CAM-C(Matheson Point) Remediation Project

Water Use Licence Application for Site Remediation Activities

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

January, 2017

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Aboriginal Affairs and Northern Development Canada
Affaires autochtones et Développement du Nord Canada

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

January 27, 2017

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

Re: Water Use Licence Application for CAM-C (Matheson Point) 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-C, Matheson Point. All supporting documents are attached.

INAC completed site investigations at CAM-C, Matheson Point in 2013 and plans to commence remedial activities on the site starting from July/August 2017.

In addition to applying for a Water Use Licence, INAC applied for NPC Conformity Check, Nunavut Impact Review Board screening and the Land Use Permit from the Crown. All 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.

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

Sincerely,

David Rochette – The Proponent
Regional Director General, NRO
Tel: (867) 975-4501;
Fax: (867) 975-4736
Email: david.rochette@aandc-aadnc.gc.ca

Canada

Section 1

General Water License Application

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

Document Date: May 2011

Application Submission Date: *January 27, 2017*
Month/Day/Year

P.O. BOX 119
GJOA HAVEN, NUNAVUT
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TEL: (867) 360-6338
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NUNAVUT IMALIRIYIN KATIMAYIT
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)		
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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)

David Rochette, Regional Director General
Department of Indigenous & Northern Affairs Canada (INAC)
P.O. Box 2200, Iqaluit, NU X0A 0H0

Phone: *(867) 975 4501*
Fax: *(867) 975 4560*
e-mail: *david.rochette@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-C (Matheson Point) Site Remediation Project

4. LOCATION OF UNDERTAKING

Project is located 30 km east of Gjoa Haven, Nunavut

Project Extents (central coordinate)

Latitude: 68° 49' 8" N; Longitude: 95° 17' 20" 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.: *057B13E* Map Name: *Topo Map of CAM-C* 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: *April 01, 2017* Date of expiry: *March 31 31, 2022*

☐ 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 October 06, 2016 (See Appendix H)*

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

☑ Yes ☐ No

If Yes, indicate date issued and attach copy *NIRB's Screening Decision Report January 06, 2017*
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. *Building and structure demolition*
6. *Non hazardous materials / Debris collection, consolidation and offsite disposal*
7. *Hazardous Materials collection, consolidation and offsite disposal*
8. *Excavation & treatment/off-site disposal of contaminated soils*
9. *Quarrying of gravel and overburden materials*
10. *Landfarm construction/ operation/decommissioning*
11. *Construction/decommissioning of sewage lagoon*
12. *Site regrading*

See: Appendices A1, A2 – Executive Summary in English and Inuktitut; Appendix B – CAM-C Phase III Environmental Site Assessment Report; Appendix C – CAM-C 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-C 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 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 Appendices B and 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):

Only one inland water body was noted in the immediate vicinity of the site; this freshwater lake (Freshwater Lake) was identified approximately 1.3 km from the airstrip and 1.5 km northwest of the Station Area. (see Appendix F)

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

In 1992, one sediment sample and one water sample were collected near the turn-around point of the access road, and all analyzed parameters (PCBs, metals) were within guidelines.

PCBs and nitrates were non-detect in the water sample collected from the lake. Of the dissolved metal parameters, aluminum, iron, manganese, selenium, and silver exceeded the Guidelines for Canadian Drinking Water Quality (May 2008) for Canadian drinking water and aquatic life pathways (manganese was just the drinking water pathway). Nitrates and PCBs were non-detect, while the TDS was 240 milligrams per litre (mg/L) and pH was 7.86, which are within guidelines. Based on the results of the analysis, the water quality of the Freshwater Lake does not appear to have been negatively impacted by former site activities. Despite this, the water quality in the Freshwater Lake does not meet the Canadian Drinking Water Quality Guidelines. Additional samples should be collected prior to the start of the construction season to determine if there are variations to the water quality at the Freshwater Lake, and whether treatment may be required if it is to be used for drinking water purposes during site clean-up.

Based on a review of aerial photos and satellite images provided by Google Earth, there are very few significant freshwater lakes in the vicinity of CAM-C site that could be considered for an alternate drinking water source. As a result, the contractor will be required to provide drinking water treatment for the existing Freshwater Lake. At the start of site remediation, 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 freshwater lake has 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. ~ 3.6 m^3/day; Water for construction ~ 9.4 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.

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-C 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 30 people= 1,500 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)	*Camp waste (Paper, packaging, food, etc.)*	*1.0 cubic metre per day*	*Incineration (combustibles only)*	*Packaged and shipped off-site for disposal*
Grey Water	*Water from kitchen*	100 litres/day x 30	*Sewage Lagoon or*	*Discharge effluent*

(Camp)	*sinks and laundry*	people = 3,000 l/day	*treatment plant*	*meeting criteria on the land*
Non-Hazardous Material	*Barrels, demolition wastes, compressed gas cylinders, other scattered site debris*	*~880 m^3*	*Collect, package and ship off-site for disposal at an appropriate off-site facility*	*Dispose of in off-site NHW landfill*
Hazardous Material	*Hazardous Demolition wastes from site structures, scattered hazardous wastes such as lead (Pb) paints, asbestos containing materials and PCB containing materials and batteries.*	*~14 m^3*	*Collect, containerize, remove and transport for disposal off-site in a licenced facility*	*Off-site disposal in licenced facility*
Soil (PHC)	*Type B Hydrocarbon Soils*	*~ 570 m^3*	*Excavate and remediate at on-site landfarm treatment facility*	*Return clean soil to backfill excavations.*
Soil (PHC)	*Type A Hydrocarbon Soils*	*none*	*N/A*	*N/A*
Soil ((Tier I and Tier II))	*Tier I and Tier II Soils (PCB and Lead)*	*~270 m^3*	*Excavate, containerize, remove and transport for disposal off-site in a licenced facility*	*Off-site disposal*
Buried Debris Areas (BDAs)	*8 BDAs (2 class Bs and 6 class Cs*	*~1008 m^3*	*Excavate and package non-hazardous , non-combustible wastes, containerize for off-site disposal*	*Off-site disposal*

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-C (Matheson Point) 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 23, 2014 in Gjoa Haven, the nearest community to CAM-C (Matheson Point). 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 (AANDC 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: _*May 2017*____ (month/year) Proposed Completion Date: ____*September 2021*____ (month/year)

Operation
Proposed Start Date: _*May 2017*____ (month/year) Proposed Completion Date: __*September 2021*___ (month/year)

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

Post - Closure
Proposed Start Date: ____*September 2019*___ (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: _*April 1 2017*__ (month/year) Requested Expiry Date: *March 31, 2022* (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

David Rochette – The Proponent	*Regional Director General (NRO)*		*January 27, 2017*
Name (Print)	**Title (Print)**	**Signature**	**Date**

Section 2

Exploration / Remote Camp Supplementary Questionnaire

P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

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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: *Caitlin Moore, Public Services and Procurement Canada (PSPC) (formerly PWGSC)* ; Tel: *780-497-3687* Fax: *780-497-3842* E-mail: *caitlin.moore@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: *April, 2017* Completion: *March, 2019*

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 30 people for a maximum of 75 days each year.

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

   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. One of such sites is the CAM-C (Matheson Point) site – a former intermediate Distant Early Warning

(DEW) Line site in Nunavut. Department of Indigenous and Northern Affairs Canada (INAC) has applied, and received funding approval under FSCAP, for the investigation and cleanup of the site. CAM-C is located about 30 km east of Gjoa Haven, 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).

The site has two main areas: the Main Station and Beach Area. The Main Station consisted of a building train, a garage, warehouse, POL (petroleum, oil and lubricants) tanks, drum storage area and communications tower. Following the abandonment of the site in 1963, the site facilities were dismantled at different times in the past. In 1985 some hazardous materials, including two transformers, a choke and light ballasts were removed. Concrete foundations, scattered debris and a fallen antenna are the only remnants of the Main Station. An airstrip suitable for landing twin otter aircraft, reported to be in good condition (2011), is located adjacent to the Main Station area.

The Beach Area was used for barge landings of supplies; approximately 400 drums (45 gallon) remain at the area. Partially buried debris is visible along the hillside southwest of the site. The beach area has a barge landing area suitable to support sealift access to the site.

A road, reported to be in good condition (2011), and partially intact old pipeline link the Beach Area to the Main Station. The Main Station is approximately 3 km from the barge landing area.

The site is accessible by aircraft or by sea in the summer. All-terrain vehicles can access the site overland in the summer, although this is not viable for routine access. In the winter, the site can be accessed overland or by sea ice via skidoo or CAT-Train.

Wildlife typically found in this region includes polar bears, seals, whales, arctic fox, arctic hare, caribou, ermine, lemming, ptarmigan, snowy owl, raven, snow bunting, osprey, shorebirds, seabirds, and waterfowl.

Contaminants of concern identified at the site include polychlorinated biphenyls (PCBs), arsenic, cadmium, cobalt, copper, lead, nickel, zinc, asbestos, and petroleum hydrocarbons (PHCs).

Liability for the site lies with the Crown. Indigenous and Northern Affairs Canada (INAC), on behalf of the Crown, is responsible for the remediation of the site.

CAMP LOCATION

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

There is currently no camp at the site. A 30 person capacity camp will be set up before the start of site construction activities. The proposed camp will be hard-sided (mainly) and will be located at either location LF-1 or LF-2 as discussed earlier in this application. These locations are also not too far from the proposed source of drinking water (See the attached "file of maps and drawings"). The full details of the camp will be provided by the project contractor following contract award.

The camp will be seasonal running from around June to September/October each year depending on weather conditions. At the end of each season, the camp and its contents will be shut down and winterised until the start of the new season when the camp will be opened again.

Maximum number of personnel at the camp will be 30 (25 on-site construction workers and 5 associated camp workers) at any point in time. Further details of personnel will be provided by the successful contractor.

More details:

- *Appendix B:- CAM-C (Matheson Point) Phase III Environmental Site Assessment Report;*
- *Appendix C:- CAM-C (Matheson Point)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 two proposed camp sites are on Crown Land. The locations have been chosen because they are removed from the main station and the distance will prevent site contaminants from getting to the camp dwellers during construction. Also the sites are not too far from the proposed source of drinking water.

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):

Gjoa Haven ~ 30 km east of site;

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

Yes. A community meeting was held on January 23, 2014 in Gjoa Haven, the nearest community to CAM-C (Matheson Point). The meeting was well advertised in the hamlet, on the radio and through posters at strategic places in the community. The meeting was attended by the Mayor, council members and the community members. The Crown representatives (AANDC 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 were considered while developing the final RAP. An example is the location of an archaeological site (a grave) which was missed during archaeological assessment but was pointed out by an elder quite familiar with the site during consultation. The location of the grave was added to the list of archaeological sites that will be preserved and not destroyed during remediation

Three (3) more community meetings are planned for the project and they will be held in Gjoa Haven:

- *Pre-Construction Community Meeting (about May/June 2017) – To make the community members to be aware that the project is about to start, recruit employees and subcontractors for the project*
- *Inter-Season Community Meeting (May/June 2018) – to provide update on the 1st year and recruit for the 2nd year*

- *Project Completion Community Meeting (October 2018) – to inform the community on project completion and future plans 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-C 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-C (Matheson Point) 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: ~ 1500 numbers of 205 L drum;
Gasoline: ~ 200 numbers of 205 L drum;
Aviation Fuel: ~ TBD;
Propane: ~ TBD.

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: *3.6 m^3 /day* _____ Water Source: *Fresh water Lake*
☐ Drilling: _____ Water Source: _____
☑ Other: *9.4 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. PCBs and nitrates were non-detect in the water sample collected from the lake. Of the dissolved metal parameters, aluminum, iron, manganese, selenium, and silver exceeded the Guidelines for Canadian Drinking Water Quality (May 2008) for Canadian drinking water and aquatic life pathways (manganese was just the drinking water pathway). Nitrates and PCBs were non-detect, while the TDS was 240 milligrams per litre (mg/L) and pH was 7.86, which are within guidelines. Based on the results of the analysis, the water quality of the Freshwater Lake does not appear to have been negatively impacted by former site activities. Despite this, the water quality in the Freshwater Lake does not meet the Canadian Drinking Water Quality Guidelines. Additional samples should be collected prior to the start of the construction season to determine whether there are any variations to the water quality at the Freshwater Lake, and whether treatment may be required if it is to be used for drinking water purposes during site clean-up.

Based on a review of aerial photos and satellite images provided by Google Earth, there are very few significant freshwater lakes in the vicinity of the CAM-C site that could be considered for an alternate drinking water source. As a result, the contractor will be required to provide drinking water treatment for the existing Freshwater Lake. He will also be required to monitor some metal parameters to ensure that they continue to meet the standards.

At the start of site remediation, 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.

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 1.2 m³/day (for 30 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:

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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:

- *AECOM (2014) - CAM-C, Matheson Point, Nunavut Phase III Environmental Site Assessment Report – Also contains the Archaeological Report*
- *AECOM (2014) – CAM-C, Matheson Point, Remedial Action Plan (RAP) Final Report.*
- *AECOM (2014) – CAM-C, Matheson Point, Nunavut - Environmental Impact Assessment Report*

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

CAM-C - Non-Technical Proposal Description In English

CAM-C (MATHESON POINT) REMEDIATION PROJECT

NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

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. The department of Indigenous and Northern Affairs Canada (INAC) has applied, and received funding approval under FSCAP, for the investigation and cleanup of these sites, one of which is the former CAM-C (Matheson Point) DEW line site, located about 30 km to the northeast of Gjoa Haven, Nunavut.

CAM-C (Matheson Point) Intermediate Distant Early Warning (DEW) Line site was constructed in 1957; and was closed and abandoned in 1963. In 1965, the responsibility for the site was assumed by INAC. INAC conducted investigation studies on the site between 2011 and 2013 which confirmed that the site is contaminated and identified the contaminants of concerns on the site. Based on the results of the site investigations, INAC developed a cleanup plan which has been planned for implementation on the site between 2017 and 2019.

The site has two main areas: the main station and beach areas. The main station consisted of buildings; a garage; a warehouse; POL (petroleum, oil and lubricants) tanks; a drum storage area; and a communication tower. Following the cessation of activities and abandonment of the site, most of the site facilities were dismantled and the materials were taken, possibly by visitors to the site. In 1985 some hazardous materials, including two transformers, a choke and light ballasts were also removed from the site. Concrete foundations, scattered debris and a fallen communication tower are the only remnants of the main station. An airstrip, suitable for landing twin otter aircraft, is located adjacent to the main station area. The beach area was used for barge landings in the past. It has approximately 400 numbers of 205 litres drums stacked together. Partially buried debris is visible along the hillside southwest of the beach area. The beach area will be suitable for badge landing during the cleanup activities at this site.

Contaminants of concern identified at the site include chemicals (such as: polychlorinated biphenyls (PCBs), arsenic, cadmium, cobalt, copper, lead, nickel, zinc, asbestos, and petroleum hydrocarbons (PHCs)) in soils and painted surfaces; demolition debris; drum cache (s); foundation bases and so on.

2. SITE LOCATION / ACCESS

CAM-C (Matheson Point) site is located at approximate Latitude: 68° 49' 8" N; and Longitude: 95° 17' 20" W. The nearest community to the site is Gjoa Haven; CAM-C is about 30 km northeast of Gjoa Haven, Nunavut.

The site is accessible by aircraft (year round); there is an airstrip at the site capable of landing a twin otter. It can also be accessed by ship/boat in the summer when there is open water. For small supplies, all-terrain vehicles (ATVs) can be used to access the site overland in summer. In winter, the site can be also accessed overland or by sea/ice via skidoo or CAT-Train.

Within the site, there is an existing road, reportedly in good condition and could be used to move around the site and particularly between main station and beach area (a distance of 3 km). There could be the need to do some minor repairs on the airstrip and the road when the contractor gets to the site.

3. PROJECT ACTIVITIES & SCHEDULE

Based on the site assessment studies carried out on CAM-C (Matheson Point) and concluded in 2013, a remedial action plan (RAP) was developed for the cleanup of the site. The draft of the RAP was presented at a community consultation public meeting in Gjoa Haven on January 23, 2014. The meeting was well attended by members of the communities and feedbacks from the meetings were considered during the finalization of the RAP.

The cleanup of the CAM-C (Matheson Point) has been planned for the fiscal years (FY) 2017/18 and 2018/2019. The project schedule summary is as follows:

- 2015/16 – Tendering (Hire a contractor) and apply for licences and permits.
- 2016/17 – Mobilize to site and complete first year site cleanup
- 2018/19 – Conduct second year site cleanup and demobilize from site.

The site cleanup activities that will be completed at the CAM-C (Matheson Point) site include, and will not be limited to the following:

- Mobilization of equipment and personnel to site. Equipment will be mobilized to site by sealift while personnel will be mobilized to site by aeroplane.
- Enhancement of site access routes (as 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 (foundations) demolition
- Debris consolidation and disposal
- Excavation and relocation of PHC contaminated soils to the Land farm cell
- 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.

Additional details on the above cleanup activities are available in the RAP document which we have attached to all licencing applications.

The regulatory bodies to which we are applying for authorizations for this project include Nunavut Planning Commission for conformity check (completed); Nunavut Impact Review Board (NIRB) for Screening (in progress; about to be completed); Indigenous and Northern Affairs

Canada (INAC) for land use permit (preparing application) and Nunavut Water Board (NWB) for water use licence (preparing application).

Since INAC will not be leaving any facilities on this site following the completion of site cleanup, there will not be any need for long term monitoring on this site.

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 Gjoa Haven 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 Gjoa Haven 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 (Gjoa Haven) by employing local and northern employees and engaging the services of local and northern sub-contractors. This requirement has been built into the contractor hiring process (tendering); contractors will commit to some targets and these targets shall be tracked throughout the cleanup period.

Appendix A2

CAM-C - Non-Technical Proposal Description In Inuktitut

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ᑲᓇᑕᐅᑦ ᒪᖕᒪᔪᑦᓯᑎᑦ ᐊᑐᒡᕆᑕᐅᑎᕐᑎᓱᒪᖕᓂ ᒪᖕᒪᑐᑦᔪᑦᓯᑦ ᓱᑕᕆᑕᐅᓱᒪᔭᓄᓂ ᐃᓕᑎᑦ ᐱᒡᕗᖓᑐᓄᑦ ᑦᓯᓇᑕᐅᓱᒪᔭᑦ (FCSAP) ᓴᑐᒪᓴᕆᓴᑐᑦ ᓇᖅᒥᓂᔪᐊᑎᑉᔪᑎᑦ ᓱᑕᕆᑕᐅᓱᒪᔭᑦ ᐃᓅᑦ ᐅᔪᐊᓗ ᐃᑐᓗᐊᕆᔪᕆᑦᑐᑦ ᐃᓅᓱᔪᒍ ᐊᒪᒪᓗ / ᐅᓪᖏᑐᓂᓅᑦ. ᐅᔪᐊ ᐃᓄᒡᓗᐳᑦᔪᑦᓯᑦ ᑲᓇᑕᒥ ᐅᑦᑐᔪᓱᒪᔭᑦ, ᐊᒪᓗᑐ ᐱᑎᑕᐅᓱᒪᔭᑦ ᑭᓇᐅᔾᕆᓂᑉᑐᑎᑦ ᐊᖖᑕᕆᑕᐅᑦᑐᑎᑦ ᐊᒋᔪᑦ ᒪᖕᒪᑐᑦᔪᑦᓯᑦ ᐃᓕᑎᑦ ᐱᒡᕗᖓᑐᓄᑦ, ᕆᑲᐅᔪᕆᑦᑐᑎᑦ ᐱᒡᕗᐊᕆᓄᓂ ᐊᒪᒪᓗ ᐃᓕᑎᑦ ᐃᓄᖓᔾᔪᑎᑦ, ᐃᓕᖏᓂ ᐅᓇ ᐃᓄᕆᑕᐅᑦᑐᓱᒪᔭᕆᑦ ᒪᖕᒪ - C (ᒪᑎᓴᐤ ᓄᑲᓴ) ᑐᓕᐃᕆᕆᓘᑦ, ᐃᓄᕆᑦᑕᑐᑦ 30 ᑭᓕᒋᑕ ᐅᐊᖏᓇᖏᓄ ᑲᓇᖏᓇᖏᓄᓂ ᐅᕆᔪᕆᑐᑦᔪᑦ, ᓄᓇᑲᓂ.

ᒪᖕᒪ - C (ᒪᑎᓴᐤ ᓄᑲᓴ) ᑐᓕᐃᕆᕆᓘᑦ ᓴᓇᔾᐅᑕᐅᑦᑐᓱᒪᔭᕆᑦ 1957-ᒥ; ᐊᒪᓗᑐ ᒪᑕᓪᑐᓄ ᐊᒪᓗᑐ ᐃᑐᕆᑭᓯᓕᖏᑐᓄ ᐃᖅᓱᓇᕆᑕᐅᓪᓕᑐᓄ 1963-ᒥ. ᑕᐃᑲᓄ 1965, ᐱᔾᒪᔪᕆᑦᑐᑎᑦ ᑦᔪᓱᒥᖏᓄ ᐃᓄᖏᓄ ᐃᓄᓕᓕᑕᕆᑦᑲᑦᓯᑦ ᑲᓇᑕᒥ. ᐃᓄᓕᓕᑕᕆᑦᑲᑦᓯᑦ ᑲᓇᑕᒥ ᐱᑕᓕᓕᐅᑦᑐᑎᑦ ᕆᑲᐅᔪᕆᑦᑐᑎᑦᓱᓕᔪ ᐃᑕᓕᑎᐊᕆᔪᖅᓱᓕᔪ ᐃᓄᖏᓂ ᐊᖖᑦᓄ 2011 ᐊᒪᓗᑐ 2013 ᓇᑐᓇᐃᑕᐅᑦᑐᑎᑦ ᐅᓇ ᐃᓄᖏᓂ ᓱᑕᕆᓱᒪᔭᕆᑦᑲᑦᓯᑦ ᐊᒪᓗᑐ ᓇᑐᓇᐃᕆᑕᐅᑦᑐᓱᒪᔭᕆᑦ ᓱᑕᕆᓱᒪᔭᑦ ᐃᓱᒫᑐᓂᑦ ᐃᓄᖏᓂᓄ. ᒪᑕᑦᓴᓂᑦ ᐊᖏᕈᐅᑎᔭᑦ ᐃᓄᖏᓂᓄᑦ ᕆᑲᐅᔪᐊᖅᑕᐅᑦᒪᒥ, ᐃᓄᓕᓕᑕᕆᑦᑲᑦᓯᑦ ᑲᓇᑕᒥ ᕿᓂᓱᑎᑦᑕᐅᑦᑐᑎᑦ ᐊᒪᓗᑐ ᐅᑐᐊ ᐊᖏᕈᑕᐅᑦᑐᓱᒪᔭᕆᑦ ᐱᒡᕗᖓᑐᓄᑦ ᐅᓇ ᐊᖏᕈᑕᐅᑦᑐᓱᒪᔭᕆᑦ ᐊᒪᓗᑐ 2017 ᐊᒪᓗᑐ 2019.

ᐅᓇ ᐃᓄᖏᓂ ᒪᕐᕉᓄᓄᑦ ᐃᓄᕆᑲᖅᑕᐅᑦ: ᐃᓄᓪᓕᒋᖏᓂ ᓱᓇᑐᐃᓐᓇᒧᑦ ᐊᒪᓗᑐ ᓂᐱᖏᓂᓄ ᓄᓇᕗᑦᔨᕐᑦ. ᐅᓇ ᐃᓄᓪᓕᒋᖏᓂ ᓱᓇᑐᐃᓐᓇᓄᑦ ᐃᓅᑐᑦᑲᑎᑦᔨᐅᑦᑐᑦ, ᐊᑲᑕᕆᑲᑦ; ᐅᑦᓂᔪᐊᑐᑦᑲᐅᑎ (ᐅᑦᓂᔪᐊᑐᖓᓄᑦ, ᐅᑦᓂᑦᑐᑕᑎᓄᑦ ᐊᒪᓗᑐ ᐅᑦᓂᑐᐃᓐᓇᓄᑦ) ᑦᑲᒋᑐᐃᑦᓯ; ᐅᓇ ᑦᑲᑕᐅᕗᑦ ᐃᓄᕆᑦᑲᖅᑕᐅᔨᑦ ᓄᐃᑕᑎᖅᑕᐅᔨᑦ; ᐊᒪᓗᑐ ᐊᓪᓚᐅᑎᑦᑲᖅᑲᑦ ᐊᖅᑕᕆᑲᑦ. ᑕᐃᒪ ᓄᑦᑲᕐᓚᑦ ᑦᑲᓄᐃᑕᐅᑦᑐᑎᑦᔨᑦ ᐊᒪᓗᑐ ᐃᓅᑐᑦᑲᑎᑦᔨᐅᑦᑐᑦᓯᑦ ᐃᓄᖏᓂ, ᑕᒪᕐᕆᑎᑕᖅᑐᓄᑦᓱᒪᔭᕆᑦ ᐃᓅᓱᓂ ᓇᐸᑦ ᐱᒡᕗᖓᑐᓄᑦ ᐊᒪᓗᑐ ᐱᔾᔪᑎᑦᑕᐅᑦᑐᓱᒪᔭᕆᑦ, ᐃᓚᒋᑲᒃ ᐳᓴᖏᑐᓄᑦ. ᑕᐃᒪᓕᒃ 1985 ᐃᓕᖏᓂ ᐊᑦᑕᓇᖏᑐᓄᑦ ᐱᔾᔪᑎᑦ ᑐᑦᔪᓇᖏᑐᓄᑦ, ᐃᓕᓴᕆᑦᑲᑎᑦᔨᐅᑦᑐᑎᑦ ᒪᕐᕉᓄᓄᑦ ᐅᐊᕆᖏᑕᐅᓱᒪᔭᕆᑦ ᐃᓄᖏᓄᑦ. ᕿᔪᖏᑎᓕᕆᔨᑦ ᐃᓄᖏᓄᑦ ᐊᒪᓗᑐ ᑐᒪᕐᓇᖅᑐᑦ ᐊᒋᑦ ᐋᖏᑕᐅᑦᑐᑎᑦ ᐃᓄᖏᓄᑦ. ᕿᑭᔪᖏᑎᓕᕆᔨᑦ ᐃᓄᕆᑦᑲᖅᑕᐅᔨᑦ, ᓱᑕᕆᓴᓕᔪᖏᑦ ᑭᓴᐃᓕᑦ, ᐊᒪᓗᑐ ᐅᕿᑭᓚᔪᖏᑦ ᓴᐱᖏᐅᑎᖏᓕᕆᔨᑦ ᓇᐸᔪᖏᑦ

ᑦᒃძᐊᑐᐊᖅ ᐃᒍᓯᓇᒃძᓪ ᑕᐃbᓂ ᑭᓯᑐᐃᐅᓇᖅᑎᕐᒪᐅᑦᑕᖅᓱᓂ ᐃᓂᖅᓱᓂ. ᒥᑦᑕᖅᕕᒃ, ᒥᑭᔪᓪᒥᑦᑕ ᖃᖅᖅᑕᓯᒥᑦᑕ ᒥᕕᐅᔨᓇᓴᖅᑐᖅ, ᐃᓂᖅᑎᖅᑐᖅ ᐊᑕᑦᓗᓂ ᐃᓂᖅᖅᕕᖏᖅᓴᓪᓚᓪᓂ ᓇᓇᒥ. ᓯᒍᖅᓱᓂ ᓇᓇᖅᓴ ᐊᑐᖅᑕᐅᔨᖅ ᑭᓴᐅᖅ ᑐᓪᑕᖅᑐᖅᖅᕕᖏᖅᓴ. ᐅᓇ ᖅbᓂᑭᓂ 400 ᖅbᓪᑕᐅᖅbᑕᖅᑐᖅ 400-ᓂᒃ 205 ᓪᑕ ᖅbᑕᑕᐅᖅᔾᐃᑦ ᖅbᓪᓱᓪᓕᖅᓯᒪᑦᓗᑎᒃ. ᐃᓪᖅᑎᑦ ᓴᐅᓯᒪᔨᑦ ᑭᓯᕕᓂᑦᑐᐃᓐᓂᑦ ᐃᓱᒋᖅᑎᓂᓂ ᑎᓯᓯᒪᓂᖅᓴᓂ ᓂᓯᒪᐊᓂ ᐱᓇᖅᓴᓂ ᐃᓂᖅᓴᓂ. ᐅᓇ ᓯᖅᓴ ᓇᓇᖅᓴ ᐊᑐᑎᖅbᖅᑐᖅ ᑭᓴᐅᖅ ᑐᓪᑕᖅᑐᖅᖅᕕᖏᖅᓴᑐᔪ ᓴᓗᓪᒪᖅᓴᓗᑎᑦᑐᓗᒃ. ᐃᓪᖅᑎᑦ ᓴᐅᓯᒪᔨᑦ ᑭᓯᕕᓂᑦᑐᐃᓐᓂᑦ ᐃᓂᖅᓴᓂ.

ᓯᑕᖅᓯᒪᔨᑦ ᐃᓯᐃᓵᑕᐅᔨᑦ ᓇᓵᓇᐃᖅᑕᐅᓯᒪᔨᑦ ᐃᓂᖅᓴᓂ ᐃᓪᓕᖅbᖅᑐᖅ ᐃᓬᑕᑎᐃᓂᓂ ᐃᒪᖅᓗᐃᓪᓕ (ᓯᔪᓗ: ᐱᓯᐲᓵ, ᓴᑦᓪᓪᑦ, ᓴᐃᖅᓂᖅ, ᖅbᔨᖅᑐᖅ, <ᓂᖅᑐᖅ, bᓵᓄᖅᖅ, ᐊᖅᑭᑐᖅ ᓴᐃᕆᖅbᓴᖅ, ᓴᐃᕆᖅᖅ ᑎᓯᔨᖅ, ᒪᒥᐊᖅ, ᖃbᖅᑐᑦ >ᑦᓪᓬᑦ, ᐊᓴᒪᓗ ᐅᖅᓯᐊᓗ ᐅᖅᓯᖅᑎᑕᑎ ᐃᕐᔨᖅᒥ ᐊᓴᒪᓗ ᐊᒥᐊᖅᓯᒪᔨᖅ ᓄᓇᐅᔾ ᖃbᓕᖅ; ᓯᑕᖅᑎᓴᐅᓂᔨᑦ ᐊᒥᐊᖅᔨᓗᓕᖅ, ᖅbᑦᑕᐅᖅᔾᐃᑦ ᐊᖅᑕᔨᑦ; ᑐᓕᓴᐃᐃᓂᑦ ᐊᓴᒪᓗ ᐊᓯᓕᑦ ᐊᓯᓯᑦ.

2. ᐃᓂᓴᑕ ᓀᓂᓂᓴ / ᐅᐸᖅᑕᐅᔨᓇᖅᑎᓂᓴ

ᑲᓴ - C (ᒪᓯᓴᓂ ᓄᐅᐊ) ᐃᓂᓴ ᐃᓂᖅᑲᖅᑐᖅ ᖅbᓂᑭᓴᓂ ᓴᓂᒧᑦ: 68° 49’ 8” ᐅᐊᓂᓇᓴ; ᐊᓴᒪᓗ ᑐᐅᒧᑦ: 95° 17’ 20” ᐱᓇᓂᓇᓴ ᐃᓂᓴ ᐃᓂᖅᑲᖅᑐᖅ ᖅbᓂᑭᓴᓂ ᓴᓂᒧᑦ. ᖅbᓂᓬᖅ ᓄᓇᓪᓂᑲ ᐅᖅᓯᖅᑲᑐᖅ, ᑲᓴ C ᖅbᓂᑭᓴᓂ 30 ᑭᓪᒥᑦᑕᕀ ᐅᐊᓂᓇᓴᓂᓂ ᑲᓇᓂᓇᓴᓄ ᐅᖅᓯᖅᑲᑐᖅ, ᓄᓇᓕᓵ.

ᐅᓇ ᐃᓂᓴ ᐅᐸᖅᑕᐅᔨᓇᖅᑐᖅ ᑎᓴᒥᓵᖅᑎᑦ (ᐊᕀᖏᔭᑕᒪᕀᑦ); ᒥᕕᖅbᖅᑐᖅ ᐃᓂᓴ ᒥᑦᑐᓂᓇᖅᓱᓂ ᑎᓴᒥᓵᕀᓕᖅ. ᐅᐸᖅᑕᐅᔨᓇᖅᒥᔨᑦ ᐅᒥᐊᖅᑎᑦ/ᐅᒥᐊᕀᔨᐊᖅᑎᑦ ᐊᐅᓴᖅᑎᑦ ᓓᑎᖅᑲᓇᓴᖅᑎᑕᑦᓂᔭᔪ. ᒥᑭᔨᑦ ᑭᓯᓪᓚᔨᑕᐅᔨᑦ, ᕿᐊᓇᑕᐃ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᐊᐅᓴᖅᑎᑦ. ᐅᑭᐅᖅᑎᑦ ᐃᓅᑎᕀᖅᑕᖅᑕᕀᓂᐊᖅᑐᑦ ᓇᓇᒃᑲᓇᓴᖅ ᐅᓄᓕᔭᓂᓂ ᑕᓚᐅᕀᒥ ᓓᑭᔭᖅᑎᑦ ᖃᒧᑕᖅᑐᑦ ᐅᓄᓕᔭᓂᓂ ᔭᓓᓕᖅᑎᑦ.

ᐃᔭᐊᓂ ᐃᓂᓴᑕ, ᐊᑐᖅᑕᐅᔨᒥᐅ ᐊᖅᓇᑎᑕᖅbᖅᑐᖅ, ᐅᖅbᐅᓯᐅᓯᒪᔨᖅ ᖃbᓇᐃᓅᓪᑎᐊᖅᓂᓴᓂᐅ ᐊᓴᒪᓗ ᐊᑐᖅᑕᐅᔨᓇᖅᑐᖅ ᓇᐅᑦᔭᓇᑎᐅ ᐃᓂᓴᓂ ᐊᓴᒪᓗ ᐱᔭᐊᖅᑐᒥ ᐊᓀᑉᓂᓂ ᐃᓄᔭᖅᑎᖅᓱᐅᔨᑦ ᐃᓂᓴᖅᑎᐅᔨᖅ ᑕᒪᐃᓪᓇᓂ ᖅbᓴᒪᓂ (ᐅᓄᓯᓂᖅᓴᓂ 3 ᑭᓪᒥᑦᑕᕀ). ᐊᖅᑭᖅᓯᖅᑕᐅbᓇᓪᓚᐊᖅbᖅᓂᐊᖅᑐᖅ ᓯᑕᖅᓯᒪᓂᖅᑎᑕ ᒥᑭᔨᑦ ᒥᑕᓱᖅᓂᓴ ᐊᓴᒪᓗ ᐊᔨᑎᑦ ᑲᓇᓂᓴᓂᐅᑕᐅᔨᓇᖅᑐᖅᖅᕕᖏᖅᓴᓂ ᓯᑕᖅᓯᒪᓂᖅᑎᑕ ᒥᑭᔨᑦ ᒥᑕᓱᖅᓂᓴ ᐊᓴᒪᓗ ᐊᔨᑎᑦ ᐃᔨᑦᑐᓂᓂ ᓴᓇᖅᑐᓂᓂ ᐅᑎᖅᑑᓂᓂ ᐅᖅᓯᖅᑲᑐᖅ ᐃᓄᔭᖅᑎᖅᓱᐅᔨᑦ ᐃᓂᓴᖅᑎᐅᔨᖅ ᑕᒪᐃᓪᓇᓂ ᖅbᓴᒪᓂ

3. ᐱᓕᕆᐊᖅᓱᖅ ᖃᓄᐃᓕᓕᐅᖅᑕᐅᓂᐊᕐᓂᖅᓯᒪᓕᒃ ᐊᓪᓚᓗ ᖃᓄᖅ ᐊᑯᓂᐅᑎᑕᓂᐊᕐᓂᖅᓯᒪᓕᒃ

ᒪᓕᖅᓯᑐᐃ ᐃᓂᖅᓯ ᖃᐅᔨᓴᐅᓇᓂᑕᑎᐊᖅᓭᒪᓕᖅᓯᒪᓕᒃ ᐃᓕᓴᐅᓭᒪᓕᓴᖅ ᐱᓕᕆᓗᐃᑐ ᑲᑎ - C (ᒪᓭᓴᐅ ᓄᐅᐊ) ᐊᓪᓚᓗ ᐱᓴᓰᖅᓯᑐᑎᒃ 2013-ᒥ, ᓄᓇᖅᓯ ᐃᓂᑐᖅᑎᓄᑦ ᐃᑎᖅᑎᓯᒪᓕᖅᓯᒪᓕᒃ ᐱᕐᓕᓕᐊᑎᑕᐅᓯᓕᒃᑐᑐᓂᒃ ᐃᓂᖅᓯᒪᓕᒃ. ᑎᑎᕋᖅᑕᐅᕐᓕᓕᐊᓴᖅ ᓄᑦᖁᓴᑎᕋᑎᓇᓂᕐᒧᑦ ᓄᓇᖅᓯᓂᒃ ᐃᓂᑐᖅᑎᓄᑦ ᑐᓂᔭᐅᓕᐅᖅᑐᖅ ᓄᓇᓕᓂᖅᓱᖅ ᐃᓄᓕᒥᑦ ᐅᑎᖅᑎᓯᒪᓕᒃ ᑲᑎᒪᓂᓗᑎᒃ ᐃᓄᓕᒥᑦ ᐅᓂᖅᓴᐃᓗᓐ ᑕᐃᒃᑐᓂ ᓴᓄᐊᓗᓐ 23, 2014. ᐅᓇ ᑲᑎᒪᓂᖅ ᑲᑎᒪᔭᖅᑐᕐᓇᐅᓕᐅᖅᑐᖅ ᓄᓇᓕᓂᖅᓂᑦ ᐊᓪᓚᓗ ᑭᐅᔭᐅᓕᓂᒃ ᑲᑎᒪᓂᖅᑯᑦ ᐃᓕᒪᑮᐅᓕᓂᒃᑐᑐᓂᒃ ᐱᓄᓇᖅᑕᐅᕐᓇᕐᓗᓂᒃ ᓄᓇᖅ ᐃᓂᑐᖅᑎᓯᒪᓕᒃ ᐅᑎᖅᑎᓂᐅᓂᒃ.

ᓴᓗᒪᓕᖅᓴᖅᑕᐅᓗᓂᒃ ᑲᑎ - C (ᒪᓭᓴᐅ ᓄᐅᐊ) <ᕐᓇᓱᑕᐅᓕᓭᖅ ᐊᕐᕿᔪᓂ 2017-ᒥᑦ 2018-ᒧᑦ ᐊᓪᓚᓗ 2018-ᒥᑦ 2019-ᒧᑦ. ᐅᓇ ᐱᓕᕆᐊᖅᓱᖅ ᐃᓂᓕᐅᖅᓭᒪᓕᓴᖅ ᑐᑭᓭᓇᖅᓭᑎᐊᖅᓭᒪᓕᓴᖅ ᐊᑕᓂᓂ:

- 2015/2016 - ᐊᑭᑕᑐᐅᑎᑦ (ᐃᖅᑲᓇᐃᔨᕐᑎᑎᓗᑕ ᑲᓐᓂᑦᓴᓗᒋᑦ) ᐊᓪᓚᓗ ᐅᓱᑐᓗᓂᒃ ᓕᐃᓴᓭᒥᒃ ᐊᓪᓚᓗ ᐱᓴᓐᓇᐅᑎᓂᒃ
- 2016/2017 - ᐃᓐᓇᖅᑎᑦᓴᐃ ᐃᓂᖅᓱ ᐊᓪᓚᓗ ᐱᓴᕐᓗᓂᒃ ᓭᑲᑦᓂᖅ ᐊᕐᕿᔪᐊ ᐃᓂᖅᓱᓂ ᑲᓗᓪᓚᖅᑲᐃᓂᖅ
- 2018/2019 - ᐱᓗᓇᓗᒋᑦ ᐱᕐᖃᑦᓂ ᐊᕐᕿᔪᒥ ᐃᓂᖅᓱᖅ ᑲᓗᓪᓚᖅᑲᖅᑕᐅᓗᓂᒃ ᐊᑕᓪᓚᓗ ᐃᓇᓕᖅᑕᐃᓂᕐᑎᑦᓴᐃ ᐃᓂᖅᓱᖅ.

ᐃᓂᖅᓱᖅ ᑲᓗᓪᓚᖅᑲᖅᑕᐅᓂᖅᓱᒪᓕᒃ ᐱᓴᓕᓂᐊᕐᓂᖅᑐᖅ ᑕᐃᖃᓂᒃ ᐳᓪᓚᓗ ᐊᕐᑎᑦ ᐊᑕᓂᐅᑎᑕᓂᐊᕐᓂᖅᑐᖅ ᐅᔪᐊ ᐊᑕᓂᐅᑎᑕᓂᐊᕐᓂᖅᑐᖅ (ᑕᐃᒪᓐᓇᐅᑦᓴᑕᐊᕐᓂᖅᑕᐅᓂ)

- ᐃᓂᖅᓱᖅ ᐊᔪᑎᑦ ᐊᓪᓚᓗ ᒥᑦᑕᕐᓇᒃ ᐱᐅᓯᖅᑎᑦᓴᑦᑎᓗᒋᑦ
- ᑕᖅᒪᓕᖅᓯᒪᓇᖅᓱᑦ ᐋᑦᕿᓯᕐᓴᐃ ᐊᓪᓚᓗ ᐃᓐᓕᖅᑐᐃᓂᒃ, ᐱᓕᕆᓗᐃᑦ ᐊᓪᓚᓗ ᐃᖅᑲᓇᐃᔨᕐᑎᑦᓴᐃ
- ᐊᑦᑕᕐᓇᖅᑐᖅᓂᖅᑐᑦ ᑐᕐᔪᖅᓇᖅᑐᖅᓂᖅᑐᑦ ᐋᕐᖅᑕᐅᓗᓂᒃ, ᐱᓕᕆᓗᐃᑦ ᐊᓪᓚᓗ ᐃᖅᑲᓇᐃᔨᕐᑎᑦᓴᐃ

- ᐊᒥᐃᓐᓇᕐᓂᐊᓐᖏᑦᑐᑦ ᑐᖁᕐᕕᒃ ᐃᓕᓴᐅᓂ ᐅᓄᒃᓴᓂ ᐅᔪᓚᐊᓇᖅᑐᒍᓂ ᐱᖁᑎᒍᓂ, ᐱᓇᕈᑎᓂ ᐊᓱᒐᓂ ᐅᖅᓯᐊᓕᔪᐃ (ᒥᐃᒪᓐᓇᐅᕆᓚᐊᖅᑭᑦ)
- ᐃᒃᑐᓂ ᐊᓱᒐᓂ ᓇᐸᔨᓂ (ᑐᓐᖏᓕᕕᒃ) ᐋᕐᖅᒥᐅᔪᓄᑎᒃ ᓯᕆᕈᑎᕐᐅᔪᓄᑎᒃ
- ᕿᓯᑐᐃᓐᓇᓂ ᓯᕆᕈᑎᓭᒪᔨᓂ ᐱᓐᕼᑎᑎᐊᖅᑐᑎ ᐊᓱᒐᓂ ᐃᒥᑦᔪᑎᒥ
- ᐱᐅᓕᕐᖅᑐᒥ ᐊᓱᒐᓂ ᐊᓯᐊᓄᓂ ᐃᒥᐅᖅᑲᖅᑐᒥ ᓯᕆᖅᓭᒪᔨᓂ ᐃᕐᔨ ᓄᓇᒥ
- ᐱᐅᓐᕼᖅᖅᑐᒥ ᐊᓱᒐᓂ ᐋᕐᖅᑐᒥ ᐱᓐᕼᖅᑐᓄᓂ ᐊᓱᐋ ᓯᕆᖅᓭᒪᔨᓂ ᐃᕐᔨᓐᓂᓂ ᐃᓀᓂ
- ᐱᐅᓐᕼᖅᖅᑐᔪ ᒪᓂᕆᖅ ᐊᓱᒐᓂ ᖃᓄᐱᓕᕐᓂᒪᖅᑐᒥ ᐱᕆᖅᑎᑦ
- ᓄᓇᒥ ᐱᕈᐱᓐᕈᓐᓇᖅᓭᑎᑦᑐᔪ ᐱᓇᑐᒥ (ᒥᐃᒪᓐᓇᐅᕆᓚᐊᖅᑭᑦ) ᐊᓱᒐᓂ ᖃᑭᒪᔨᑎᑦᑐᑦᑐᒥ (ᐱᕼᓰᕈᓂ ᐃᕐᔨᐊ ᐃᓂᑐᑎᓂᐅᖅᑐᒥᓐᓄ ᐅᑎᕆᑎᓂᓐᓄ ᑭᐱᔪᓐᓄ ᐃᓄᓕᓴᐃᖅᑐᔪᓂ ᐅᓇᕆᑐᐃᓐᓇᖅᑐᒥ ᑲᓇᑕ (2009) ᐃᓄᖅᑲᓐᓂᖅᑐᒥ ᐃᓕᓴᐅᔪᓂ ᐅᓇᑕᖅᑐᐱᓴᖅᕼᕆᓂ ᐃᓂᑐᑎᓂᓐᓄ ᐅᑎᖅᑎᑕᐅᓴᐊᖅᓂᒪᒥ)
- ᐃᓂᓐᓄ ᑐᐊᐸᓐᓄ ᒪᓂᕆᓐᓄᕐᓂᑐᔪ
- ᐊᐱᓴᑐᒥ ᐱᓇᕈᑎᓂ, ᐱᓴᔪᑎᓵᐳᖅᑕᔪᓂ ᐊᓱᒐᓂ ᐃᖅᑲᓇᐃᐱᓴᖅᑎᓂ.

ᓇᑐᓇᐃᓴᕆᑎᐳᓐᓂᕆᐊᒋᓂ ᖃᔪᓐᓂ ᓴᑐᒪᖅᓴᐃᒋᑐᓂ ᐊᑐᐃᓐᓇᐅᔪᓂ ᑐᑭᓯᕆᐅᑎᓂ ᑎᑎᕆᖅᓯᒪᔨᓂ ᐅᔪᐊᑐ ᐊᒋᔪᓂ ᑕᒪᐃᓐᓂ ᑕᒪᐃᒋᑦᑐᓂ ᓴᑐᒪᖅᓴᐃᒋᑦᑐᓂ ᐅᓐᔅᑐᑎᓂ.

ᐱᖁᔭᕆᔨᒋᕆᔨᓂ ᑎᒥᐅᔪᓂ ᐅᖅᑐᖁᓕᒃᑯᐅᓂ ᐊᓐᓇᑦᑎᓴᓂᐊᖁᒪᒃᑕ ᑕᒪᑐᒥᓐᓇ ᐱᒋᔭᐅᓂᓐᓂ ᐅᓐᓴᖅᑎᑦᑐᓂ ᐊᑐᐃᓐᓇᐅᔪᓂ ᑐᑭᓯᕆᐅᑎᓂ ᑕᒪᐃᒋᑦᑐᓂ ᑕᒪᐃᓐᓂ ᒪᓂᕆᓐᓄᕐᓂᑐᔪ ᐅᓐᓴᖅᑎᑦᑐᓂ ᐅᑎᖅᑎᑕᐅᓴᐊᖅᓂᒪᒥ

ᐅᑭᐅᖅᑕᖅᑐ ᐊᖏᑎᖓᓄᓇ ᐊᓚᒪᓗ ᐃᓄᖅᑲᖏᑐᖓᓄᓇ, ᐊᑐᖅᓯᓂᐊᖅᑐᑦ ᐃᓄᐃᑦ ᖁᑦᐳᓴᓕᔪᑐᖅᑲᓂᖅᑑ ᐊᓚᒪᓗ ᐃᓕᓴᐅᑎᓯᒪᓕᑎᑦ ᐊᔪᐅᐊᖏᑦᑕᑐᑦ ᑭᖑᓪᓚᓴᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒧᑦ ᐊᓚᒪᓗ ᐊᖏᑎᖓᓄᑦ ᓄᓇ ᐃᓂᑐᖅᑲᖓᓄᑦ ᐅᑎᖅᑎᓂᐊᕐᓗᒍ ᓴᓇᔪᐅᓂᐊᕐᓂᖓᓄᑦ <ᕐᓇᐅᑎ.

ᐊᓯᐊᒍᑦ ᐃᓄᓕᒫᑦ ᓄᓇᓕᖓᓂ ᑲᑎᒪᓂᖓᑕ ᐅᖅᑲᐅᓯᑦᓴᑐᒍ ᐅᓇ ᐅᐸᑐᑎ ᐃᓂᑐᖅᑲᖓᓄᑦ ᓄᓇ ᐅᑎᖅᑎᑕᐅᒥᐊᖅᓂᖓᓄᓇ ᐱᓕᕆᔨᐅᓕᐅᖅᑐᖅ 2014, ᐊᓯᖏᑦ ᓄᓇᓕᖓ ᖁᑲᐅᔾᑎᐊᖅᓴᖅᑎᓂᖅ ᑲᑎᒪᔨᓗᑎ ᐅᖅᓯᓯᐅᑐᖅ ᐱᑎᐊᓕᐅᖏᓂᖓᓄᓇ ᐅᓇ ᓴᓗᓪᓚᖅᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐅᖅᑲᖅᑎᑎᒋᔭᑎᑦᓗᑎᑦ ᐃᖅᑲᓇᐃᔨᖅᑎᑎᓂᐊᖅᓂᖅ ᐊᓚᒪᓗ ᑲᖏᖅᑐᐃᓐᓇᖅᑐᑦ ᐃᖅᑲᖅᑎᑎᓂᐊᖅᓂᖅ ᐱᓴᓕᖅᑐᑦ ᐱᓴᓕᖅᑐᒥ ᑲᔪᓯᐊᖅᑐᑦ ᐱᖓᓱᖏᑦ ᐱᖓᓱᓕᖅᑐᑦ. ᐱᖓᓱᐊᖅᑐᑦ ᓄᓇᓕᖓ ᑲᑎᒪᒥ ᑲᔪᓯᐊᖅᑐᑦ ᐱᖓᓱᓕᖅᑐᑦ ᐱᓕᕆᔨᐅᓂᒪᓕᒫᓂᖓ ᑕᐃᒪᓗ ᓄᓇᓵᒃ ᐅᖅᑲᖅᑎᑎᓂᐊᖅᑐᑦ ᐱᓕᕆᔨᐅᓂᒪᓕᖅᑐᑦ ᐱᖓᓱᐊᖅᑐᑦ ᐃᓄᖅᑲᖅᑎᑎᓂᐊᖅᑐᑦ ᑕᒪᓕᒐᒪᓂᖅ ᐅᓇ ᐱᓕᕆᔨᐊᖓᔪᖅ ᐱᓕᕆᔨᐅᓂᒪᓕ

Appendix B

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

(Sent via DropBox)

Appendix C

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

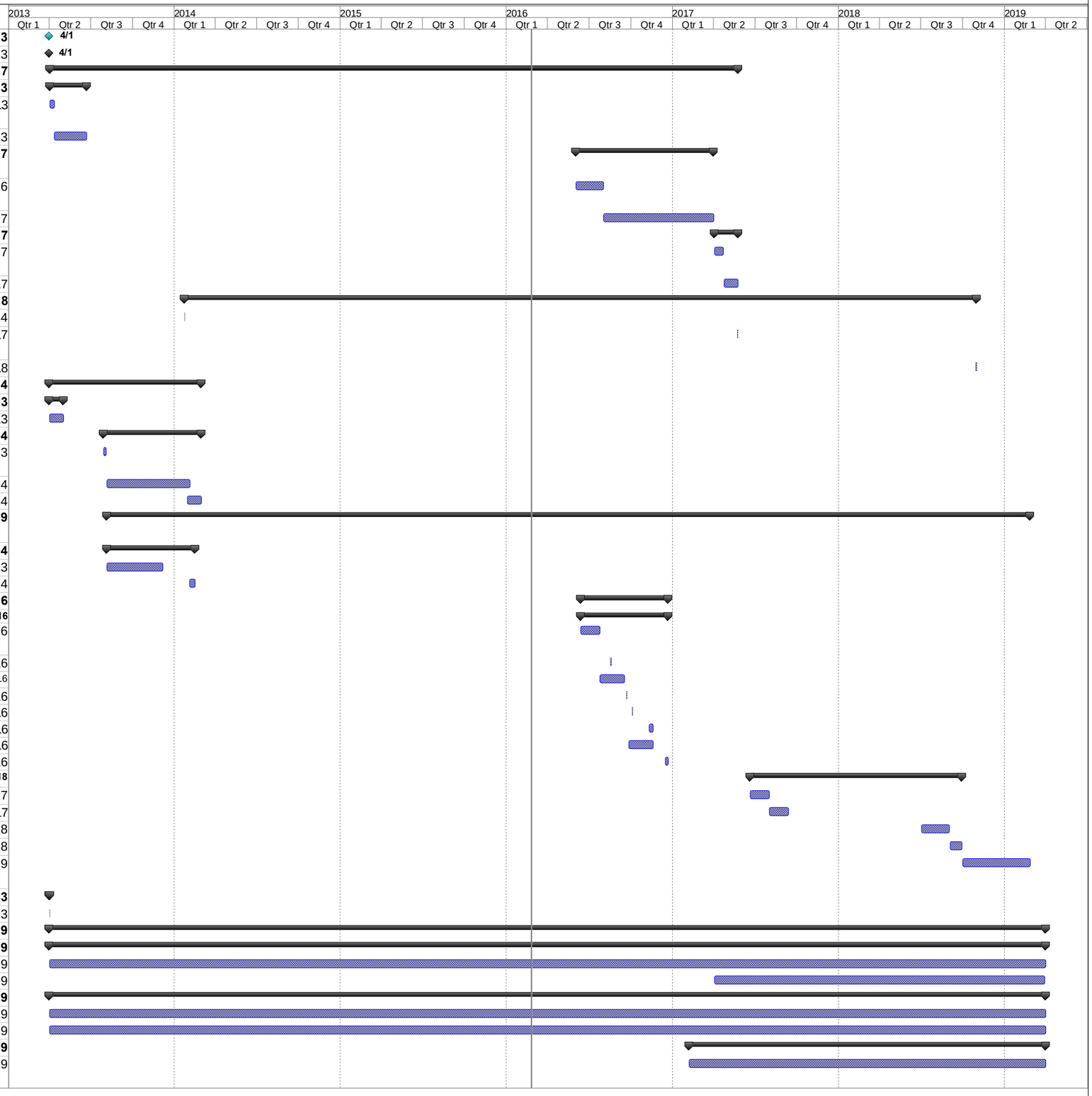
(Sent via DropBox)

Appendix D

Current Project Schedule

CAM-C (Matheson Point)
Remediation Project

ID	Task Name	Duration	Start	Finish
1	**1 Care and Maintenance**	**0 days**	**Mon 4/1/13**	**Mon 4/1/13**
2	1.1 Not Applicable	0 days	Mon 4/1/13	Mon 4/1/13
3	**2 Regulatory Approvals**	**1083 days**	**Tue 4/2/13**	**Wed 5/24/17**
4	**2.1 Permit for Site Assessment**	**59 days**	**Tue 4/2/13**	**Fri 6/21/13**
5	2.1.1 Prepare and Submit Applications for Archaeological Permit	8 days	Tue 4/2/13	Thu 4/11/13
6	2.1.2 Regulatory Review	51 days	Fri 4/12/13	Fri 6/21/13
7	**2.2 Permits for Site Remediation (NPC, NIRB, Water Licence, Land Use Permit)**	**217 days**	**Thu 6/2/16**	**Fri 3/31/17**
8	2.2.1 Prepare and Submit Applications for NIRB Screening, Land Use Permit and Water Licence	43 days	Thu 6/2/16	Mon 8/1/16
9	2.2.2 Regulatory Review	174 days	Tue 8/2/16	Fri 3/31/17
10	**2.3 Quarry Permits & PCB Storage Area Permits**	**38 days**	**Mon 4/3/17**	**Wed 5/24/17**
11	2.3.1 Prepare and Submit Applications for Quarrying Permit and PCB Storage Area	15 days	Mon 4/3/17	Fri 4/21/17
12	2.3.2 Regulatory Review	23 days	Mon 4/24/17	Wed 5/24/17
13	**3 Consultation**	**1244 days**	**Thu 1/23/14**	**Tue 10/30/18**
14	**3.1 Presentation of Draft RAP**	1 day	Thu 1/23/14	Thu 1/23/14
15	**3.2 Pre-Remediation Community Meeting (Construction Yr 1)**	1 day	Tue 5/23/17	Tue 5/23/17
16	**3.3 Post Construction Yr 2 Community Meeting**	1 day	Tue 10/30/18	Tue 10/30/18
17	**4 Site Investigation and Assessment**	**241 days**	**Mon 4/1/13**	**Fri 2/28/14**
18	**4.1 Preparatios for Site Assessment**	**23 days**	**Mon 4/1/13**	**Wed 5/1/13**
19	4.1.1 Gap Analysis	23 days	Mon 4/1/13	Wed 5/1/13
20	**4.2 Site Assessment**	**155 days**	**Mon 7/29/13**	**Fri 2/28/14**
21	4.2.1 Conduct Site Assessment (ESA, Geotech and Arch.)	5 days	Mon 7/29/13	Sat 8/3/13
22	4.2.2 Prepare Draft and Final Reports	131 days	Mon 8/5/13	Mon 2/3/14
23	4.2.3 Environmental Impact Assessment	23 days	Wed 1/29/14	Fri 2/28/14
24	**5 Site Remediation**	**1451 days**	**Mon 8/5/13**	**Mon 2/25/19**
25	**5.0 RAP Development and Cost Estimates**	**140 days**	**Mon 8/5/13**	**Fri 2/14/14**
26	5.0.1 Draft RAP Development	89 days	Mon 8/5/13	Thu 12/5/13
27	5.0.2 Finalize RAP and Cost Estimate	10 days	Mon 2/3/14	Fri 2/14/14
28	**5.1 Preconstruction**	**138 days**	**Mon 6/13/16**	**Wed 12/21/16**
29	**5.1.01 Tendering Services**	**138 days**	**Mon 6/13/16**	**Wed 12/21/16**
30	5.1.01.1 Retain Consultant to Revise Specs and Drawings	30 days	Mon 6/13/16	Sun 7/24/16
31	5.1.01.2 Bidders' Site Visit (2nd)	1 day	Wed 8/17/16	Wed 8/17/16
32	5.1.01.3 Prepare Request For Proposal (RFP)	40 days	Mon 7/25/16	Fri 9/16/16
33	5.1.01.4 Post RFP on Buy and Sell	1 day	Wed 9/21/16	Wed 9/21/16
34	5.1.01.5 Bidder's Conference	1 day	Tue 10/4/16	Tue 10/4/16
35	5.1.01.6 Bids Evaluation	7 days	Thu 11/10/16	Fri 11/18/16
36	5.1.01.7 Consultant Support During Tendering	40 days	Mon 9/26/16	Fri 11/18/16
37	5.1.01.8 Contract Award	5 days	Thu 12/15/16	Wed 12/21/16
38	**5.2 Construction**	**334 days**	**Tue 6/20/17**	**Fri 9/28/18**
39	**5.2.01 Mobilization to CAM-C (via Sealift)**	30 days	Tue 6/20/17	Mon 7/31/17
40	**5.2.03 Site Remediation (Year 1)**	30 days	Tue 8/1/17	Mon 9/11/17
41	**5.2.04 Site Remediation (Year 2)**	45 days	Mon 7/2/18	Fri 8/31/18
42	**5.2.02 Demobilization (via Sealift)**	20 days	Mon 9/3/18	Fri 9/28/18
43	**5.3 Final Completion, Regulatory& AANDC Proj. Closure Reports**	106 days	Mon 10/1/18	Mon 2/25/19
44	**6 Monitoring**	**1 day**	**Mon 4/1/13**	**Mon 4/1/13**
45	6.1 Future Task	1 day	Mon 4/1/13	Mon 4/1/13
46	**7 Project Management**	**1566 days**	**Mon 4/1/13**	**Sun 3/31/19**
47	**7.1 AANDC Project Management**	**1566 days**	**Mon 4/1/13**	**Sun 3/31/19**
48	7.1.1 AANDC Project Managment	1566 days	Mon 4/1/13	Sun 3/31/19
49	7.1.2 AANDC Project Administration(Salary and EBP)	520 days	Mon 4/3/17	Fri 3/29/19
50	**7.2 PWGSC Project Management**	**1566 days**	**Mon 4/1/13**	**Sun 3/31/19**
51	7.2.1 PWGSC Project Management	1566 days	Mon 4/1/13	Sun 3/31/19
52	7.2.1 PWGSC Regional Fees	1566 days	Mon 4/1/13	Sun 3/31/19
53	**7.3 AANDC Project Tax**	**560 days**	**Mon 2/6/17**	**Sun 3/31/19**
54	7.3.1 AANDC Administration Project Tax (Salary and EBP)	560 days	Mon 2/6/17	Sun 3/31/19



Project: Work Program Schedule
Date: Fri 2/26/16

Task | Rolled Up Task | Split | Group By Summary | Inactive Summary | Manual Summary Rollup | Finish-only
Milestone | Rolled Up Milestone | External Tasks | Inactive Task | Manual Task | Manual Summary | Progress
Summary | Rolled Up Progress | Project Summary | Inactive Milestone | Duration-only | Start-only

Appendix E

Fuel and Hazardous Material Spill Contingency Plan (Sent via DropBox)

Appendix F

Site Maps – Site Location Map; Map of Current Site Features; and NTS Map Sheet (Sent via DropBox)

Appendix G

Environmental (Impact) Assessment (Screening) Report

(Sent via DropBox)

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

October 6, 2016

Jaida Ohokannoak
Manager, Technical Administration
Nunavut Impact Review Board (NIRB)
Box 1360, Cambridge Bay, NU X0B 0C0
By email: info@nirb.ca

Karén Kharatyan
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Tracey McCaie
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Dear Ms. Ohokannoak, Mr. Kharatyan, Ms. McCaie, Mr. Cote, Mr. Rochette:

RE: NPC File # 148353 Matheson Point (CAM-C) Remediation Project

The following works and activities have been proposed in the above-noted project proposal:

1. Site Cleanup/Remediation of Matheson Point CAM-C Intermediate Distant Early Warning Line site.
2. Licensing Requirements: Class B Water License, Class A Land Use Permit

A complete description of the project proposal reviewed by the NPC can be accessed online using the link below.

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=148353&sessionid=

This decision applies only to the above noted project proposal as submitted. Proponents may not carry out projects and regulatory authorities may not issue licenses, permits and other authorizations in respect of projects if a review by the NPC is required.

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

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Sincerely,

Jonathan Savoy
Senior Planner,
Nunavut Planning Commission

Appendix I

Nunavut Impact Review Board (NIRB) Screening Decision Report

(Sent via DropBox)