kugaaruk to the site.

The site consists of two (2) distinct areas – the main site area and the beach area. There are two (2) airstrips (one in each of the two (2) areas). The airstrips are in good conditions and can be used for landing and taking off during the cleanup works to move people and site supplies / resupplies.

3. PROJECT ACTIVITIES & SCHEDULE

Environmental site assessment (ESA) activities were carried out to identify and estimate the quantities and extents of contaminants of concerns on CAM-E (Keith Bay) site. Reports of these assessment studies were produced by Environmental Science group (ESG)(1995); WESA(February, 2012); and by Stantec (2013). The investigation/site assessment reports listed as follows:

- ESG (March 1995) - Environmental Study of Abandoned DEW Line Sites Vol I to III. One Auxiliary and Eight Intermediate Sites in the Canadian Arctic.
- WESA (February 2012) – Limited Environmental Investigation UK004 – Keith Bay, CAM-E
- Stantec (December 2013) – Phase III Environmental Site Assessment, CAM-E (Keith Bay), Nunavut.

Based on these site assessment studies, a remedial action plan (RAP) was developed for the cleanup of the CAM-E (Keith Bay) site. Following the development of the draft of the RAP, a community consultation, in the form of public meeting, was held in Kugaaruk on January 8, 2014. The meeting was well attended by members of the communities and feedbacks from the meetings were considered when the RAP was finalized.

The cleanup of the CAM-E site has been planned for the fiscal years (FY) 2016/17 to 2019/2020. The overall project schedule is as follows:

- 2016/17 - Obtain permits, carry out sealift mobilization to Kugaaruk and winter overland transportation to site
- 2017/18 – Year 1 of environmental site cleanup
- 2018/19 – Year 2 of environmental site cleanup and winter overland transport to Kugaaruk.
- 2019/20 - Sealift Demobilization to South and Project Closure

The site cleanup activities that will be completed at the CAM-E (Keith Bay) site include, and will not be limited to the following:

- Mobilization of equipment and personnel to site. Equipment will be mobilized to site by badge and CAT train while personnel will be mobilized to site by aeroplane (by the project contractor).
- Enhancement of site access routes (if required)
- Site roads and airstrips improvement
- Camp set-up and operation
- Hazardous material removal, handling and transportation
- Temporary storage on site for hazardous materials, equipment and fuels (if required)
- Building and infrastructure demolition
- Debris consolidation and disposal

- Excavation and relocation of PHC contaminated soils to the Land farm cell (if it is eventually decided to do onsite land farm rather than offsite disposal of PHC contaminated soils);
- Excavation and removal of metals and PCB contaminated soils from site
- Quarrying of gravel and overburden materials
- Land farm cell construction (if required) & decommissioning (after soil is remediated to INAC (2009) Abandoned Military Sites Remediation Protocol)
- Site grading
- Demobilization of equipment, materials/wastes and personnel. Demobilization will follow similar approach the contractor used to mobilize to the site.

Additional details on the above cleanup activities are available in the RAP document previously submitted to the regulatory bodies via Nunavut Planning Commission (NPC). The RAP contains the recommended cleanup methods for the various waste streams identified at CAM-E (Keith Bay). The contractor would likely use these suggested approaches or come up with better approaches to clean up the CAM-E site.

Following the completion of site remediation (by 2020) at CAM-E, INAC will embark on up to 25 years of long term monitoring of the site to ensure the stability of the non-hazardous landfill facility as well as the Tier II (metals and PCB) landfill at the site. Any problems discovered during the post-remediation monitoring shall be fixed. This monitoring procedure is in accordance to INAC's Abandoned Military Sites Remediation Protocol (AMSRP).

4. SOCIAL IMPACT OF THE PROJECT

As much as possible, the project will adopt solutions tailored to the northern environment and its inhabitants, by using local knowledge and including the unique needs of northerners and their environments in the remediation work plan.

Apart from the public community meeting held to present the draft RAP to the community in 2014, another community consultation meetings will be held in Kugaaruk prior to the commencement of site cleanup activities to discuss employment and sub-contracting opportunities. Progress community meetings will continue throughout the duration of the project to ensure that the community members in Kugaaruk are informed about the activities, results and plans regarding the site and they are carried along as the project progresses.

The contracting/procurement procedure being adopted for this project aims at maximizing the benefits of the project to the closest northern community (Kugaaruk) by employing local and northern employees and engaging the services of local and northern sub-contractors.

Appendix A2

Executive Summary – Nunavut Inuktitut

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ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᖏᑦ ᐊᑐᓕᕐᑎᑦᑎᓯᒪᔪᑦ ᒐᕙᒪᑐᖃᒃᑯᑦ ᓱᕈᖅᓯᒪᔪᑦ ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᕆᕙᓪᓕᐊᓂᖅ ᐸᕐᓇᐅᑖ ᓴᓗᒻᒪᖅᓴᕐᓗᒋᑦ ᒐᕙᒪᒃᑯᑦ ᓇᖕᒥᓂᕐᑯᑎᖏᑦ ᓱᕈᖅᓯᒪᔪᑖᑦ ᐃᓂᒋᔭᐅᔪᑦ ᐅᑯᐊᓗ ᐊᑦᑕᕐᓇᖅᑎᑦᑎᒍᓐᓇᖅᑐᑦ ᐅᓗᕆᐊᓇᖅᑐᑦ ᐃᓄᐃᑦ ᐃᓅᓯᖏᓐᓄᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᐊᕙᑎᑦᑎᓄᑦ. ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ ᐆᒃᑐᖅᓯᒪᕗᑦ, ᐊᒻᒪᓗ ᐱᑎᑕᐅᓯᒪᓪᓗᑎᒃ ᑮᓇᐅᔭᒃᓴᖏᓐᓂᒃ ᐊᖕᖏᖅᑕᐅᓯᒪᔪᑦ ᐊᑖᒍᑦ ᒐᕙᒪᑐᖃᒃᑯᑦ ᓱᕈᖅᓯᒪᔪᑦ ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᕆᕙᓪᓕᐊᓂᖅ ᐸᕐᓇᐅᑖ, ᖃᐅᔨᓴᖅᑕᐅᓗᑎᒃ ᐊᒻᒪᓗ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓗᑎᒃ ᑳᒻ E-ᕕᓂᖅ ᑑᓚᐃᖃᕐᕕᕕᓂᖅ ᐃᓂᖓ, ᐃᓂᖃᖅᑐᖅ ᖃᓂᕆᔮᓂ 75 ᑭᓚᒦᑕ ᑲᓇᖕᓇᖓᓂ ᑰᒫᓗᒃ, ᓄᓇᕗᑦ.

ᑳᒻ E ᓴᕐᑭᑕᐅᓚᐅᖅᓯᒪᔪᖅ 1957-ᒥ ᑑᓚᐃᖃᕐᕕᐅᓪᓗᓂ. ᐅᓇ ᐃᓂᖓᑦ ᐃᓄᖃᕈᓐᓃᓚᐅᖅᑐᖅ 1963-ᖑᑎᓪᓗᒍ ᐊᒻᒪᓗ ᑕᐃᑲᓂ 1965, ᐱᔭᒃᓴᕆᓕᓚᐅᖅᑕᖓᑦ ᐃᓂᖓ ᑖᒃᑯᐊ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ.

ᐃᒡᓗᑦ ᓇᐸᖅᖢᑎᒃ ᐃᓂᖓᓂ ᐃᓚᖃᖅᖢᑎᒃ ᑐᓛᓕᖅᑐᖅᓯᒪᔪᖅ, ᓯᕐᓗᐊᓕᒃ, ᓯᕐᓗᐊᕌᓗᓕᒃ, ᐅᖅᓱᐊᓗᖃᐅᑎᑦ, ᐅᖅᓱᐊᓗᒃᓴᐃᑦ ᐊᒻᒪᓗ ᐅᖅᓯᖅᑕᐅᑎᑦ, ᖃᓕᓈᓯᑎᑦᑎᕕᒃ ᓯᕐᓗᐊᕐᒧᐊᖅᑐᒃᓴᓄᑦ ᐊᒻᒪᓗ ᓅᓚᐅᑖ ᓇᐸᔪᖅ. ᒥᑭᔪᖅ ᒥᑦᑕᕐᕕᒃ (460 ᒦᑕ ᑕᑭᑎᒋᔪᖅ), ᐅᐊᖕᓇᖓᓂ ᐃᓂᖃᕐᕕᐅᔪᖅ, ᐃᓚᒋᓚᐅᖅᓯᒪᔭᖓ ᐃᓂᖓᓂ ᓇᐸᖅᑕᐅᓯᒪᔪᑦ. ᑕᑭᓂᖅᓴᐅᔪᖅ ᒥᑕᕐᕕᒃ (915 ᒦᑕ ᑕᑭᑎᒋᔪᖅ) ᐊᒻᒪᓗ ᐃᒡᓗᕌᓛᑦ ᐃᓂᖃᖅᑐᑦ ᓯᒡᔭᖓᓂ ᖃᓂᒋᔮᓂ 5.6 ᑭᓚᒦᑕ ᐅᖓᓯᒃᑎᒋᔪᖅ ᑭᑉ ᐹᑭᓛ. ᒫᓐᓇᐅᔪᖅ, ᑕᒪᕐᒥᒃ ᓇᐸᔪᑦ ᑕᐃᑲᓂ ᐃᓂᖓᓂ ᐲᔭᖅᑕᐅᓯᒪᓕᖅᑐᑦ ᐊᒻᒪᓗ ᐃᓂᖓ ᒫᓐᓇ ᑭᓯᑐᐃᓐᓇᓂᒃ ᑕᒫᓂᕐᓇᔪᑦ (ᐃᓚᒋᔭᐅᓪᓗᑎᒃ ᑐᓛᕕᓃᑦ, ᓇᐸᖅᓯᒪᔪᕕᓃᑦ ᓅᓚᒍᑏᑦ, ᓯᕐᓗᐊᖅ, ᓯᕐᓗᐊᕌᓗᒃ, ᐅᖅᓱᐊᓗᖃᐅᑎᑦ, ᐅᖅᓱᐊᓗᒃᓴᐃᑦ ᐊᒻᒪᓗ ᐅᖅᓯᖅᑕᐅᑎᑦ ᐊᒻᒪᓗ ᐃᒡᓗᕌᓛᑦ. ᐅᓇ ᐃᓂᖓ ᐃᓂᖃᕐᕕᐅᔪᖅ ᐅᓄᖅᑐᓂᒃ ᖃᑦᑕᐅᔭᓂᒃ ᐃᓂᑐᖃᖓᓂ ᐊᒻᒪᓗ ᐊᒥᓱᓂ ᓇᓂᑐᐃᓐᓇᖅ ᒫᓂᓇᔪᑦ ᖃᑦᑕᐅᔭᐃᑦ ᐃᓂᖓᓂ ᑕᐅᕙᓂᓗ ᓯᒡᔭᖓᓂ, ᐃᔾᔪᖅ ᓱᕈᖅᓯᒪᔪᖅ ᐅᖅᓱᐊᓗᖃᐅᑎᓂᑦ (ᓲᕐᓗ ᒫᓴᓛᖅ ᐊᒻᒪᓗ ᑏᓯ), ᐃᔾᔪᖓ ᓱᕈᖅᓯᒪᔪᖅ ᓴᕙᕐᓴᔾᔪᓂᒃ (ᓲᕐᓗ ᐊᕐᑭᑦᑐᑦ ᓴᕙᕐᓴᔾᔪᑦ) ᐊᒻᒪᓗ ᐱᓯᐲ ᐅᑯᖕᓂᑦ, ᐳᓪᓚᓕᖕᓂᒃ, ᑭᓱᕐᓗᖃᐅᖅᑐᑦ, ᐹᑕᑖᕕᓃᑦ, ᒫᓴ ᐳᓪᓚᓛᑦ ᐊᒻᒪᓗ ᐊᓯᖏᑦ ᑭᓯᑐᐃᓐᓇᐃᑦ.

2. ᐃᓂᖓ ᓇᓃᓐᓂᖓ **/** ᐅᐸᒃᑕᐅᔪᓐᓇᖅᑐᖅ

ᑳᒻ E ᐃᓂᖃᖅᑐᖅ ᖃᓂᒋᔮᓂ ᑐᑭᒧᑦ: 68° 17’ 16” ᐅᐊᖕᓇᖓᓄ; ᐊᒻᒪᓗ ᓴᓂᒧᑦ 88° 7’ 10” ᐱᓇᖕᓇᖓ. ᖃᓂᓛᖅ ᓄᓇᓖᑦ ᑰᒫᓗᒃ; ᑳᒻ E 75 ᑭᓚᒦᑕᔅ ᑲᓇᖕᓇᖓᓂ ᑰᒫᓗᒃ, ᐊᒻᒪᓗ 280 ᑭᓚᒦᑕᔅ ᓴᓂᕐᔭᖕᒥᑦ, ᓄᓇᕗᑦ.

ᑳᒻ E ᓴᕿᑕᐅᓚᐅᖅᓯᒪ ᐅᐸᒃᑕᐅᔪᓐᓇᖅᑐᖅ ᑎᓴᒪᓕᒃᑯᑦ, ᓯᑭᑑᒃᑯᑦ, ᖃᖓᑕᓲᒃᑯᑦ, ᖁᓕᒥᒎᓕᒃᑯᑦ, ᑑᓖᓕᒃᑯᑦ (ᓄᓇᒃᑯᑦ) ᐊᒻᒪᓗ ᐅᒥᐊᒃᑯᑦ. ᐃᒻᒪᑲᓪᓚᓂᑦ, ᐱᔭᕐᓂᖃᑦᑕᖅᓯᒪᓐᖏᑦᑐᖅ ᑭᓴᐅᖅ ᑕᐃᑯᖓᓇᐊᒃᓴᖅ ᑳᒻ E -ᒧᑦ ᐱᔾᔪᑎᒋᓪᓗᒍ ᓯᑯᐊᓗᐊᖅᑐᖅ ᓄᓇᓕᒫᖓ. ᐃᓚᖏᑦ ᐊᖏᓗᐊᖅᑐᑦ ᓯᑯᑦ ᐊᔪᖅᓯᓯᒪᔪᑦ ᐊᔪᕐᑎᑦᑎᖃᑦᑕᖅᑐᑦ ᑳᒑᓗᖕᒧᑦ, ᖃᓂᓛᖑᔪᖅ ᓄᓇᓕᒃ ᑖᑉᓱᒧᖓ ᑳᒻ E, ᐅᒥᐊᕐᔪᐊᖅᑕᐅᓇᓱᒃᑲᓗᐊᖅᓗᑎᒃ. ᑰᒑᓗᒃ ᐱᔨᑦᑎᕋᖅᑕᐅᔪᖅ ᐅᐸᒃᑕᕐᑯᐅᕙᒃᑐᑦ ᑲᓇᑕᐅᑉ ᐱᖖᒋᓇᖅᑐᓕᕆᔨᒃᑯᖏᓐᓂᒃ ᐅᒥᐊᕐᔪᐊᓂᒃ, ᐱᖁᑎᑭᑎᖏᑦ ᐅᓄᓐᖏᓂᖅᓴᐅᕗᑦ ᐊᒻᒪᓗ ᐅᒥ)ᓐᓇᖅᑕᖏᑦ.

ᐱᓇᓱᐊᕈᓯᑦ ᐊᖖᒋᔫᑎᑦ ᐃᒡᓗᓕᐅᕈᑎᑦ ᓄᓇᓯᐅᑎᑦ ᐊᒻᒪᓗ ᑭᓯᓕᓇᔾᔪᑎᒃᓴᖏᑦ ᑳᒻ E ᐃᓂᖓᓂ ᑕᐃᒪᓗ ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᑎᑭᑎᓪᓗᒋᑦ ᐅᖁᒪᐃᑦᑐᑦ ᓴᓇᔾᔪᑏᑦ ᓄᓇᓯᐅᑎᕐᔪᐊᑦ ᓄᓇᕗᑦ ᓄᓇᖏᓐᓄᑦ ᖃᓂᒋᔭᖓᓄᑦ ᑳᒻ E ᐊᒻᒪᓗ ᐱᔨᑦᑎᕋᖅᑕᐅᓗᑎᒃ ᐅᓯᑲᖅᑕᑦᑎᐅᔪᑦ ᑲᒻᐸᓃᑦ. ᑳᓐᑐᕌᒃᑎ ᑕᐃᒪᓗ ᐅᓯᓕᖅᓱᐃᓂᐊᕐᒪᑕ ᐊᒡᔭᖅᑐᖅᑕᐅᓂᐊᖅᑐᓂᒃ ᓄᓇᓕᖕᓂᑦ ᐃᓂᖓᓄᑦ. ᐃᒻᒪᖄ ᓄᓇᓖ, ᐊᑐᓕᖅᑯᔭᐅᓯᒪᔪᑦ ᓯᕗᓂᑦᑎᓂ ᐃᓕᑕᐅᓇᓱᒃᓯᒪᔪᓂᑦ ᐊᒻᒪᓗ ᐃᓂᑐᖃᖓᓄᑦ ᓄᓇᐃᑦ ᐅᑎᖅᑎᑕᐅᓯᒪᔪᑦ ᒐᕙᒪᑐᖃᒃᑯᑦ ᓱᕈᖅᓯᒪᔪᓂᒃ ᐃᓂᖏᓐᓂᒃ ᓄᑖᕈᖅᑎᑕᐅᓂᒃᓴᖓᑕ ᐸᕐᓇᐅᑖᑦ ᑎᑎᕋᖏᑦ ᓇᐅᔮᓂ ᑕᓗᕐᔪᐊᓂᓗᑭᐊᖅ.

ᐅᓇ ᐱᓕᕆᐊᖑᒧᑦ ᑳᓐᑐᕌᒃᑕᐅᓯᒪᔪᖅ ᐅᒥᐊᕐᔪᐊᑰᕐᑎᑦᑎᔪᓐᓇᖅᑐᖅ (ᐊᐅᔭᒃᑯᑦ) ᐊᒻᒪᓗ ᓄᒃᑕᕐᓗᒋᑦ ᓴᓇᕈᑎᓂ ᐊᒻᒪᓗ ᑕᕐᑯᐊᓂ ᓂᒋᐊᓂᑦ ᑰᒑᓗᖕᒧᑦ ᐅᓯᔭᐅᓗᑎᒃ ᒪᓕᒃᑕᐅᓗᑎᒃ ᑲᓇᑕᐅᑉ ᐱᖖᒋᓇᖅᑐᓕᕆᔨᒃᑯᑦ ᐅᒥᐊᕐᔪᐊᖏᓐᓂᑦ ᓯᐅᓯᐅᑎᓂᒃ. ᑳᓐᑐᕌᒃᑕᐅᓯᒪᔪ ᐅᓯᔭᐅᑎᓐᓂᐊᕐᒪᒋᑦ ᑰᒑᓗᖕᒥᑦ ᐃᓂᖓᓄᑦ.

ᐅᓇ ᐃᓂᖓ ᒪᕐᕉᖕᓂᒃ (2) ᓴᕿᔫᖅᑐᖃᖅᑐᖅ - ᐃᓂᖓ ᐊᒻᒪᓗ ᓯᒡᔭᒦᑦᑐᖅ. ᑕᐃᒪᓗ ᒪᕐᕉᒃ (2) ᒥᑦᑕᕐᕖᒃ (ᐊᑕᐅᓯᖅ ᐊᑐᓂ ᒪᕐᕉᖕᓂ (2) ᓄᓈᖕᓂ). ᒥᑦᑕᕐᕖᑦ ᐋᕿᑦᑎᐊᖅᓯᒪᔪᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᒥᑦᑕᕐᕕᐅᓗᑎᒃ ᐊᒻᒪᓗ ᐊᒡᔭᖅᑐᕐᕕᐅᓗᑎᒃ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᔪᓂᒃ ᓄᒃᑕᕐᓗᒋᑦ ᐃᓄᐃᑦ ᐊᓐᒪᓗ ᐃᓂᖓᓂ ᓴᓇᕈᑎᒃᓴᖏᑦ / ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ.

3. ᐱᓕᕆᐊᖑᔪᖅ ᖃᓄᐃᓕᐅᖅᑐᑦ ᐊᒻᒪᓗ ᐅᓪᓗᖏᑦ

ᐊᕙᑎᖓ ᐃᓂᖓᑕ ᖃᐅᔨᓴᐅᓇᓯᑦᑎᐊᖅᓗᓂ ᐱᓕᕆᔭᐅᓚᐅᖅᑐᑦ ᑭᓲᖕᒪᖔᑕ ᐊᒻᒪᓗ ᓈᓴᖅᓗᒋᑦ ᖃᓃᑎᒋᖕᒪᖔᑕ ᓱᕈᖅᓯᒪᔪᑦ ᐃᓯᒫᓗᑎᒃᓴᐃᑦ ᑕᐃᑲᓂ ᑳᒻ E ᐃᓂᖓᓂ. ᐅᓂᒃᑳᑦ ᑕᒪᒃᑯᓂᖓ ᐃᓚᑕᐅᓇᓱᒃᓯᒪᔪᓂᒃ ᑎᑎᕋᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᕙᑎᑦᑎᓄᑦ ᖃᐅᔨᓴᖅᑎᒻᒪᕇᑦ ᐱᓇᓱᐊᖅᑲᑎᒌᖕᓂᑦ (1995); ᐃᒪᖓᓂ, ᓄᓇᖓᓂ ᖃᐅᔨᓴᐃᔨᒻᒪᕇᑦ ᐱᓇᓱᐊᖅᑲᑎᒌᑦ (ᕕᕗᐊᕆ 2012); ᐊᒻᒪᓗ ᓯᑖᓐᑎᒃᑯᓂᑦ (2013). ᖃᐅᔨᓴᖅᓯᒪᔪᑦ / ᐃᓂᖓᓂᒃ ᖃᐅᔨᓴᑦᑎᐊᕋᓱᒃᓯᒪᔪᑦ ᐅᓂᒃᑳᖏᑦ ᐊᑖᓂ ᑎᑎᕋᖅᓯᒪᔪᑦ

- ᐊᕙᑎᑦᑎᓄᑦ ᖃᐅᔨᓴᖅᑎᒻᒪᕇᑦ ᐱᓇᓱᐊᖅᑲᑎᒌᖕᓂᑦ (ᒫᑦᓯ 1995) - ᐊᕙᑎᑦᑎᓕᒃ ᐃᓕᑦᑎᓇᓱᒃᑐᑦ ᐃᔅᓯᓇᑯᓂᒃ ᑑᓚᐃᖅᑲᖅᕕᖕᓂᒃ ᐃᓂᖓ ᐃᔾᔪᔪᑦ I ᑎᑭᓪᓗᒍ III. ᐊᑕᐅᓯᖅ ᐃᑲᔪᕆᐊᖅᑎᑕᐅᓯᒪᔪᑦ ᐊᒻᒪᓗ 8 ᐊᕙᑎᑦᑎᓄᑦ ᖃᐅᔨᓴᖅᑎᒻᒪᕇᑦ ᐱᓇᓱᐊᖅᑲᑎᒌᖕᓂ ᐱᖃᑎᖏᑦ ᐃᓂᖏᓂ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᐊᓂ.
- ᐃᒪᖓᓂ, ᓄᓇᖓᓂ ᖃᐅᔨᓴᐃᓂᒻᒪᕆᒃ ᐱᓇᓱᐊᖅᑲᑎᒌᑦ (ᕕᕗᐊᕆ 2012) - ᐅᓄᓐᖏᑦᑐᓂᒃ ᐊᕙᑎᖓ ᖃᐅᔨᓴᐅᓇᓯᑦᑎᐊᖅᓗᓂ UK004 - ᑲᒻ E
- ᓯᑖᓐᑎᒃ (ᑎᓯᐱᕆ 2013) - ᓇᕿᓂᖓ III ᐊᕙᑎᖓ ᐃᓂᖓᑕ ᖃᐅᔨᓴᐅᓇᓯᑦᑎᐊᖅᓗᓂ, ᑳᒻ E, ᓄᓇᕗᑦ.

ᒪᓕᒃᓴᐃᒍ ᐅᑯᐊ ᐃᓂᖅᑎᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔪᓕᐸ ᐃᓕᓴᐸᐊᕋᓯᓴᓄᑦᓕᐸ, ᐃᓂᖅᑎᓂᒃ ᓄᑦᖁᕐᕕᑎᑕᐅᓂᒃᓴᖅᓴᖅᑐᑦ ᐊᕐᕌᕆᑦ ᓴᖅᑭᑕᐅᓕᐅᖅᓯᒪᔪᓕᐸ ᓴᓇᓴᖅᓴᕐᒪᓕᒃᑐᐃᒍ ᐃᒃᑐᐃᓕᓴᐅᓂᖅ <ᕋᓇᐅᑦ, ᓄᓇᓕᖅᓂ ᐅᖅᑲᓕᖅᑎᕋᖅᑲᓂᒃ, ᑕᐃᒪᓐᓇ ᐃᓄᓕᒫᓂᒃ ᑲᑎᒪᑎᑦᓕᓂᒃ, ᑯᐃᔭᖅᓯ ᑕᐃbᓂ ᐅᓇᓕᑎᑦᓕᓂᒃ 8 , 2014. ᑲᑎᒪᓂᖅ ᐃᓕᐅᕕᐅᑎᐊᓕᐅᖅᑐᖅ ᓄᓇᓕᖅᓂ ᖁᑎᖅᑭᐊᖅᑎᑦᓕᓂᒃᑐᖅᓴᖅ ᑲᓚᒪᑎᓕᐅᖅᑐᖅ ᐃᓂᖅᑎᓂᒃᓴᖅᓴᖅᑐᑦ ᐃᓕᒪᑎᕕᐅᑎᐊᖅᑐᖅ ᐃᓂᖅᑎᓂᒃ <ᕋᓇᐅᑦ ᐱᓕᓴᖅᑕᐅᓂᓐᓄᓂ. ᐅᓇ ᓴᓇᓕᖅᓴᐃᓂᖅ ᑲᓕᑦᓂᒃᑎᑦᓕᓂᒃ ᐃᓂᖅᑎᓂᒃᓴᖅᓴᖅᑐᑦ ᐃᓂᖅᑎᓂᒃ ᐃᓂᖅᑎᓂᒃᓴᖅᓴᖅᑐᑦ ᐃᓂᖅᑎᓂᒃ <ᕋᓇᐅᑦ ᐱᓕᓴᖅᑕᐅᓂᓐᓄᓂ. ᐅᓇ ᓴᓇᓕᖅᓴᐃᓂᖅ ᑲᑎᒪᓂᖅ ᐃᓕᐅᕕᐅᑎᐊᖅᑐᖅ <ᕋᓇᐅᑦ ᐱᓕᓴᖅᑕᐅᓂᓐᓄᓂ ᐊᕐᕌᕆᑦ 2016/2017 ᑎᑭᓐᓇᒍ 2019/2020. ᑕᒪᕎᑲᓂᖅ ᐃᓂᓕᐅᕕᐅᑎᐊᖅᑐᖅ ᐅᑯᐊᓂᖅ:

- 2016-17 - ᐱᔾᓇᐅᑎᑕᕐᓄᑎᒃ, ᐱᓕᓕᓄᑦ ᐅᒥᐊᕐᔪᐊᑯᖅᑐᑦᓴᐃᓂ ᓄᑦᕿᖅᑕᐅᓄᑎᒃ ᑯᐃᓚᕐᓇᒪᓂ ᐊᓚᓕᓄ ᐅᑭᐅᖅᑯᓂ ᐅᓱᐅᓕᕐᓄᑎᒃ ᓄᓇᖅᑯᓂ ᐃᓂᖅᓱᓄᓂ.
- 2017-18 - ᐊᕐᕌᒍ ᐊᑕᐅᓱᖅ ᐊᐅᑎᖅᓱ ᐃᓂᖅᓄᓂ ᓴᓄᓴᓪᓚᖅᓴᖅᑕᐅᓄᓂ
- 2018-19 - ᐊᕐᕌᒍ 2 ᐊᐅᑎᖅᓱᓂ ᐃᓂᖅᓱᑕ ᓴᓄᓪᓚᖅᓴᐃᓄᑎᒃ ᐊᓚᓕᓄ ᐅᑭᐅᖅᕐᑯᓂ ᓄᓇᖅᑯᓂ ᐊᓱᔾᖅᑐᐃᓄᑎᒃ ᑯᐃᓚᕐᖅᓕᓂ.
- 2019-20 - ᐅᒥᐊᕐᔪᐊᖅᑯᓂ ᐃᓱᓕᔭᕐᖅᕕᓄᑎᒃ ᖃᓄᓕᓵᓕᓂ ᓄᓇᖅᓱᓂ ᐊᓚᓕᓄ ᐱᓕᓕᓄᑦᓕᐸᖅᓴᖅ ᓚᑐᓄᓂ.

ᐅᓇ ᐃᓂᖅᓱᓄᓂ ᓴᓄᓪᓚᖅᓴᐅᑕᐅᓂᐊᖅᑐᑦ ᐱᓕᓕᓄᔭᓂᐊᖅᑐᑦ ᑕᵒᓇ ᑲᑦ ᐃ ᐅᑯᐊ ᐃᓕᑎᐅᔪᓕᐸ, ᐊᓚᓕᓄ ᐊᓱᖅᑎᐅᓂᐊᖅᑐᖅ ᐃᓕᖅᑲᐅᓂᐊᖅᑐᖅ ᐃᓂᖅᓱᓄᓂ ᖃᐃᖅᓯᐅᑦᓱᓂᒃᑐᖅᓴᖅ ᐃᓂᖅᓱᓄᓂ ᖃᖅᖅᓯᐅᑦᓱᓂᒃᑐᖅᓴᖅ ᐃᓕᓴᐸᐊᕐᓂᖅ (ᐱᓕᓕᑎᑎᑦᑎᐊᖅ ᑲᵒᑐᑭᖅᑕᐅᓄᓂ)

- ᐱᐅᓱᒋᑦᓯᓄᑦᑐᒃ ᐃᓂᖅᓱ ᐅᐸᖅᑕᐅᔪᵒᓇᑦᑎᐊᓕᓯᓄᓂ ᐊᑯᓱᐅᑦᓄᒍ (ᑕᐃᒪᵒᓇᐅᑦᖅᑕᐅᓄᑎᒃ)
- ᐃᓂᖅᓱᓂᑕ ᐱᑯᓂᑦ ᐊᓚᓕᓄ ᒥᑦᑲᕐᓂᖅᓱᓂ ᐃᓂᖅᓱᓄᓂ
- ᑕᖅᒧᒪᖅᓱᓂᑦ ᐋᑯᖅᑭᐅᖅᓱᓄᒍ ᐊᓚᓕᓄ ᐊᑐᖅᑕᐅᓕᕐᓄᑎᒃ (ᑕᐃᒪᵒᓇᐅᑦᖅᑕᐅᓄᑎᒃ)
- ᐃᓂᖅᓱᓂᑕ ᐊᑯᓂᖅᑕᐅᓂᒃ ᐃᓂᖅᓱᓄᓂ ᐅᓄᓚᓇᖅᑐᓄᑦ ᐱᓇᓂᓄᑦ, ᓴᓇᖅᑎᓄᑦ ᐊᓚᓕᓄ ᐅᖅᓱᐊᓄᖅᓄᑦ (ᑕᐃᒪᵒᓇᐅᑦᖅᑕᐅᓄᑎᒃ)
- ᐃᓗᓄ ᐊᓚᓕᓄ ᓇᐸᐅᑦ ᓱᕆᕋᑎᕆᐅᓄᑎᒃ
- ᑲᑕᑎᓂᑯᐃᑦ ᐊᒥᐊᖅᑯᐃᑦ ᑲᑎᕋᑦᓂᑕᑦ ᐊᓚᓕᓄ ᐃᑕᑦᓂᑕᑦ
- ᓴᐅᖅᑎᓂᑕᑦ ᐊᓚᓕᓄ ᐊᓱᐊᓄᑦ ᓄᑦᑎᓂᑕᑦ ᓱᑕᖅᓱᒪᔪᑦ ᐃᕐᔪᖅ ᓄᓇᒧᑦ (ᐱᓕᓕᕆᐅᒥᐊᑕᓂ ᓄᓇᖅᓱᓂ ᓱᓕᒋᑎᐅᓕᖅᓴᖅᑐᑦ)
- ᓴᐅᖅᑎᓂᑕᑦ ᐊᓚᓕᓄ ᐋᓱᓂᑕᑦ ᓴᐃᓚᕆᐃᑦ ᐊᓚᓕᓄ ᐱᓱᐋ ᓱᑕᖅᓱᒪᔪᑦ ᐃᕐᔪᐃᑦ ᐃᓂᖅᓱᓂᒥᑦ
- ᐅᕆᖅᑎ ᐱᐅᓂᖅᑎᑦ ᐋᓱᓂᑕᑦ ᐊᓚᓕᓄ ᐅᓄᓪᐊᖅᑕᐅᑦ ᐱᓇᓂᑦ

- ᓄᓇ ᐱᕈᑦᑎᐊᑲᓐᓂᕈᓐᓇᖅᓯᑎᓪᓗᒍ ᓴᓇᔭᐅᓗᓂ (ᑕᐃᒪᓐᓇᐃᔭᕆᐊᖅᑲᕈᑎᒃ) ᐊᒻᒪᓗ ᐲᔭᕐᓗᒥᑦ (ᑕᐃᒪᓗ ᐃᔾᔪᖅ ᐃᓂᑐᖃᖓᓄᒃ ᐅᑎᖅᑎᑕᐅᔭᕇᕈᓂ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᓂᕐ) (2009) ᐃᒡᓯᓇᖅᑕᐅᓂᑯᑦ ᐅᓇᑕᖅᑐᖅᓴᓂᑦ ᐃᓂᖓ ᓄᑖᖑᖅᑎᑕᐅᓗᑎᒃ

- ᐃᓂᖓ ᑐᐊᐸᖓ ᓯᖅᑲᓕᑦᑎᐊᖅᓗᒍ

- ᐅᑎᖅᑎᓪᓗᒋᑦ ᓴᓇᕐᕈᑎᑦ, ᐱᕐᑯᑎᑦ / ᐊᒃᑕᑯᑦ ᐊᒻᒪᓗ ᐃᖅᑲᓇᐃᔭᖅᑑᑦ. ᐅᑎᑦᑎᑎᓇᓂᖅ ᐱᓕᕆᔭᐅᓕᕐᓗᓂ ᑳᓐᑐᕌᒃᑕᐅᓯᒪᔪᖅ ᓄᒃᑕᕐᓗᒋᑦ ᐃᓂᖓᓄᑦ.

ᓇᓗᓇᐃᔭᑦᑎᐊᖅᓯᒪᔪᑦ ᖁᓛᓂ ᓴᓗᒻᒪᖅᓴᐃᓂᖅ ᐊᑐᐃᓐᓇᐅᔪᑦ ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᑕᐅᓂᒃᓴᖓᑕ ᐸᕐᓇᐅᑖ ᐃᓗᓕᖃᖅᑐᖅ ᐊᑐᓕᖁᔭᐅᔪᓂ ᑎᑎᖅᑲᓂᒃ ᑐᓂᔭᐅᓚᐅᖅᓯᒪᔪᑦ ᒪᓕᒐᓕᐅᖅᑎᓄᑦ ᑎᒥᐅᔪᓄᑦ ᑖᒃᑯᑎᒎᑦ ᓄᓇᕗᒻᒥ ᐸᕐᓇᐃᔩᑦ. ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᑕᐅᓂᒃᓴᖓᑕ ᐸᕐᓇᐅᑖ ᐃᓗᓕᖃᖅᑐᖅ ᐊᑐᓕᖁᔭᐅᔪᓂ ᓴᓗᒻᒪᖅᓴᐃᔾᔪᑎᒃᓴᐃᑦ ᖃᓄᓇᑦᑐᑐᐃᓐᓇᓄᑦ ᑰᕕᔪᓄᑦ ᑕᐃᑲᓂ ᑳᒻ E. ᑳᓐᑐᕌᒃᑕᐅᓯᒪᔪᖅ ᐊᑐᕋᔭᖅᑕᖏᑦ ᐃᓱᒪᓕᖅᑕᐅᓯᒪᔪᑦ ᑕᒪᒃᑯᓄᖓ ᐱᒋᐊᕈᑎᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐱᐅᓂᖅᓴᐅᔪᒥᒃ ᐱᒋᐊᕈᑎᖃᕐᓗᑎᒃ ᓴᓗᒻᒪᖅᓴᐃᓂᕐᒧᑦ ᑳᒻ E ᐃᓂᖓᓂᒃ.

ᐱᔭᕇᕈᑎᒃ ᐃᓂᖓᓂ ᓄᑖᖑᕐᑎᑦᑎᓇᓂᖅ (ᑎᑭᐅᑎᓚᐅᖅᑎᓐᓇᒍ 2020) ᑕᐃᑲᓂ ᑳᒻ E, ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ ᐊᑐᖅᓯᓂᐊᖅᑐᑦ ᑎᑭᓪᓗᒍ 25 ᐊᕐᕌᒍᓄᑦ ᒥᐊᓂᕆᔭᐅᓗᓂ ᖃᐅᔨᓴᐅᓇᓱᑦᑎᐊᖃᑦᑕᕐᓗᓂ ᐋᖅᑭᑦᑎᐊᖅᓯᒪᒐᓗᐊᕐᒪᖔᑦ ᐅᓗᕆᐊᓇᖅᑐᖃᖏᑦᑐᓂᒃ ᓴᐅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐅᓗᕆᐊᓇᕐᓂᖅᓴᐃᑦ II (ᓴᕕᕐᔭᒃᓴᐃᑦ ᐊᒻᒪᓗ ᐱᓯᐲ) ᓴᐅᓯᒪᔪᑦ ᑕᐃᑲᓂ ᐃᓂᖓᓂ. ᐃᓗᐊᖏᔾᔭᑎᑦ ᓴᕿᑕᐅᒍᑎᒃ ᑕᐃᑲᓂ ᓄᑖᕈᒻᒥᖅᑎᓐᓂᐊᕌᖅᑐᓂ ᒥᐊᓂᕆᔭᐅᓕᕐᓂᐊᖅᑐᑦ. ᐅᓇ ᒥᐊᓂᕆᓂᖅ ᐱᐅᓯᕆᔭᐅᔪᖅ ᒪᓕᒃᓗᒍ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ ᐃᒡᓯᓇᖅᑕᐅᓯᒪᔪᓂᒃ ᐅᓇᑕᖅᑐᒃᓴᒃᑲᕝᕕᓂᑦ ᐃᓂᖏᑦ ᓄᑖᕈᒻᒥᖅᑎᑕᐅᓂᖏᓐᓂᑦ.

4. ᐃᓅᓯᓂᕐᓄᑦ ᐊᒃᑐᐃᓂᖓ ᐱᓕᕆᐊᖑᔪᖅ

ᑕᐃᒪᖓᓂᑦ ᐊᑐᖅᓯᓗᑕ, ᐱᓕᕆᐊᓇᔭᕗᖅ ᐱᓕᕆᖅᑎᖃᖅᓗᑎᒃ ᓱᖏᐅᓴᐅᑎᒃᓴᓂᒃ ᐋᕿᒃᓯᒪᔪᓂᒃ ᓈᓚᕆᔭᖏᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᖅ ᓯᓚᑖᑕ ᐊᒻᒪᓗ ᓄᓇᖃᖅᑐᑦ, ᐊᑐᖅᓯᓗᑎᒃ ᐃᓄᖕᓂ ᖃᐅᔨᒪᔭᐅᔪᑦᑲᓂᒃ ᐊᒻᒪᓗ ᐃᑕᒋᔭᐅᓗᑎᒃ ᑭᖅᖁᒪᒋᔭᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᐅᑦ ᐊᒻᒪᓗ ᓯᓚᑎᖏᑕ ᐱᓪᓗᒋᑦ ᓱᕈᖅᓯᒪᔪᓂᒃ ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᑕᐅᓂᒃᓴᖓᑕ ᐸᕐᓇᐅᑖ.

ᓴᓂᐊᒍᑦᑕᐅᖅ ᐃᓄᓕᒫᓂᒃ ᓄᓇᓕᖕᓂ ᑲᑎᒪᑎᑦᑎᓂᑦᑕ ᑐᓂᓯᓚᐅᖅᑐᒍᑦ ᐆᒃᑑᑎ ᓱᕈᖅᓯᒪᔪᓂᒃ ᐃᓂᖏᓐᓂᒃ ᓄᑖᖑᖅᑎᑕᐅᓂᒃᓴᖓᑕ ᐸᕐᓇᐅᑖ ᓄᓇᓕᖕᓂ 2014-ᒥ, ᐊᓯᐊᒍᑦ ᓄᓇᓕᖕᓂᒃ ᕿᒥᕐᕈᐊᖃᑎᖃᕐᓗᑎᒃ ᑲᑎᒪᓗᑎᒃ ᑰᒑᕐᕈᒃ ᐱᒋᐊᓚᐅᖏᓐᓂᕐᒪᓂ ᐃᓂᖓᓂᒃ ᓴᓗᒻᒪᖅᓴᐃᓂᖅ ᐅᖃᖃᑎᒋᓗᑎᒋᑦ ᐃᖅᑲᓇᐃᔭᖅᑑᑦ ᐊᒻᒪᓗ ᑳᓐᑐᕌᒃᑕᐅᓯᒪᓂᐊᖅᑐᑦ. ᐱᐊᓂᒃᓯᓂᐊᖅᐳᖅ ᓄᓇᓕᖕᓂ ᑲᑎᒪᓗᑎᒃ ᑲᔪᓯᖅᑲᑦᑕᕐᓂᐊᖅᑐᖅ ᑕᐃᒪᖓᓂ ᐱᓕᕆᐊᖑᓂᖓᓂ ᑕᐃᒪᓗ ᓄᓇᓖᑦ ᑰᒑᕐᕈᒻᒥ ᖃᐅᔨᒪᓂᐊᕐᒪᑕ ᖃᓄᐃᓕᐅᖅᑕᐅᓂᖏᓐᓂᒃ, ᖃᐅᔨᓴᐅᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᐸᕐᓇᐅᑎᓂᒃ ᐱᐊᓗᒍ ᐃᓂᖓ ᐊᒻᒪᓗ ᐱᓕᕆᐊᓂ ᖃᓄᖅ ᐱᐊᓂᒃᓯᓂᐊᕐᒪᖔᑕ.

ᑲᓐᑐᕆᑕᐅᓯᒪᔪᖅ / ᓇᖏᒥᓂᔪᐊᑎᖅᑕᖅᑐᓄᑦ ᑕᐃᒪᓐᓇᐅᔾᔨᕐᓇᖅᑭᑕᐅᔾᔨᒃᑯ ᐊᑐᓕᖅᑕᕆᐅᓪᓗᑎᑦ ᑕᒪᑐᒧᖏᑲ ᐱᓕᕆᓇᖏᔪᒪᑦ ᐊᖏᖓᓕᖅᓯᒪᔪᓕᒫᑦ ᐃᑲᔪᑎᔪᒃ ᐱᓕᕆᐊᖏᔪᒥᒃ ᖃᓄᐹᓕᕆᔨᖏᓐᓄᑦ ᓄᓇᓕᖓᓄᑦ (ᑯᐃᓚᐅᖅ) ᐃᖃᓄᐊᔾᔨᑎᑎᓪᓗᒍ ᓄᓇᓕᖓᓂ ᐊᓕᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᑐᒥ ᐃᖃᓄᐊᐃᔾᔨᑎᑎᕐᔾᐅᔪᓂᒃ ᐊᓕᒪᓗ ᐱᓕᕆᐊᑎᑎᓪᓗᒍ ᐱᔭᕇᑎᕐᖏᑦ ᓄᓇᓕᖓᓂᑦ ᐊᓕᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᑐᒥ ᑲᓐᑐᕆᑕᐅᐊᓯᒪᔪᑦ.

Appendix B

CAM-E Phase III Environmental Site Assessment and Archeological Reports (Final)

(Contained in a separate DVD)

Appendix C

CAM-E Remedial Action Plan (RAP) (Final)

(Contained in a separate DVD)

Appendix D

Current Project Schedule

Appendix E

Fuel and Hazardous Materials Spill Contingency Plan (Attached as a separate document in email 2)

Appendix F

Site Maps – Site Location Map; Map of Current Site Features; and NTS Map Sheet (Attached as a separate document in email 3 - Also contained in Phase III and RAP reports)

Appendix G

Environmental (Impact) Assessment (Screening) Report

(Contained in a separate DVD)

Appendix H

Nunavut Planning Commission (NPC) Conformity Check (Letter confirming that is outside the area of an applicable regional land use plan)

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Nunavunmi Parnaiyiit
Nunavut Planning Commission
Commission d'Aménagement du Nunavut

January 27, 2016

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Manager, Technical Administration
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RE: NPC File # 148190 CAM-E (Keith Bay) Remediation Project

The Nunavut Planning Commission (NPC) has determined that this project proposal is outside the area of an applicable regional land use plan. The project proposal requires screening by the Nunavut Impact Review Board (NIRB) because it does not belong to a class of exempt works or activities set out in Schedule 12-1 of the Nunavut Land Claims Agreement (NLCA).

By way of this letter, the NPC is forwarding the project proposal to the NIRB for screening. Project materials are available at the following address: http://npc.strata360.com/portal/project-dashboard.php?appid=148190&sessionid=

This decision applies only to the above noted project proposal as submitted. If there is a significant modification to the project proposal, the proponent is required to re-submit the modified project proposal to the NPC. For reference, a significant modification may include:

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ᐅᖃᓘᑎᖓ 867-983-4625
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P.O. Box 2101
Cambridge Bay, NU X0B 0C0
867-983-4625
867-983-4626

P.O. Box 2101
Ikaluktutiak, NU X0B 0C0
867-983-4625
867-983-4626

- Any change to the location of the work or activity;
- Any change to the type of land use;
- Any change to the timing of the work or activity (e.g. seasonal changes);
- An increase or modification in a work or activity that, for example, requires changes to a land use permit from Class B to Class A or a water licence from Type B to Type A;
- Any change that disqualifies a project proposal from a previously applicable NIRB screening exemption provided in NLCA Schedule 12-1.

This list is non-exhaustive and is simply an example of what the NPC may consider to be “significant modifications” from a land use planning perspective.

If you have any questions, please do not hesitate to contact me at (867) 983-4632.

Sincerely,

Jonathan Savoy
Senior Planner,
Nunavut Planning Commission

Appendix I

Nunavut Impact Review Board (NIRB)

NIRB Screening Decision Report

SCREENING DECISION REPORT
NIRB FILE No.: 16DN001

NPC File No.: 148190

May 13, 2016

Following the Nunavut Impact Review Board's (NIRB or Board) assessment of all materials provided, the NIRB is recommending that a review of Indigenous and Northern Affairs Canada (INAC) – Contaminated Sites Division's "CAM-E (Keith Bay) Site Remediation Project" is not required pursuant to paragraph 92(1)(a) of the *Nunavut Planning and Project Assessment Act* (NuPPAA).

Subject to the Proponent's compliance with the terms and conditions as set out in below, the NIRB is of the view that the project proposal is not likely to cause significant public concerns, and it is unlikely to result in significant adverse environmental and social impacts. The NIRB therefore recommends that the responsible Minister(s) accepts this Screening Decision Report.

OUTLINE OF SCREENING DECISION REPORT

1) REGULATORY FRAMEWORK
2) PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS
3) FACTORS FOR DETERMINING SIGNIFICANCE OF IMPACTS
4) RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS
5) OTHER NIRB CONCERNS AND RECOMMENDATIONS
6) REGULATORY REQUIREMENTS
7) CONCLUSION

REGULATORY FRAMEWORK

The primary objectives of the NIRB are set out in Section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) as follows:

> *"In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area."*

These objectives are confirmed under section 23 of the NuPPAA.

The purpose of screening is provided for under section 88 of the NuPPAA:

"*The purpose of screening a project is to determine whether the project has the potential to result in significant ecosystemic or socio-economic impacts and, accordingly, whether it requires a review by the Board…*"

To determine whether a review of a project is required, the NIRB is guided by the considerations as set out under subsection 89(1) of NuPPAA:

> *"89. (1) The Board must be guided by the following considerations when it is called on to determine, on the completion of a screening, whether a review of the project is required:*
>
> *(a) a review is required if, in the Board's opinion,*
> *i. the project may have significant adverse ecosystemic or socio-economic impacts or significant adverse impacts on wildlife habitat or Inuit harvest activities,*
> *ii. the project will cause significant public concern, or*
> *iii. the project involves technological innovations, the effects of which are unknown; and*
>
> *(b) a review is not required if, in the Board's opinion,*
> *i. the project is unlikely to cause significant public concern, and*
> *ii. its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies."*

It is noted that subsection 89(2) provides that the considerations set out in paragraph 89(1)(a) prevail over those set out in paragraph 89(1)(b).

Where the NIRB determines that a project may be carried out without a review, the NIRB has the discretion to recommend specific terms and conditions to be attached to any approval of the project proposal. Specifically, paragraph 92(2)(a) of NuPPAA provides:

> "*92. (2) In its report, the Board may also*
> *(a) recommend specific terms and conditions to apply in respect of a project that it determines may be carried out without a review.*"

PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

1. Project Description

The proposed "CAM-E (Keith Bay) Site Remediation Project" project is located within the Kitikmeot region, approximately 75 kilometres (km) east from Kugaaruk. The Proponent intends to conduct site clean-up and remediation work of the CAM-E distant early warning (DEW) line site that was operational from 1957 to 1963. The program is proposed to operate seasonally between June and September from June 2016 to March 2020.

According to the project proposal, the scope of the project includes the following undertakings, works or activities:

- Establishment of a temporary camp for up to 38 personnel;

- Construction and operation of a temporary winter access trail for mobilization and demobilization activities to and from the CAM-E site;
- Transportation of equipment via barge to local community (Kugaaruk, Naujaat or Taloyoak; dependant on barge accessibility to the community), followed by winter overland transportation to site using a CAT train;
- Weekly transportation of personnel and supplies during operational months to site by aeroplane from Kugaaruk;
- Remediation activities to include:
    - Demolition of site buildings and infrastructure;
    - Debris consolidation and disposal;
    - Excavation and relocation of petroleum hydrocarbon (PHC) contaminated soils to a landfarm cell;
    - Excavation, collection and treatment of contaminated soils in an on-site non-hazardous waste landfill;
    - Disposal of non-hazardous materials (e.g., empty barrels, fuel drums, building material) to an existing non-hazardous landfill;
    - Re-grading of site;
    - Stabilization and covering of landfill after completion of remediation activities;
    - Removal and disposal of hazardous wastes to an approved off-site facility;
- Development and operation of a landfarm cell (if required);
- Construction and operation of a non-hazardous waste landfill and a Tier II landfill facility;
- Removal and quarrying of aggregate material from eight potential borrow sources to facilitate infrastructure rehabilitation and remediation activities;
- Quarrying of gravel and overburden materials;
- Use and enhancement of two (2) existing airstrips for supply planes with enhancement;
- Enhancement of site access routes (if required);
- Use of water for domestic and operational purposes;
- Transportation, storage and use of fuel and oil with up to 10,200 litres (L) of diesel and 2,050 L of gasoline;
- Potential construction, use and decommissioning of a temporary lagoon for treatment and disposal of black and grey water;
- Incineration of combustible wastes generated from camp operations;
- Removal of non-combustible wastes, overburden and hazardous wastes to a licenced off-site facility;
- Use of heavy machinery and equipment to support site and remediation operations;
- Demobilization of machinery and equipment upon project completion;
- Hiring of Nunavut residents for project components and services;
    - Hosting periodic community meetings in Kugaaruk to provide residents with project updates and results;
- Long-term monitoring of site to ensure stability of landfill facilities.

2. Scoping

The NIRB has identified no additional works or activities in relation to the project proposal.

3. Key Stages of the Screening Process

The following key stages were completed:

Date	Stage
January 27, 2016	Receipt of project proposal from the NPC
February 12, 2016	Information request(s)
March 30, 3016	Proponent responded to information request(s)
March 30, 2016	Scoping pursuant to subsection 86(1) of the NuPPAA
April 1, 2016	Public engagement and comment request
April 22, 2016	Receipt of public comments

4. Public Comments and Concerns

From April 1, 2016 to April 22, 2016 the NIRB provided opportunity for the public to provide comments and concerns regarding the project proposal. No comments or concerns were received from the public on this project proposal.

5. Comments and Concerns with respect to Inuit Qaujimaningit

No concerns or comments were received with respect to Inuit Qaujimaningit in relation to the proposed project.

FACTORS FOR DETERMINING SIGNIFICANCE OF IMPACTS

In determining whether a review of the project is required, the Board considered whether the project proposal had a potential to result in significant ecosystemic or socio-economic impacts.

Accordingly, the assessment of impact significance was based on the analysis of those factors that are set out under section 90 of NuPPAA. The Board took particular attention to take into account traditional knowledge and Inuit Qaujimaningit in carrying out its assessment and determination of the significance of impacts.

The following is a summary of the Board's assessment of the factors that are relevant to the determination of significant impacts with respect of this project proposal:

1. *The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.*

   The size of the geographic area for the proposed project would encompass the former CAM-E distant early warning (DEW) line site with two main areas; Area 1 and Area 2. Area 1 includes a small airstrip, former infrastructure, drum storage areas, and five areas of buried material and a landfill. Area 2 includes a larger airstrip, a helipad, some former infrastructure, two dump areas and three areas of buried material. The proposed project would also include the use of borrow sites, development of remediation areas and the establishment of a 38-person temporary camp. The physical footprint would also include the development of a winter trail for the transportation of equipment to the site, as well as seasonal barge transportation.

The Proponent submitted an Environmental Impact Assessment Report which indicated that that project activities are expected to take place within the habitats of many far-ranging wildlife species as well as habitats for small and large terrestrial mammals, bird populations, and marine mammals (only polar bears), and various other freshwater and coastal marine species.

2. *The ecosystemic sensitivity of that area.*

   The proposed project would occur in an area with no particular identified ecosystemic sensitivity, with the exception of a project area noted to be within the northern range of the Wager and Lorillard herds.

3. *The historical, cultural and archaeological significance of that area.*

   The project proponent has indicated that there are no known areas of historical, cultural and archaeological significance associated with the project area. However, eight previously unrecorded Neoeskimo archaeological sites were identified to be outside of the Project work areas during an archaeological impact assessment study (Archaeological Impact Assessment Report).

4. *The size of the human and the animal populations likely to be affected by the impacts.*

   The proposed project would occur approximately 75 km from Kugaaruk, the nearest community and it was noted by the Proponent that the residents of Kugaaruk have reported using the Site in the past but due to the distance, it is used infrequently. As such no human populations are likely to be affected by project impacts. Specific animal populations have been identified as potentially interacting with the proposed project area; however, mitigation measures recommended in the following section are expected to limit any potential impacts that would result from this project on any human or animal populations.

5. *The nature, magnitude and complexity of the impacts; the probability of the impacts occurring; the frequency and duration of the impacts; and the reversibility or irreversibility of the impacts.*

   As the "CAM-E (Keith Bay) Site Remediation Project" project is a proposed remediation project, the nature of potential impacts is considered to be well-known, with potential for infrequent, localized impacts to the biophysical environment that are temporary in nature, reversible and mitigable with due care.

6. *The cumulative impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out.*

   As the current proposal would be remediating and cleaning-up an abandoned distant early warning (DEW) line site, no cumulative impacts have been identified as potentially resulting

from this proposed project in association with any projects that have been carried out, are being carried out or are likely to be carried out.

7. *Any other factor that the Board considers relevant to the assessment of the significance of impacts.*

   No other specific factors have been identified as relevant to the assessment of this project proposal.

In considering the factors as set out above in the screening of the project proposal, the NIRB has identified a number of issues and provides the following views regarding whether or not the proposed project has the potential to result in significant impacts, and has proposed terms and conditions that would mitigate the potential adverse impacts identified.

Administrative Conditions:

To encourage compliance with applicable regulatory requirements and assist the Board and responsible authorities with compliance and effects monitoring for project activities, the following project-specific terms and conditions have been recommended: 1-4.

Issue 1: Potential negative impacts to wildlife and wildlife habitat resulting from remediation activities and periodic aircraft transportation from Kugaaruk during seasonal operations.

Board views: As discussed above in the assessment of factors relevant to this project proposal, the potential for impact(s) is applicable to an existing DEW line site and is limited due to the seasonal undertaking of project activities. The probability of impacts occurring is considered to be low, with potential adverse effects anticipated to be low in magnitude and it is unlikely that the proposed activities would interact significantly with identified wildlife and wildlife habitat. The proposed activities may take place within areas that overlap for many far-ranging wildlife species such as caribou, muskox and migratory birds, and may potentially affect animal migratory patterns. However, it is expected that standard operational considerations as well as aircraft flight restrictions would mitigate any potential adverse impacts to wildlife (including caribou) and migratory birds.

The Proponent would also be required to follow the *Migratory Birds Convention Act* and *Migratory Birds* Regulations, *Species at Risk Act*, and the *Nunavut Wildlife Act* (see Regulatory Requirements section).

Recommended Mitigation Measures: It is recommended that the potential negative impacts may be mitigated by measures such as requiring the Proponent to maintain minimum flight altitudes and seasonal restrictions. The following terms and conditions are recommended to mitigate the potential adverse impacts: 7, 12, and 27 through 40.

Issue 2: Potential negative impacts to surface and ground water quality, and fish and fish habitat from the remediation activities of CAM-E DEW line site; including setup of temporary camp; use of water for camp; disposal of sewage and grey-wastes into a sewage lagoon;

transportation, storage and use of fuel and hazardous chemicals; development of a winter trail; landfarm activities; and quarrying activities.

Board views: The potential for negative impacts is applicable to a small geographic area, with a low probability of impacts occurring, and the impacts being reversible in nature. The Proponent has provided an Environmental Impact Assessment Report and a Remedial Action Plan that detail environmental protocols and operational measures to be taken for the protection of the surrounding environment throughout the duration of the project. As such, the magnitude of potential impacts is considered to be low and would also have a low probability of extending beyond the immediate project area.

The Proponent would require a water licence from the Nunavut Water Board for the use of water for the project activities and for the storage of fuel (see Regulatory *Requirements* section).

Recommended Mitigation Measures: It is recommended that operational procedures for storing and transferring of materials, use of secondary containment, and spill response equipment would reduce the risk of uncontrolled releases of fuel or hazardous materials resulting in negative impacts to surface and ground water quality and quantity and to fish and fish habitat. Further, the potential negative impacts are issues relevant for consideration by the Nunavut Water Board. In addition, the following terms and conditions are recommended to mitigate the potential adverse impacts to waterbodies: 5, 6, 10, 11, 13 through 15, 19, 44 through 47, 49, 50, 52, 56, and 58.

Issue 3: Potential negative impacts to the land including vegetation and soils as a result of storage and use of fuel, development of quarries, setup of temporary camp, upgrading of access and site routes, demobilization of buildings and infrastructure landfarm activities; landfill activities and quarrying activities.

Board views: The potential for negative impacts is applicable to a small geographic area, with a low probability of impacts occurring, and the impacts being reversible in nature. While the magnitude of impacts resulting from a potential spill is unknown, the Proponent has provided has provided a Spill Contingency Plan, an Environmental Impact Assessment Report and a Remedial Action Plan that detail environmental protocols and operational measures to be taken for the protection of the surrounding environment throughout the duration of the project. As such, the magnitude of potential impacts is considered to be low and would also have a low probability of extending beyond the immediate project area.

The Proponent would also be required to follow the *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act*, the *Canadian Environmental Protection Act* and the *Nunavut Mining Safety Ordinance* and the *Territorial Quarrying Regulations (*see Regulatory Requirements section).

Recommended Mitigation Measures: It is recommended that operational procedures for storing and transferring of materials, use of secondary containment, undertaking restoration of

disturbed areas, following proper procedures for landfarm operations, landfill operations, quarry activities and ensuring spill response equipment are in place would reduce the risk of impacts to the land. The following terms and conditions are recommended to mitigate the potential adverse impacts to land: 13 through 20, 22 through 24, 26, 41 through 43, 48, 51 and 53 through 64.

Issue 4: Potential negative impacts to air quality resulting from quarrying activities, remediation activities, incineration of combustible wastes and landfarming operations.

Board Views: The potential for impacts is applicable to select areas within the project footprint with a low probability of extending beyond the project area. Wildlife and migratory bird habitats may also potentially be impacted from airborne contaminants from waste incineration, and remediation activities. The Proponent has provided a spill contingency and waste management plan in order to address potential accidental fuel spills and wastes disposal in the area. Further, the Proponent has committed to employing dust suppression measures as needed for project activities and components as highlighted in the Remedial Action Plan.

Recommended Mitigation Measures: It is recommended that the potential negative impacts to air quality be mitigated by measures such as requiring the Proponent to incinerate combustible wastes daily, to remove the ash from incineration activities to an approved facility for disposal, to not incinerate waste oil/grease, and to follow proper dust suppression measures. The following terms and conditions are recommended to mitigate the potential adverse impacts to air quality: 8, 9 21, 25, and 60.

Socio-economic effects on northerners:

Issue 5: Potential negative impacts to historical, cultural, and archaeological sites due to remediation activities.

Board Views: The Proponent has noted that archaeological or historical sites have been identified outside of the Project work areas during an archaeological impact assessment study and that the Proposed Project activities would likely not impact these sites, however the Proponent has committed that if work areas extend near these sites, a buffer of 30 metres would be established for heavy equipment. If clean-up work was necessary within the 30 metres buffer (i.e., removal of barrels and other debris), the Proponent indicated that this would be conducted by hand with light equipment (i.e., ATVs and trailers) in order to avoid any historical sites or features. It is noted that the Proponent would be required to contact the Government of Nunavut – Department of Culture and Heritage when encountering any historical sites (see Regulatory Requirements section).

Recommended Mitigation Measures: The Proponent is required to follow the *Nunavut Act* and (as recommended in the Regulatory Requirements section). Further, term and condition 65 is recommended to ensure that available Inuit Qaujimaningit can inform project activities, and reduce the potential for negative impacts occurring to any additional historical sites.

Issue 6: Potential positive socio-economic effect on northerners as Proponent has committed to hiring local and northern employees. The Proponent has also noted the potential for business opportunities during construction and operation.

Board Views: It is noted that the hiring of beneficiaries and northerners, and providing business/contracting opportunities would ensure positive socio-economic effects on northerners.

Recommended Mitigation Measures: Term and condition 65 has been recommended to ensure the Proponent continues to keep the community informed of the infrastructure upgrades, and potentially prepare the community members to take best advantage of hiring of local people if opportunities arise.

Issue 7: Potential negative impacts to traditional land use activities in the area due to transportation of personnel and equipment via aircraft, and development and use of equipment via winter road.

Board Views: The proposed project would occur approximately 75 km from Kugaaruk, the nearest community and it was noted by the Proponent that the residents of Kugaaruk have reported using the Site in the past but due to the distance, it is used infrequently. However, noise and vehicle movements from the Project activities may temporarily change distribution of harvested species through avoidance and may affect personal enjoyment of the land. A term and condition has been recommended to ensure minimal impacts to traditional land use activities.

Recommended Mitigation Measures: Term and condition 66 has been recommended to ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities in the area.

Issue 8: Potential positive impacts to traditional land use activities and human health due remediation activities and removal of contaminated equipment and wastes.

Board Views: It is noted that following remediation of the CAM-E DEW line site, the residual effect would be expected to be positive on human health and to traditional land due to the removal and clean-up of harmful contaminants and waste debris.

Significant public concern:

Issue 9: No significant public concern was expressed during the public commenting period for this file.

Board Views: Follow up consultation and involvement of local community members is expected to mitigate any potential for public concern resulting from project activities.

Recommended Mitigation Measures: Term and condition 65 is recommended to ensure that the affected community and organizations are informed about the project proposal and to mitigate any concerns that may arise from the project activities.

Technological innovations for which the effects are unknown:
No specific issues have been identified associated with this project proposal.

In considering the above factors and subject to the Proponent's compliance with the terms and conditions necessary to mitigate against the potential adverse environmental and social effects, the Board is of the view that the proposed project is unlikely to cause significant public concern and its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS

The Board is recommending the following specific terms and conditions to apply in respect of the project:

General

1. Indigenous and Northern Affairs Canada (INAC) – Contaminated Sites Division (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (Application to Determine Conformity, January 27, 2016) and the NIRB (Part 1 Form, March 11, and March 30, 2016; Project Specific Information Requirements, March 11, and March 30, 2016).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless approved by the Nunavut Water Board.
6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste Disposal/Incineration

7. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All such wastes shall be kept inaccessible to wildlife at all times.

8. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
9. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Fuel and Chemical Storage

10. Unless otherwise authorized by the Nunavut Water Board, the Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
11. The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
12. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
13. The Proponent shall use adequate secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) when storing barreled fuel and chemicals.
14. The Proponent shall use drip pans or other equivalent device when refueling equipment. The Proponent shall also use secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) at all refueling stations.
15. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, and at all fuel storage sites.
16. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
17. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Landfarm Operations

18. The Proponent shall treat only petroleum and hydrocarbon contaminated soils at the landfarm facility. Materials contaminated with other substances such as glycol and heavy metals are not to be stored at the landfarm and must be disposed of at an authorized facility.
19. The Proponent shall ensure that it meets the required standards as set out in the Nunavut Water Board's Water Licence for this project prior to any discharge of water collected in the retention cell(s).
20. The Proponent shall ensure that the equipment used for aeration in the landfarm operation have been cleaned off within the landfarm facilities prior to exiting.
21. The Proponent shall take appropriate dust suppression measures when conducting soil turning and removal.

22. All operations personnel shall be adequately trained prior to commencement of landfarm operations, and shall be made aware of all operational guidelines and Proponent commitments relating to the Project.

Landfill Operations

23. The Proponent shall dispose of non-hazardous materials only at the landfill and shall limit this disposal to those materials listed as acceptable for disposal. Hazardous materials, materials listed as unacceptable for disposal at the landfill, or materials that contain asbestos, fluorescent tubes or ozone depleting substances are not to be disposed of in the landfill and must be disposed of at an authorized facility.
24. The Proponent shall ensure that it meets the standards and/or limits as set out in the Nunavut Water Board Water Licence and any other permits as required for this project.
25. The Proponent shall take appropriate dust suppression measures when conducting soil topping of landfill materials, or landfill capping activities.
26. All operations personnel shall be adequately trained prior to commencement of landfill operations, and shall be made aware of all operational guidelines and Proponent commitments relating to the Project.

Wildlife - General

27. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
28. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
29. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.

Migratory Birds and Raptors Disturbance

30. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metres buffer around the nests). If active nests of any birds are discovered (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
31. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
32. The Proponent shall avoid the seaward site of seabird colonies and areas used by flocks of migrating waterfowl by three (3) kilometres.
33. The Proponent shall ensure its aircraft avoid excessive hovering or circling over areas where bird presence is likely.

Aircraft Flight Restrictions

34. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.

35. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.

36. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

37. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

Caribou and Muskoxen Disturbance

38. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.

39. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as movement of equipment or personnel until such time as the caribou have passed.

40. During the period of May 15 to July 15, when caribou are observed within one (1) kilometre of project operations, the Proponent shall suspend all operations, including low-level over flights. Following July 15, if caribou cows or calves are observed within one (1) kilometre of project operations, the Proponent shall also suspend all operations in the vicinity, including low-level over flights until caribou are no longer in the immediate area.

Ground Disturbance

41. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles must be suspended if rutting occurs.

42. The Proponent shall implement suitable erosion and sediment suppression measures on all areas before, during and after conducting activities in order to prevent sediment from entering any waterbody.

43. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.

Winter Road/Trail

44. The Proponent shall select a winter route that maximizes the use of frozen water bodies.

45. The Proponent shall not erect camps or store materials on the surface ice of lakes or streams, except that which is for immediate use.

46. The Proponent shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted.

47. The Proponent shall not move any equipment or vehicles without prior testing the thickness of the ice to ensure the lake is in a state capable of fully supporting the equipment or vehicles.
48. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles must be suspended if rutting occurs.
49. The Proponent shall ensure that bank disturbances are avoided and no mechanized clearing carried out immediately adjacent to any watercourse.
50. The Proponent shall ensure that stream crossings and/or temporary crossings constructed from ice and snow, which may cause jams, flooding or impede fish passage and or water flow, are removed or notched prior to spring break-up.
51. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.
52. The Proponent shall implement sediment and erosion control measures prior to, and during operations to prevent sediment entry into the water during the spring thaw. This includes ensuring that a sufficient thickness of snow and ice is present on the winter road to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.
53. The Proponent shall implement a clean-up and reclamation stabilization plan which should include, but is not limited to, re-vegetation and/or stabilization of exposed soil in road bed.

Establishment of New Quarries

54. The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.
55. The Proponent shall locate quarry/pit facilities so as to avoid all recreational sites and public use areas, and to protect unique geographical features and natural aesthetics.
56. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from quarry/pit access, stockpiles, or other structures or facilities.
57. The Proponent shall ensure that silt fences/curtains are installed down gradient of any quarry activities.
58. The Proponent shall maintain an undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body that is of an adequate distance to ensure erosion control.
59. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.
60. The Proponent shall use water or other non-toxic and biodegradable additives for dust suppression as necessary to maintain ambient air quality without causing water to pool or runoff.

Temporary Camps

61. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
62. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Restoration of Disturbed Areas

63. The Proponent shall remove all garbage, fuel and equipment upon abandonment.

64. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

Other

65. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the area and available Inuit Qaujimaningit that can inform project activities.

66. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board is recommending the following:

Change in Project Scope

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission (NPC) and the NIRB of any changes in operating plans or conditions, including phase advancement, associated with this project prior to any such change.

Bear and Carnivore Safety

2. The Proponent review the bear/carnivore detection and deterrent techniques outlined in "Safety in Grizzly and Black Bear Country" which can be down-loaded from this link: http://www.enr.gov.nt.ca/sites/default/files/web_pdf_wd_bear_safety_brochure_1_may_2015.pdf. There are polar bear and grizzly bear safety resources available from the Government of Nunavut at the following link: http://env.gov.nu.ca/wildlife/resources/polarbearsafety and a "You are in Polar Bear Country" pamphlet from Parks Canada at the following link http://www.pc.gc.ca/eng/lhn-nhs/mb/prince/securite-safety/ours-bear.asp following link http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx.

3. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of the community of the community of Cambridge Bay, phone: (867) 983-4167).

Species at Risk

4. The Proponent review Environment and Climate Change Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: http://epe.lac-bac.gc.ca/100/200/301/environment_can/cws-scf/environmental_assessment-ef/ea_best_practices_2004_e.pdf. The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project.

Migratory Birds

5. The Proponent review Canadian Wildlife Services' "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", available at the following link: http://publications.gc.ca/site/eng/317630/publication.html and "Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories", available at the following link: http://publications.gc.ca/site/eng/392824/publication.html. The guide provides information to the Proponent on key terrestrial and marine habitat areas that are essential to the welfare of various migratory bird species in Canada.

6. For further information on how to protect migratory birds, their nests and eggs when planning or carrying out project activities, consult Environment and Climate Change Canada's Incidental Take web page and the fact sheet "Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs" available at http://www.ec.gc.ca/paom-itmb/.

Incineration of Wastes

7. The Proponent review Environment and Climate Change Canada's "Technical Document for Batch Waste Incineration", available at the following link: http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

Transport of Waste/Dangerous Goods and Waste Management

8. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.

9. The Proponent shall ensure that a waste manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site. Further, the Proponent shall ensure that the shipment of waste is registered with the Government of Nunavut Department of Environment (GN-DoE). Contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste will be generated during project activities.

Winter Roads/Trails

10. If ice bridges are constructed, the Proponent follow the mitigation measures outlined in Fisheries and Oceans Canada's Operational Statement for Ice Bridges, available at the following internet address: http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/provinces-territories-territoires/nu/index-eng.htm.

11. Cutting or filling of crossing approaches below the high water mark will require prior review and approval by Fisheries and Oceans Canada - Fish Habitat Management Branch.

Caribou Management

12. Territorial and federal government agencies in Nunavut should work together with Regional Inuit Associations, co-management boards and industry to develop an action plan to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., larger than individual project areas).

Nunavut Water Board

13. The Nunavut Water Board impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; access infrastructure and operation for camps; spill contingency planning; abandonment and restoration planning; and monitoring programs.
14. In particular, mitigation measures, conditions and monitoring requirements should be considered for the use of water, snow and ice for the development and maintenance of the winter road/trail for this project.

REGULATORY REQUIREMENTS

The Proponent is also advised that the following legislation may apply to the project:

1. The *Fisheries Act* (http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html).
2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (http://www.canlii.org/ca/sta/n-28.8/whole.html).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (http://laws-lois.justice.gc.ca/eng/acts/M-7.01/).
4. The *Species at Risk Act* (http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html). Attached in **Appendix A** is a list of Species at Risk in Nunavut.
5. The *Wildlife Act* (http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html) which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. The *Nunavut Act* (http://laws-lois.justice.gc.ca/eng/acts/N-28.6/). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix B**.
7. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (http://www.tc.gc.ca/eng/tdg/safety-menu.htm), and the *Canadian Environmental Protection Act* (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/). The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the Government of Nunavut, Department of Environment Manager of Pollution Control and Air Quality at 867-975-7748.
8. The *Aeronautics Act* (http://laws-lois.justice.gc.ca/eng/acts/A-2/).
9. The Proponent shall undertake quarrying in accordance with the *Nunavut Mining Safety Ordinance* and the *Territorial Quarrying Regulations* (http://www.canlii.org/en/ca/laws/regu/crc-c-1527/latest/crc-c-1527.html) or equivalent.

Other Applicable Guidelines

10. The Proponent shall practice progressive reclamation in accordance with the restoration guidelines outlined in Aboriginal Affairs and Northern Development Canada's *Northern Land Use Guidelines Pits and Quarries* (http://www.aadnc-aandc.gc.ca/eng/1100100023585).

11. The Proponent shall review and apply as applicable, design, operation, monitoring, sampling, analytical methods, decommissioning and closure, record keeping and reporting requirements for landfarming projects as found within the *Federal Guidelines for Landfarming Petroleum Hydrocarbon Contaminated Soils* (Science Applications International Corporation Canada, March 2006). It is recommended that the Proponent and any consultants hired for the project refer to this document as it relates to the future operations of the landfarming activities.

CONCLUSION

The foregoing constitutes the Board's screening decision with respect to the Indigenous and Northern Affairs Canada-Contaminated Sites' "CAM-E (Keith Bay) Site Remediation Project".

Dated _____May 13, 2016_____ at Arviat, NU.

_____
Elizabeth Copland, Chairperson

Attachments: Appendix A: Species at Risk in Nunavut
Appendix B: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders

Appendix A
Species at Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term "listed" species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are "pending" addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: June 2015

Species at Risk [1]	**COSEWIC Designation**	**Schedule of SARA**	**Government Organization with Primary Management Responsibility** [2]
Eskimo Curlew	Endangered	Schedule 1	Environment Canada (EC)
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut (GN)
Peregrine Falcon	Special Concern (*anatum-tundrius* complex[3])	Schedule 1 - Threatened (*anatum*) Schedule 3 – Special Concern (*tundrius)*	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Red Knot (*rufa* subspecies)	Endangered	Schedule 1	EC
Red Knot (*islandica* subspecies)	Special Concern	Schedule 1	EC
Horned Grebe (Western population)	Special Concern	Pending	EC
Red-necked Phalarope	Special concern	Pending	EC
Buff-breasted Sandpiper	Special concern	Pending	EC
Felt-leaf Willow	Special Concern	Schedule 1	GN
Porsild's Bryum	Threatened	Schedule 1	GN
Peary Caribou	Endangered	Schedule 1	GN
Barren-ground Caribou	Special Concern	Schedule 1	GN

Species at Risk [1]	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility [2]
(Dolphin and Union population)			
Polar Bear	Special Concern	Schedule 1	GN/Fisheries and Oceans Canada (DFO)
Grizzly Bear	Special Concern	Pending	GN
Wolverine	Special Concern	Pending	GN
Atlantic Cod, Arctic Lakes	Special Concern	Pending	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Schedule 2	DFO
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Arctic population		Schedule 2	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

[1] The Department of Fisheries and Oceans has responsibility for aquatic species.

[2] Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

[3] The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern.

Appendix B:
Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders

INTRODUCTION

The Department of Culture and Heritage (CH) routinely reviews land use applications sent to the Nunavut Water Board, Nunavut Impact Review Board and the Indigenous and Northern Affairs Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut's archaeological and palaeontological resources.

TERMS AND CONDITIONS

1) The permittee/proponent shall have a professional archaeologist and/or palaeontologist perform the following **Functions** associated with the **Types of Development** listed below or similar development activities:

	Types of Development (See Guidelines below)	**Function** (See Guidelines below)
a)	Large scale prospecting	Archaeological/Palaeontological Overview Assessment
b)	Diamond drilling for exploration or geotechnical purpose or planning of linear disturbances	Archaeological/ Palaeontological Inventory
c)	Construction of linear disturbances, Extractive disturbances, Impounding disturbances and other land disturbance activities	Archaeological/ Palaeontological Inventory or Assessment or Mitigation

Note that the above-mentioned functions require either a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit. CH is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*[1] to issue such permits.

2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.

[1] P.C. 2001-1111 14 June, 2001

3) The permittee/proponent shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.

4) The permittee/proponent shall immediately contact CH at (867) 934-2046 or (867) 975-5500 should an archaeological site or specimen, or a palaeontological site or fossil, be encountered or disturbed by any land use activity.

5) The permittee/proponent shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation until permitted to proceed with the authorization of CH.

6) The permittee/proponent shall follow the direction of CH in restoring disturbed archaeological or palaeontological sites to an acceptable condition. If these conditions are attached to either a Class A or B Permit under the Territorial Lands Act Indigenous and Northern Affairs Canada directions will also be followed.

7) The permittee/proponent shall provide all information requested by CH concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.

8) The permittee/proponent shall make best efforts to ensure that all persons working under its authority are aware of these conditions concerning archaeological sites and artifacts and palaeontological sites and fossils.

9) If a list of recorded archaeological and/or palaeontological sites is provided to the permittee/proponent by CH as part of the review of the land use application the permittee/proponent shall avoid the archaeological and/or palaeontological sites listed.

10) Should a list of recorded sites be provided to the permittee/proponent, the information is provided solely for the purpose of the proponent's land use activities as described in the land use application, and must otherwise be treated confidentially by the proponent.

Legal Framework

As stated in Article 33 of the *Nunavut Land Claims Agreement*:

Where an application is made for a land use permit in the Nunavut Settlement Area, and there are reasonable grounds to believe that there could be sites of archaeological importance on the lands affected, no land use permit shall be issued without written consent of the Designated Agency. Such consent shall not be unreasonably withheld. [33.5.12]

Each land use permit referred to in Section 33.5.12 shall specify the plans and methods of archeological site protection and restoration to be followed by the permit holder, and any other conditions the Designated Agency may deem fit. [33.5.13]

Palaeontology and Archaeology

Under the *Nunavut Act*[2], the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under

[2] s. 51(1)

the *Nunavut Archaeological and Palaeontological Sites Regulations*[3], it is illegal to alter or disturb any palaeontological or archaeological site in Nunavut unless permission is first granted through the permitting process.

Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

> *"archaeological site" means a place where an archaeological artifact is found.*
>
> *"archaeological artifact" means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.*
>
> *"palaeontological site" means a site where a fossil is found.*
>
> *"fossil" includes:*
> *Fossil means the hardened or preserved remains or impression of previously living organisms or vegetation and includes:*
> *(a) natural casts;*
> *(b) preserved tracks, coprolites and plant remains; and*
> *(c) the preserved shells and exoskeletons of invertebrates and the preserved eggs, teeth and bones of vertebrates.*

[3] P.C. 2001-1111 14 June, 2001

(**Note:** Partial document only, complete document at: www.ch.gov.nu.ca/en/Archaeology.aspx)

Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns Effective collaboration between the developer, the Department of Culture, Language, Elders and Youth (CH), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

CH is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is as follows: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; and ensure that the developer complies with the recommendations.

The primary regulatory agencies that CH provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the Nunavut Land Claims Agreement), and the Indigenous and Northern Affairs Canada, for development activities proposed for federal Crown Lands.

A developer is the initiator of a land use activity. It is the obligation of the developer to ensure that a qualified archaeologist or palaeontologist is hired to perform the required study and that provisions of the contract with the archaeologist or palaeontologist allow permit requirements to be met; i.e. fieldwork, collections management, artifact and specimen conservation, and report preparation. On the recommendation of the contract archaeologist or palaeontologist in the field and the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to salvage the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with the study in its entirety.

Through his or her active participation and supervision of the study, the contract archaeologist or palaeontologist is accountable for the quality of work undertaken and the quality of the report produced. Facilities to conduct fieldwork, analysis, and report preparation should be available to this individual through institutional, agency, or company affiliations. Responsibility for the curation of objects recovered during field work while under study and for documents generated in the course of the study as well as remittance of artifacts, specimens and documents to the repository specified on the permit accrue to the contract archaeologist or palaeontologist. This individual is also bound by the legal requirements of the *Nunavut Archaeological and*

Palaeontological Sites Regulations.

Types of Development

In general, those developments that cause concern for the safety of heritage resources will include one or more of the following kinds of surface disturbances. These categories, in combination, are comprehensive of the major kinds of developments commonly proposed in Nunavut. For any single development proposal, several kinds of these disturbances may be involved

- *Linear disturbances: including the construction of highways, roads, winter roads, transmission lines, and pipelines;*
- *Extractive disturbances: including mining, gravel removal, quarrying, and land filling;*
- *Impoundment disturbances: including dams, reservoirs, and tailings ponds;*
- *Intensive land use disturbances: including industrial, residential, commercial, recreational, and land reclamation work, and use of heritage resources as tourist developments.*
- *Mineral, oil and gas exploration: establishment of camps, temporary airstrips, access routes, well sites, or quarries all have potential for impacting heritage resources*.

Types of Studies Undertaken to Preserve Heritage Resources

Overview: An overview study of heritage resources should be conducted at the same time as the development project is being designed or its feasibility addressed. They usually lack specificity with regard to the exact location(s) and form(s) of impact and involve limited, if any, field surveys. Their main aim is to accumulate, evaluate, and synthesize the existing knowledge of the heritage of the known area of impact. The overview study provides managers with baseline data from which recommendations for future research and forecasts of potential impacts can be made. A Class I Permit is required for this type of study if field surveys are undertaken.

Reconnaissance: This is done to provide a judgmental appraisal of a region sufficient to provide the developer, the consultant, and government managers with recommendations for further development planning. This study may be implemented as a preliminary step to inventory and assessment investigations except in cases where a reconnaissance may indicate a very low or negligible heritage resource potential. Alternately, in the case of small-scale or linear developments, an inventory study may be recommended and obviate the need for a reconnaissance.

The main goal of a reconnaissance study is to provide baseline data for the verification of the presence of potential heritage resources, the determination of impacts to these resources, the generation of terms of reference for further studies and, if required, the advancement of preliminary mitigative and compensatory plans. The results of reconnaissance studies are primarily useful for the selection of alternatives and secondarily as a means of identifying impacts that must be mitigated after the final siting and design of the development project.

Depending on the scope of the study, a Class 1 or Class 2 Permit is required for this type of investigation.

Inventory: A resource inventory is generally conducted at that stage in a project's development at which the geographical area(s) likely to sustain direct, indirect, and perceived impacts can be well defined. This requires systematic and intensive fieldwork to ascertain the effects of all possible and alternate construction components on heritage resources. All heritage sites must be recorded on Government of Nunavut Site Survey forms. Sufficient information must be amassed from field, library and archival components of the study to generate a predictive model of the heritage resource base that will:

- allow the identification of research and conservation opportunities;
- enable the developer to make planning decisions and recognize their likely effects on the known or predicted resources; and
- make the developer aware of the expenditures, which may be required for subsequent studies and mitigation. A Class 1 or 2 permit is required.

Assessment: At this stage, sufficient information concerning the numbers and locations of heritage resources will be available, as well as data to predict the forms and magnitude of impacts. Assessments provide information on the size, volume, complexity and content of a heritage resource, which is used to rank the values of different sites or site types given current archaeological knowledge. As this information will shape subsequent mitigation program(s), great care is necessary during this phase.

Mitigation: This refers to the amelioration of adverse impacts to heritage resources and involves the avoidance of impact through the redesign or relocation of a development or its components; the protection of the resource by constructing physical facilities; or, the scientific investigation and recovery of information from the resource by excavation or other method. The type(s) of appropriate mitigative measures are dictated by their viability in the context of the development project. Mitigation strategies must be developed in consultation with, and approved by, the Department of Culture and Heritage. It is important to note that mitigation activities should be initiated as far in advance of the construction of the development as possible.

Surveillance and monitoring: These may be required as part of the mitigation program.

Surveillance may be conducted during the construction phase of a project to ensure that the developer has complied with the recommendations.

Monitoring involves identification and inspection of residual and long-term impacts of a development (i.e. shoreline stability of a reservoir); or the use of impacts to disclose the presence of heritage resources, for example, the uncovering of buried sites during the construction of a pipeline.