
APPENDIX 1:

HOPE LAKE REMEDICATION PROJECT

NUNAVUT IMPACT REVIEW BOARD PART 1 FORM – PROJECT PROPOSAL INFORMATION REQUIREMENTS (ENGLISH, INUINNAQTUN & INUKTITUT)



PART 1 FORM PROJECT PROPOSAL INFORMATION REQUIREMENTS

To access NIRB documents, project screenings, and project reviews please visit the Nunavut Impact Review Board's ftp site <http://ftp.nirb.ca/>. The NIRB's website (www.nirb.ca) is currently under construction. Please contact info@nirb.ca should you have any questions or require further information.

IMPORTANT!

Please be advised that your application will not be processed until the Sections 1 - 9 are completed in their entirety, in both English and Inuktitut (+ Inuinnaqtun, if in the Kitikmeot).

SECTION 1: APPLICANT INFORMATION

1. Project Name **Hope Lake Remediation Project – 2012 Field Program**

2. Applicant's full name and mailing address:

Natalie Plato

Director, Contaminated Sites

Phone: **867-975-4730**

Aboriginal Affairs and Northern

Development Canada

Fax: **867-975-4736**

PO Box 2200 Iqaluit NU X0A 0H0

Email: **natalie.plato@aandc.gc.ca**

3. Primary contact's full name and mailing address:

Mark Yetman

Project Manager, Contaminated Sites

Phone: **867-975-4733**

Aboriginal Affairs and Northern

Development Canada

Fax: **867-975-4736**

PO Box 2200 Iqaluit NU X0A 0H0

Email: **mark.yetman@aandc.gc.ca**

SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

☒	Regional Inuit Association (RIA)
☒	Nunavut Water Board (NWB)
☐	Nunavut Planning Commission (NPC)
☒	Indian and Northern Affairs Canada (INAC)
☐	Department of Fisheries and Oceans (DFO)
☐	Community Government & Services (CG&S)
☐	Nunavut Research Institute (NRI)
☐	Department of Culture, Language, Elders, and Youth (CLEY)

☐	Canadian Launch Safety (CLS)
☐	Environment Canada (EC)
☐	Government of Nunavut (GN)
☐	Department of National Defense (DND)
☐	Hamlet
☐	Parks Canada (PC)
☐	Canadian Wildlife Service (CWS)
☐	Other (please specify):



N/A

- 3. List the pending permits, licenses, or other authorizations related to the project proposal:**

Nunavut Water Board Licence

Indian and Northern Affairs Canada Land Use Permit

Kitikmeot Inuit Association Certificate of Exemption

4. Has this project or any components of this project been previously screened or reviewed by NIRB?

☐ YES☐ NO

If YES, indicate the previous project name and NIRB File No.

SECTION 3: PROJECT PROPOSAL DESCRIPTION

- 1. Indicate the type of project proposal (check all that apply)^(1,2):**
(See Appendix A for Project Type Definitions)

1	All-Weather Road/Access Trail	☐	9	Site Cleanup/Remediation	☒
2	Winter Road/ Winter Trail	☐	10	Oil and Natural Gas Exploration/Activities	☐
3	Mineral Exploration	☐	11	Marine Based Activities	☐
4	Advanced Mineral Exploration	☐	12	Scientific/International Polar Year Research*	☐
5	Mine Development /Bulk Sampling	☐	13	Harvesting Activities*	☐
6	Pits and quarries	☐	14	Tourism Activities*	☐
7	Offshore Infrastructure (port, break water, dock)	☐	15	Other ⁽²⁾ :	☐
8	Seismic Survey	☐			☐

Please note:

1. All project types listed above, except those marked with an asterisk (*), will also require the Proponent to submit a **Part 2 Project Specific Information Requirement (PSIR) Form**. The NIRB application process will not be considered complete without the Part 2 PSIR Form.
2. Please be advised that in order to complete the NIRB process, the NIRB may request additional information at any time during the process.
3. If "Other" is selected, contact NIRB for direction on whether a Part 2 PSIR Form is required.



6c. Discuss the history of the site if it has been used for any project activities in the past.

Contamination at the Hope Lake sites is a result of mineral exploration activities that took place from the 1960s to the 1980. In 2010 a Phase III Environmental Assessment, Geotechnical Assessment and Archaeological Assessment were completed at the sites. Upon the completion of the assessment works a Remedial Action Plan was developed for the site (See Appendix 4).

6d. Indicate if there are any known archaeological/palaeontological historical sites in the area.

The Archaeological Assessment conducted by Golder Associates in 2010 identified three heritage resource sites at Hope Lake. All of these sites will be flagged and avoided during remediation activities to ensure that they remain undisturbed (See Appendix 8).

7. Land Status (check all that applies):

☒ Crown ☐ Commissioners' ☐ Municipal
☒ Inuit Owned Surface Lands ☐ Inuit Owned Sub-Surface Lands

8a. Co-ordinates:

Min Lat (degree/minute)	67°18'42"	Min Long (degree/minute)	115°58'25"
Max Lat (degree/minute)	67°32'34"	Max Long (degree/minute)	116°28'16"

NTS Map Sheet No: **086N08 Tuktuva Lake (1:50,000)**

(Please ensure that maps of the project are attached (1:50,000 if available, 1:250,000 Mandatory) available from Natural Resources Canada)

8b. If the project proposal includes a camp, please provide the coordinates of the camp location

Min Lat (degree/minute)	N/A	Min Long (degree/minute)	N/A
Max Lat (degree/minute)	N/A	Max Long (degree/minute)	N/A

If different from above for the camp:

NTS Map Sheet No: _____

Please ensure that maps of the project are attached (1:50,000 if available, 1:250,000 Mandatory) available from Natural Resources Canada

Please note that additional location information may be required in a subsequent Project Specific Information Requirement (PSIR) submission. This may take the form of a digital Geographic Information Systems (GIS) file.

SECTION 4: NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

Project work is scheduled to start in the summer 2012 with a limited field season of approximately 20 days in July. The site will be accessed with daily flights from Kugluktuk. These flights will bring a crew of up to 10 people to the sites and return them to Kugluktuk each evening. The planned work includes:

- **Drum sampling and consolidation**
- **Debris collection and incineration of untreated/unpainted wood**
- **Excavation and containerization of contaminated soil at Husky Creek and Willow Creek**
- **Transportation of consolidated materials from Husky Creek & Willow Creek to the Hope Lake site via helicopter**



The main portion of the remediation project will begin with the mobilization of the camp and equipment to Kugluktuk via barge in the fall of 2012. The camp and equipment will then be transported to Hope Lake via CAT-Train in March/April 2013. Remedial activities will be completed during the summer of 2013 and demobilization from Hope Lake to Kugluktuk will take place in March/April 2014 via CAT-Train. This will be followed by the final demobilization from Kugluktuk via barge in the summer/fall of 2014.

Permit applications for the main portion of the project will be submitted in the summer/fall of 2012.

IMPORTANT: IF THE PROPOSED ACTIVITIES REQUIRE SUBMISSION OF A NIRB PART 2 PSIR FORM, PLEASE COMPLETE SECTION 8 ONLY, OTHERWISE CONTINUE ON WITH SECTION 5.

SECTION 5: MATERIAL USE

1. List equipment to be used (including drills, pumps, aircraft, vehicles, etc.):

Equipment type and number	Size – dimensions	Proposed use

2a. Detail fuel and hazardous material use:

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel			
Gasoline			
Aviation fuel			
Propane			
Other			
Hazardous Materials and Chemicals		Total Amount of Hazardous Materials and Chemicals (in Litres)	

2b. Describe the proposed Spill Prevention Plan.

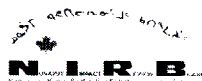
3a. Detail the anticipated daily water consumption rates

Daily amount (m ³)	Proposed water retrieval methods	Proposed water retrieval location

3b. Have you applied for a water License with the Nunavut Water Board?

☐ YES

☐ NO



If yes, what class of licence?

☐ Class A Water Licence

☐ Class B Water Licence

SECTION 6: WASTE DISPOSAL AND TREATMENT METHODS

1. List the types of waste associated with the proposed project activities:

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage (human waste)			
Greywater			
Combustible wastes			
Non-Combustible wastes			
Overburden (organic soil, waste material, tailings)			
Hazardous waste			
Other:			

2. Describe the proposed Waste Management Plan.

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

1. List the community representatives that have been contacted and provide the minutes of the meetings if available:

Community	Name	Organization	Date Contacted

SECTION 8: GENERAL QUESTIONS

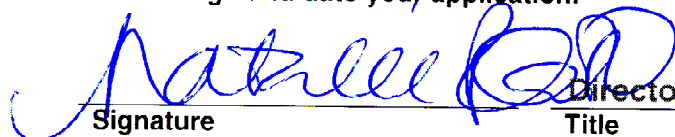
1. Will you be disturbing any known archaeological sites?

☐ YES

☒ NO

SECTION 9: APPLICANT SIGNATURE

Please sign and date your application:

 Signature
Director, Contaminated Sites Title
3/29/12 Date

Ilaga 1 Titigakhak

HAVAGIYA OYUMAYUMIK HIVUNIKHIYUTIKHANIK PIKAGEAKAKNIGA

Hivonikhivaligomagovin Nonavomi Avatilikiiyin Katimayenik (NIGB-kon) takoenagealgin kagitaoyami kongeakhan ovani www.nirb.ca tapkoatlunet piyanginik Avatilikiiyt titigakotae, havangoyot naonaeyaotae, tapkoatlo havangoyot naonaeyakne takoinagealgit tapkoat Nonavot Avatiligiiyt Katimayit ftp kagitaoyakakvea <http://ftp.nirb.ca>.

ATOKLOAKTOK!

Kaoyimaneakutin una tukhigaotin havagiyaolimaetok ukoa ilagani 1-min 9-mun inikaktilogin tamaeta Kavulunatun Inuktitulo (Inoenaktulo, Kitikmeonetpan).

ILAGA 1: TUKHIGAKTUP KANOGINIGAGUN HIVONIKHIYUTIN

1. b) Havap Atea **HUUP LIIK NUNAA UTIKNAHUAKLUGU HIVULLIKTUT HAVA AHAK – 2012mi Nunami Havaahak**

2. Tokhigaktum tamaeta aten titigakakvikulo tugaktakvea:

Natalie Plato

Atanguyaluak, Puisikhi mayut Nayugait

Nunakakkaakhimayut Munaginiinut ukunungalu

Nunaptingni Nautikniantut Kanata

PO Box 2200 Iqaluit NU X0A 0H0

Kayumiktokun:

867-975-4730

Hivayaota: **867-975-4736**

Kagitaoyakun: **natalie.plato@aandc.gc.ca**

3. Okakvigiyaoloaktukham tamaeta aten titigakakvikulo tugaktakvea:

Mark Yetman

Havaahap Atanguyaa, Puisikhi mayut Nayugait

Nunakakkaakhimayut Munaginiinut ukunungalu

Nunaptingni Nautikniantut Kanata

PO Box 2200 Iqaluit NU X0A 0H0

Kayumiktokun:

867-975-4733

Hivayaota: **867-975-4736**

Kagitaoyakun: **mark.yetman@aandc.gc.ca**

ILAGA 2: AGIGUTA OYAGEAKAKTOK UKUNANGA

1. Titiklogit tamaeta agigeakaktun tugagayunik havagiyaoyumayumun:

X	Aviktokhi mayuni Inoen Katimayen (RIA-guyun)	Kanatami Aolaktitigeagutinun Aneaknaetukun (CLS-kun)
X	Nunavumi Imalikiyin Katimayin (NWB-kun)	Avatilikiiyin Kanatami (EC-kun)
	Nunavumi Paknaeyaeyin Katimayin (NPC-kun)	Kavaman Nunavumi (GN-kun)
X	Kavamatukani Inulikiyin (INAC-kun)	Kavamatukani Aguyaktulikiyin (DND-kun)
	Kavamatukani Imakmeotalikiyin (DFO-kun)	Hamleoyok
	Nunalikni Kavamalikinikun Ikayutiniklo (CG&S-kun)	Mingeokhikvilikiyin Kanatami (PC-kun)
	Nunavumi Iilitokhaeyin Havakvean (NRI-kun)	Kanatami Umayulikiyin (CWS-kun)
	Iilitkuhilikiyin, Okaohikniklo, Inutkuyalo, Inulgamelo	Ahealo (Okateayavatin):

	(CLEY-kun)		
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2. Titigaklogit atokhimaktun piyunaotit, laesaoyulo, tapkoatlonet ahenik ihumakhutaoyun togagayun havagiyaoyumayumun ihulilvikhaelo:

N/A

3. Titigaklogit nahugiyaoyun piyunaotit, laesaoyulo, tapkoatlonet ahenik ihumakhutaoyun togagayun havagiyaoyumayumun:

Nunavut Imakmut Katijukatigiit Laisihakvik

Itkilgit ukuatlu Nunaptingni Munaginiit Kanatap Nunait Atukniit Angiktauvik

Kitikmeot Inuit Katujikatigiit Titigak Naunaitkut Ilaungittutit Ukakhimaluni

4. Una havaak, ilagiyaelunen havam hivoagun ilitokhaktaohimavan ihivgeoktaohimavalunen NIRB-kunin?

☐

IYA

☒

IMANAK

Agiguvin, okayavan atigiyagaloaga havam NIRB-kunilo titigagiyaeni napa.

ILAGA 3: HAVAGIYAOYUMAYUM KANOGITUNIGA

1. Titiklogo kanogituniga havagiyaoyumayum (titigaklogin tamaeta atoktun)^(1,2):
(Takulogo Oegoa A Havam Kanogituniganik Okaoheoyunik)

1	Ukeogalok Apkutaoyok/Aolakveoyok Nunanun	☐	9	Inigiyatik Kiklimaktiklogo / Utiktigeaklogolo Ilitkuhigaloaganun	☒
2	Ukeomi Apkutaoyok / Ukeomi Aolakveoyok	☐	10	Okhokyoakheoknik Kasileniklo	☐
3	Oyagakheokvikhakheoknik	☐	11	Takyumi Havaguyun	☐
4	Oyagakheokvikhakheoveokhaktok	☐	12	Naonaeyaenik/Hilakyoami Ukeoktaktumi Ilitokhaenik*	☐
5	Oyagakheoktun / Agiyunik Naonaeyaeyun	☐	13	Angunahoaknen*	☐
6	Oyagaktaken	☐	14	Polakpaktun hulilugagutikhaen *	☐
7	Takyumi pikutin (tulaktakvik, malelgumeovik, tunmigak)	☐	15	Ahea ⁽²⁾ :	☐
8	Nunanik Ilitokhaenik Havivalukaknikata	☐			☐

Kaoyimaneakutin:

1. Tamaeta havan titigakhimayun havuma kulanetuni, ukoagugitok titigakaktunik (*)-mik, piyageakakneakok Havakagumayok tunihiyagan **Ilaga 2-mik Havakhamun Hivunikhiyutaoyunik Piyageakaktunik (PSIR-mik) Titigakhamik**. NIRB-kun tuxhiknikun aolaniga ihumagiyaolimagitok pikagitpan Ilaga 2 PSIR-mik Titigakhamik.
2. Ilihimanekuhi iniktigeagani taman NIRB-kun aolaniga, NIRB-kun tuxhikneagunakhiyun ilageagutikhanik hivunikhiyutikhanik kagugulika aolanigiyamikni.
3. “Ahea” titigakhimakpan, okakatigiyavatin NIRB-kun kanogileoguhikhamik piyavikni Ilaga 2 PSIR-mik Titigakhamik piyageakakmaga.

2. Havam Kanogituniganik 3, 4-lunen 5-lunen titigakhimakpan havuma kulanetuni, okayavan kanogitunik oyagakhakakmaga. Naetugaloamik okateayavan hunaokmaga.

- ☐
- Havivaloen (zinc, kanoyak, Kuli, Kivliktulo, taemaetunik)
- ☐
- Pinikutikhanik
- ☐
- Nuguyoetunik
- ☐
- Ahenik:

3a. Havam Kanogituniganik 12, 13-lunen 14-lunen titigakhimakpan havuma lulanetuni, iniktiyavan naonaepkun apkutaoyulo havuma atanetuni.

Aolagutim Kanogituniga	Kavin	Kanok Atoktaoneakmaga	Hivituniga Atoknigagun
Imatun, Hanikaptak	Ataohik	Nunanin nunanun akyaktoelotik	Siksini upluni

3b. Okateaklogin tulaktakven, tunmikalo, milvelo atoktulo pikutin havagiyaoyumayumi. Kaoyimaneakutin: napaktigiyagani nutanik pikutinik atugeakakneagunakhiyutin Ilaga 2-mik Titigakhamik.

Una havaahak atukniaktut milvik hanayagiikhimayuk Huup Liikgup nayugaani

3c. Hiniktakveokavuktukhamik pineaknikata, okayavatin hunaokmaga napayukhan kanogituniginiklo kanoklo alguyaktutikakneakmaga iglupakakvikhami atugeakaknikan.

Iklukpaliugunaittut 2012mi havaligumik nunami. Hila hapiknahinahugilugu nappakhiniaktut atuktahamingnik nunamiititlutik.

4. Havakteoyun

Tamaeta kaveonigin havaktun havakvikmi = (A)

10

Tamaeta uplun havakviknetun = B

20

Tamaeta uplun inukakneaknigagun (A) × (B) =

200

5. Kakongukan Pigeagutikhan

Kanok havakveoneakmaga:

July 15, 2012

talvonga

August 5, 2012

Atugumayanik hivitunikhata piyunaotim:

July 1, 2012

talvonga

August 31, 2012

6a. Nonalet Aviktokhimanea (titiklogit tamaeta atoknilgit):

☐ Tununga Kigiktalok

☐ Kivalik

☒ Kitikmeot

☐ Hivuga Kigiktalok

☐ Mingoekhikvik

☐ Nonani ataohenaogitumi:

6b. Okaklogin humenigin havagiyaoyumayun nunan aviktokniga atoklogo, okaklogolo kanitoanenikhak nunagiyaoyok monagiyaoyulo pikaknikan nunanik.

Taamna Huup Liikmi Nuna Utiknahuaklugu hivulliktut havaahak ilagiyait tallimat (5) ilikuuktut nayugat katitpagait ihuatkiyaulikmat imaalu manik atuktuhak ihuaktumik atugiangani. Angitkiyak nayugak tahapkunanit una Huup Liik; aippait mikitkiyat nayugat ukuatlu ilagiyait Huski Kuganuak unalu Willu Kuganuak– ilagiyait pingangnaani iklupat ukuatlu kivalivyaani pingangnap iklukpait. Huski Kuganuak nayugaa ungahiktilaanga 16 kilumiitat Huup Liikmit. Willu Kuganuak nayugaa ungahiktilaanga 20 kilumiitat Huup Liikmit. Kanitkiyak nunalaak Kugluktuk, Huup Liikmit ungahiktilaanga 75 kilamiitakaktuk Kugluktumit.

6c. Discuss the history of the site if it has been used for any project activities in the past.

Puisikhiyanik talvani Huup Liikgup nayugaani pihimayuk kinikhiayunit uyagahiukvihamingnik talvani 1960nit uvunga 1980nut. 2010mi Pingahuat Havaahap Nunamik Imakniklu Uuktukniantut, Uyagaknutlu Uuktuknik ukuatlu utukanik inuup tamayainik kinikhiaplutik pivaktut talvani nayugakmi. Inikmata tahapkua uuktuktatik havakpagaak Nunamut Utiktitinahuakniantut Hivulliktut Havaahaanik iniktigivaktut nayugaata (Takulugu Appendix 4).

6d. Indicate if there are any known archaeological/palaeontological historical sites in the area.

Taamna Utukkakhiuktut Tamayanik Uuktuknik havaktauvaktut ukuat Golder Havakatigiit talvani 2010mi pingahunik naunaiyaivaktut inuit kangagaaluk atukpaktainit nayugat talvani Huup Liikmi. Tamaita hapkua nayugat titigaktauvaktut imaalu kahaktaungittutik havakkamik nunamik utiktitinahuakhutik (Takulugu Appendix 8).

7. Kia Nunagikmaga (titiklogit tamaeta atoknilgit):

☒ Koen	☐ Kamisinaop	☐ Hamleoyun
☒ Inoenat Nanminea Nunaplo Kaginaenetun	☐ Inoenat Nanminea Nunaplo Iloanetun	

8a. Humeniga Nunam:

Mikinikha Nunaoyami Hanimon (nahaotaen)	<u>67°18'42"</u>	Mikinikha Nunaoyuami Tokimon (nahaotaen)	<u>115°58'25"</u>
Anginikha Nunaoyami Hanimon (nahaotaen)	<u>67°32'34"</u>	Anginikha Nunaoyami Tokimon (nahaotaen)	<u>116°28'16"</u>

NTS Nunaoyami Ilagata Napa:

086N08 Tuktuvak Lake (1:50,000)

Ilaoyavun nunaoyan humeniginik havan pikaktunik (1:50,000 **pikakat**, 1:250, 000 **Piyakakpeaktok**) piyaolat talvaga Nunameotalikiyinin Kanatami.

8b. Havakun **hiniktakvikakneaknikata**, titigatyavot nahaotaen hiniktakveoyun.

Hanimon (nahaotaen)	<u>N/A</u>	Tokimon (nahaotaen)	<u>N/A</u>
Hanimon (nahaotaen)	<u>N/A</u>	Tokimon (nahaotaen)	<u>N/A</u>

Alagakpata huvuma kulanetunin hiniktakveoyok:

NTS Nunaoyami Ilagata Napa: _____

Nunavumi Avatilikiiyin Katimayin piyumanegunakhiyun hivunikhivaligutikhanik humeniganik ilagani Havam Kanoginigagun Hivunikhuyutikhani (PSIR-guyok). Imaetunegunakhiyok Nunan Kanoginigagun Nunaoyani Naonaepkutini (GIS-guyun)

ILAGA 4: TUKIHEANAKTUNIK HAVAGIYA OYUMAYUMIK OKAOHEOYUN

Ilaopkayavan tukiheanaktok kanogitunikha havam, avatkutaelilogo 500 taegohet, Kavlunatat Inuktitoto (Inoenaktolo, Kitikmeonetpata). Havam kanoginiga ilakaktukhaogaloak ukuniga:

- Havami havagiyaoyukhan, piyakakne hivitonikhalo;
- Kanoktut aolagutikakneakmaga
- Kitulikak napaktakhat hanayaoneat (ilihimaenaktokhat / atokaphoktakhat);
- Aheagugutikhat ihumagiyaoyun; unalo
- Hivunikhami havakhan, kanoklo kigoagun kanogiliyutikha nunani hunaolikalo pivikhakaknigagun.

Havaktauyuhat havatauliktuhak auyami 2012 unalu uplut ikitunuat havangita 20 uplut Julaimi. Taamna nayugak kunniaktauniaktut tingmikattaklutik upluk tamaat Kugluktumit. Ukuat tingmiyut havaktinik akyakataakluni kullinik inuknik nayugaanut talvanga uttikattaklugit Kugluktumut unnuk tamaat. Imaa havaktuhat:

- Kattakyunik uuktuklutik imaalu katitiklugit
- Ikkakunik pukuklutik imaalu ikualatilugit havakhimaitut/mingukhimaitut kiyuit
- Pualgikhuklugu imaalu puuktuklugu nuna puisikhimayuk talvani Huski Kuganuak uvanilu Willu Kuganuak
- Akyaklugit katitikhimayut tamayat talvanga Huski Kuganuak & Willu Kuganuak talvanga Huup Liik nayugaanut halikaapta atuklugu.

Angitkiyaa taafuma nunap utiknahuaklugu hivulliktut havaahak hivulikpaakmi akyaknia iklukpaknik ukuatlu hanalgutit Kugluktumut umiakut hikutinagu 2012mi. Ikluhat ukuatlu hanalgutihat talvanga nuutiktauniaktut Huup Liikmut atuklugit Akhaluutikpakuyuit pualgikhuutilgit Maats/lipulmi 2013. Nunamik utiktinahuat hivuliktut inikniaktut auyaani 2013 imaalu akyaliklutik talvanga Huup Liikmit Kugluktumut talvani Maats/lipul 2014 atuklugit akhaluutikpakuyuit pualgikhuutilgit. Una maliktauniaktuk talvani akyaklutik talvanga Kugluktumit umiakut auyami/ukiuk tikitinagu 2014mi.

Angigutihat uuktugutit talvanga angitkiyaanut havaahap tuniyauniaktuk auyaani/ukiuktinagu 2012mi.

ATUGEALIK: HAVAGIYA OYUMAYUMI HULILUGAGUTIN TUNIHUYUTIKAGEAKAKNIKATA NIRB-KUN ILAGA 2 PSIR-MIK TITIGAKHAMIK, INIKTIYAVAN ILAGANI 8-METUN TALVATOAK, TAEMAEGITPAN INIKTIKHIMAYAVAN ILAGANI 5-METUN.

ILAGA 5: IHOAKUTIVALOEN ATOKTAOYUKHAN

1. Titiklogit Pikutin (ikutavaloelo, papaotilo, tikmiyan, akhalutivaloelo taemaetun):

Pikun hunaokmaga napalo	Agitilaga - uktaotitigulo	Kanok atoktaoneakmaga

2a. Oniktoteaknea okhokhat hivoganaktulo honat atoktaone:

Okhokhat	Kaveone Puguyut, Agitilagilo	Ataotimun Okhokhat (Litres-guyuni)	Kanok Tutkumayaoneakmaga
• Okhokyoak			
• Kasilek			
• Tikmiyutin okhokhae			
• Puplakhat			
• Ahenik			
Hivuganaktot Pikutin Kuviyaktulo		Ataotimun Hivuganak-tun Kuviyaktulo (litaoyuni)	

2b. Okaohigiyavatin Kuvegitagani Paknaeyaotin.

3a. Oniktokteaknea uplotoagagan imaknik atoknigin kanogalok:

Uplutoagagan (m ³ -guyuni)	Atugumayaen imavaloen utiktitagani kanok	Atuligumayaen imavaloen utiktitagani humi

4. Tukhikhimavin Napagiya A-mik Laeseoyumik Nunavumi Imalikiyinin Katimayinin?

☐

IYA

☐

IMANAK

Agiguvin, hunaova napagiya laeseoyum?

☐

Napagiya A Imaknik Atugeagani Laeseoyok

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Napagiya B Imaknik Atugeagani Laeseoyok

1. Titigaklogin kanogitunigin ikaguvaloen:

Kanogituniga ikaguyum	Nalaonealogin kanogalok ikagukakneakmaga	Kanok ikaguneakmaga	Halumaktiganigutikhan piyutin
Anagun (Inoen anagoen)			
Oakhitin			
Ikulalaktun ikaguvaloen			
Ikulalimagitun ikaguvaloen			
Atakoen (halumaektun nunan, ikaguvaloelo, ataguvaloelo oyakikivikmin)			
Hivuganaktun ikaguvaloen			
Ahelo			

2. Okaohigiyavan Ikaguvaloknik Paknaeyaotin.

ILAGA 7: NUNALEN ILAOYUN, AVIKTOKHIMAYUNETUNULO IKAYUHEAGUYUN

1. Titigaklogit nunaliknin kivgaktokte okakatigiyaohimayun, tunilogilo titigakniginik katimayutinun kahaknikata:

Nunaoyok	Atea	Timeoyok	Uploani okakatigiyaokmata

ILAGA 8: HUNALIKA APIKUTIKHAN

1. Kahaknikneakihi kaoyimayaoyunik igilgan inituklenik?

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IYA

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IMANAK

ILAGA 9: TUKHIGAKTUP SAENEOTA

Saeniyavan uploaniklo titigaklogo tukhiktutin:



Saeneota:

Hivuliqti, Halumaiqhimayut Havakvit
Havanga:


Uploa:

OEGUYOK A

Havami Kanogituniginik Tukitagutin

Tikitagani Ineoyun Nunami: Havagiyaoyumayumi ihumagiyakaknikata akhalutikun tikitagani ihumagiyaoyumun aktoknikakpalalimiginikan manikanik.

Nalvakheokveokhaktok: Havagiyaoyumayumi naonaeyaeneakata agitilaginik, peoteaknigilo, kanogitunigilo oyagaktakhan naonaeyageaganilo manileogutaoteakneakmaga havatigulo namateakneakmaga oyagaktakveoliknikan.

Ukeogalok Apkutaoyok: Havagiyaoyumayumi apkutuleogumakpata atoktaoyukhamik ukeogalok.

Uyagaktakhanik Naonaeyaenik: Havagiyaoyumayumi ahivaeneakgumik agiyunik havivalokaktunik oyakanik ukumaeyoaktunik pineaknikata. Naonaeyaevaktun oyagaktakveoyukhamin naonaeyaktaoyumin. Hikuptigilaktun oyakikivikmi (mikaogaloamik).

Angunahoaknik: Havagiyaoyumayumi agunahoakneakata umayunik, takyumeotaniklo huganik ikalokniklunen nunaginaeyin agunahoaklogin nanigeaktoklogilunen nanminik atoktakhamiknik neovgutigiyakhamikniklunen.

Takyumi Hulilugagutin: Hulilugagutin takyumi avataoyumi, umiyanik atoknikata nunami havamikni ikagumiklunen takyumun.

*Kaoyimaneakutin nunaliknun umiyan tikitpaktun akyaktun pikutunik ilaoginman nunami havagiyaoyumayunun ilitokhaktaolimagitun NIRB-kunin (Ilagani 12.12.2-mi NLCA-mi).

Oyagaktakvikhamik Pivaleanik: Havagiyaoyumayumi ahivaeneakata hikuptikhimayunik oyakanik havivalukaktunik ukumaeyoaktuniklo manileogutaotealakan oyagakheokveoligumi (oyagaktak). Oyagaktageagani oyagaktanik anmukpalealotik nunam kaganin iloanugakpalealotiklunen nunamun. Oyagaktanik oyakikivikalaktok. Oyakikinih ahivakpaleayagani atoklogin pikutin kuviyaktulo piyutin atoktaolaktun ugavageagani akituyok oyagaktakhak.

Oyagaktakvikhakheoknik: Havagiyaoyumayumi kinikheaneakata oyagaktakveoneaktunik nunanik. Nunanik ihivgeoknik (nunakun tikmeakulunen) nanihiyagani agiyunik takunaktuniklo oyagaktakhanik.

Takyumi Pikutin: Havagiyaoyumayumi hananeakata uheyakvikhanik pikutunik hinanin takyumi atanikata nunaloamun takyumin imavalokniilunen avataoyumin. Ayikutaen ukoa tulaktakvik, tunmigaklo, umiyanilune atoktaoyunik.

Ohokyoanik Kasileniklo Nalvakheoknik/Hulilugagutilo: Havagiyaoyumayumi ilakaktumik 1) nalvakheoknikmik, ima kukulaktunoen atoklogin nunaoyatigulunen, 2) ikutakan okhokyoaktakvikhanik kasileniklo, 3) hanakpan atukalo tukhoakyoanik, kasileniklo hanakivikmik okhokyoakakvelunen kasilekakvelunen Nunavumi.

Heogaktakveoyun: Havagiyaoyumayumi heogaktakneagumik, ahivaeneakata heogavaloknik (imaetun, heokan oyagalealo) oyagaktakatalo, ahivaeneakata ataotimetunik oyakanik (imaetun, kaektunik, kikumayuniklo nunanik).

Naonaktunik Naonaeyaenik: Havagiyaoyumayumi atuligeagani iglukakveoyumi hulilugagutunik taotuklogin akliknaktun, naonaeyaklogilo katitigeaklogilo naonaepkutikhan piyageaktun naonaktunik ilitokhaenikun tikoaktaohimayuni nunani pivikhakaklaktilogilo.

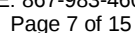
Kokulaktunoanun Naonaeyaenik: Havagiyaoyumayumi naonaeyaeneakata nunaoyeogeagani hiliktilagin unugagalok oyakan nalgulogin kanok kokuktunoak utikniga naonaegutaoneakman hiliktilaganik nunam kaganin. Naonaeyaeven takyumelaktun (iloanelimagitun 12-nik maelinik ugahiktilaganik hinanin imam), hinatalo kanitoanilo, unanilaloklo takyumi.

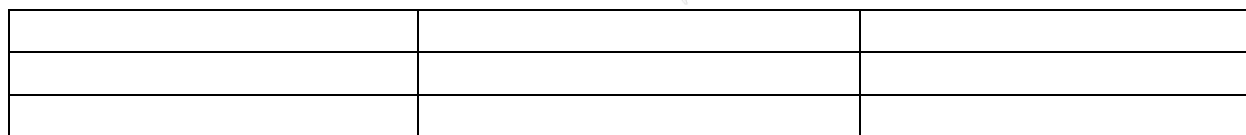
Inigiyaoyun Kiklimaktiknigin: Havagiyaoyumayumi inigiyaoyun kiklimaktikneakata (ukoalo Tulaekakven kiklimaktiktaonigin), ihumagiloakhugin utiktitagani ilitkuheanun kuviyaktuvaloknin halumaekhimayun nunavaloen, aolalimaeegeaganilo haohimayun kuvelo, agiptikniginiklo / ikaklogilo napayun pikutin ikaguvaluelo amigilogilo kanogilivaleanigagun kigoagun kiklimaktiktaotakan.

Polaktulikiyutin Havan: Havagiyaoyumayumi aolaktitiyagani tugagaloaktunik tunikgoektigiyutinun, ulapkiyutinulo neamgiyaginageaganilunen tikoaktaohimayumi nunami pivikhakaktiloglo hivitunigagun

Ukeoginakmi Apkun: Havagiyaoyumayumi apkutileokneakata ukeomi atoktukhamik atagikhaklogin kikhoktiklogilo kaginaen aputin hikulo. Ukeomi apkutoayok ahivaktaoneakok kikumanaekan ukeom ilagani.

Ukeoginakmi Inin: Havagiyaoyumayumi hananeakata inimik ukeomi atoktukhamik ataotimin tulakaktumin akhalunmin atoklotik poalgiyaonmik, piyageakaknikan.



[illegible]

$\Delta^c \rightarrow CL^{\text{qb}}$ $\Lambda^{\text{qb}} \rightarrow \Delta^{\text{qb}} \text{ (m}^3\text{)}$	$\Delta^c \rightarrow \Delta^{\text{qb}}$ $\Delta^{\text{qb}} \rightarrow \Delta^{\text{qb}}$	$\Delta^c \rightarrow \Delta^{\text{qb}}$ $\Delta^{\text{qb}} \rightarrow \Delta^{\text{qb}}$

□ ◁^ul



Δεσ8: ΡηΔΔαα΄ ΔΑααα

1. αααααααα αααααααααααα αααααααα ?

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☐ αα

Δεσ9: αααααα

ααααα αααααα ααααα ααααα :

Nataniel Pato
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3/29/12
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