



Fisheries and Oceans
Canada

Pêches et Océans
Canada

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Your file / Votre référence

Out file / Notre référence

November 7, 2011

Nunavut Water Board
P.O. Box 119
Gjoa, NU
X0B 10J

Attention: Richard Dwyer
Licensing Administrator

Dear Sir:

Re: Pagnirtung Small Craft Harbour
NWB License No. 1BW-DUV0911
Renewal Application

This letter is in response to your letter of January 21, 2011 requesting an “Application for Water License Renewal” and additional information that was lacking in our original request. I would like to apologize for my late response to your request but I have only recently hired a professional engineer who is now responsible for this project and have completed the necessary documentation to support this application.

For clarity purposes, I would like to address specifically the items mentioned in your letter of January 21, 2011 as detailed below:

- **Part B, Item 6:** The executive summaries in both Inuktitut and English are included in this submission for both reports originally submitted in January for the “Construction Environmental Management Plan, Pagnirtung Small Craft Harbour Development” dated May 11, 2010 and the Culvert Crossing of the Duvall River “Technical Memorandum – Pagnirtung Small Craft Harbour – Ancillary Project Requirement Site Visit” dated December 3, 2009.
- **Part E, Item 2:** Construction of the temporary crossing at the Duvall Crossing occurred in October 2009 after freeze up. The work was performed by the Municipality of Pagnirtung and their subcontractor Tower Arctic Ltd. The crossing was installed as per the drawings prepared by Golder Associates and as summarized in the previous report and the photographs therein submitted in January.

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Canada

The construction report was prepared by a Professional Engineer and the work on site was supervised by DFO on-site personnel. Although the drawing is not stamped, it reflects exactly the original drawings and the existing structure that was built in October 2009.

The river crossing handled the 2010 spring runoff and was utilized throughout the 2010 construction season without incident. Unfortunately, in the spring of 2011, ice travelling down the river cause a blockage at the crossing culverts and dislodged a considerable portion of the upper portion of the road. The culverts were not disturbed. The fill was replaced upon arrival of our contractor and an additional culvert was added above the remaining culverts to lessen any future flooding in this area. With the exception of the additional culvert and periodic upkeep to the road surface, there has been no alteration to the river crossing since its construction.

This river crossing is the only means of passage for heavy equipment between the municipal quarry and the Pangnirtung Harbour site.

- **Part E, Item 3:** The Licensee is required within ninety (90) days of completion of the drainage diversion at the Marshalling Area submit to the Board a Construction Summary Report. The current dredging in the Pangnirtung inner basin will not be finished until October 2012. The dredged material deposited in this marshalling area is considerably more saturated and less stable or firm than originally planned. Consequently, it is anticipated that the current Marshalling Area will be re-evaluated in the summer of 2012 and if the material itself is not stable, additional imported fill may be required to be used as a topping or surface material. Consequently, it is anticipated that the Construction Summary Report will not be completed until December 2012.
- **Part F, Item 1:** A Spill Contingency Plan has been developed and is included in the current submission.
- **Part G, Item 1:** DFO is required to submit to the Board within six (6) months of License issuance an Abandonment and Restoration Plan for the Duvall River Crossing. The crossing will be still required for the new Phase of the Pangnirtung Harbour Development which has been awarded and has a construction completion date of October 2013. This phase includes the new sheet pile wharf, dredging of the outer channel and installation of floating docks.

The Hamlet of Pangnirtung has expressed an interest in keeping the Duvall Crossing as a vital link for construction activities within this community.

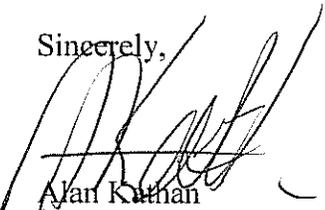
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We are requesting an extension to the issuance of an Abandonment and Restoration Plan for the Duvall River Crossing be deferred to June 2013 to finalize details with the Hamlet of Pangnirtung for possible transfer of the responsibility of this Crossing and the necessary permits required will have to be approved. If not transferred, the Crossing will be removed when all harbour related construction is completed..

- **Part H Item 3:** As previously identified in this letter, the Duvall Crossing was installed in October 2009 after freeze up. As the construction occurred after freeze up, there was flow to monitor prior to construction, during construction and upon completion of the Crossing. Consequently, there was no water quality testing immediately upstream and downstream of the Duvall River Crossing conducted.
- **NIRB Screening Decision:** We have requested confirmation from the NIRB that a further screening is not required by this authority. This will be forwarded to your office once a reply is received from this authority.
- **NPC Conformity:** I have attached an e-mail from Brian Aglukark, Director Regional Planning, Nunavut Planning Commission indicating that the Duvall Crossing “falls outside an approved planning boundaries...a conformity review by the Nunavut Planning Commission will not be required.”
- The executive summaries in both Inuktitut and English are included in this submission for the “Application for Water License Renewal, Duvall River Crossing.”
- Application for Water License Renewal for the “Duvall River Crossing” is attached. DFO/SCH requests that a renewal to the License be granted to November 2013 to accommodate construction activities associated with the Harbour Development Project, Pangnirtung.

Thank you for your assistance in this matter and if you should have any questions or concerns, please do not hesitate to contact the undersigned at (204) 983-6093.

Sincerely,



Alan Kathan

Executive Director, Pangnirtung Project / Exécutive, Projet de Pangnirtung
Small Craft Harbours Branch / Direction des Ports pour petits bateaux
Central and Arctic Region / Region du Centre de L'Arctique

Attachments

Canada

ATTACHMENTS
DUVALL RIVER CROSSING
IBW-DUVO911

- 1 Application for “**Water License Renewal**” for the Duvall River Crossing in English and Inuktitut
- 2 Executive Summary – “Application for Renewal Application, Duvall River Crossing” in English and Inuktitut
- 3 Executive Summary – “Construction Environmental Management Plan, Pangnirtung Small Craft Harbour Development” in English and Inuktitut
- 4 Executive Summary – “Culvert Crossing of the Duvall River – Hamlet of Pangnirtung – Small Craft Harbour Development” in English and Inuktitut
- 5 Spill Contingency Plan, Harbour Development Project, Pangnirtung
- 6 NPC Conformity – e-mail from Brian Aglukark, Director of Regional Planning, Nunavut Planning Commissio
- 7 Correspondences from NIRB on July 24, 2009 and May 31, 2010



Application for Water Licence Renewal

April 2010

P.O. BOX 119
GJOA HAVEN, NUNAVUT
XOB 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

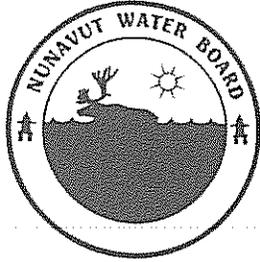
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NUNAVUT IMALIRIYIN KATIMAYINGI
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

APPLICATION FOR WATER LICENCE RENEWAL

Your application may be classified as a **renewal** only if all operations remain the same as previously licensed and only the term of the licence requires change. If your application contemplates:

- a change to water source;
- a change to the volume of water authorized for use;
- a new activity related to water use or waste disposal;
- a new component related to water use or waste disposal;
- a change in predicted environmental impacts(s); and/or
- a change to any term or condition of the original licence

your application is **NOT** classified as a renewal but rather an amendment and will require submission of an Application for Water Licence Amendment. Licensees applying for combined renewal / amendment are also referred to the Application for Water Licence Amendment.

The applicant is referred to the NWB's Guide 7: Licensee Requirements Following the Issuance of a Water Licence for more information about this application form.

EXISTING LICENCE NO: IBW – DUV0911

1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

Yes No

If No, a licence assignment must be completed and approved by the NWB. **A renewal will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: **Alan Kathan**

Address: **Small Craft Harbours Branch
Central & Arctic Region
501 University Avenue
Winnipeg, MB R3T 2N6**

Phone: **204-983-6093**

Fax: **204-983-7166**

e-mail: **Alan.Kathan@dfo-mpo.gc.ca**

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.

Name:

Address:

Phone: _____

Fax: _____

e-mail: _____

(Attach authorization letter.)

3. NAME OF PROJECT

Is the name of the project the same as that considered in the existing water licence?

Yes No

Indicate the name of the project including the name of the location: **Harbour Development, Pangnirtung**

4. LOCATION OF UNDERTAKING

Is the location of the undertaking the same as that considered in the existing water licence?

Yes No

Project Extents

NW: Latitude: (69 ° 9' 2.87" N)	Longitude: (65° 41' 30.01" W)
NE: Latitude: (° ' " N)	Longitude: (° ' " W)
SE: Latitude: (° ' " N)	Longitude: (° ' " W)
SW: Latitude: (° ' " N)	Longitude: (° ' " W)

Camp Location(s)

Latitude: (° ' " N) Longitude: (° ' " W)

5. MAP

Are the locations of the main components of the undertaking the same as those considered in the existing licence?

Yes No

Attach a topographical map, indicating the main components of the undertaking.

NTS Map Sheet No.: _____ Map Name: _____ Map Scale: _____

6. NATURE OF INTEREST IN THE LAND

Is the nature of the interest in the land the same as that considered in the existing water licence?

Yes No

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

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: **October 23, 2009** Date of expiry: **October 31, 2011**

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

Yes No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations:

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Is the undertaking located in the same land use planning area as that considered in the existing licence?

Yes No

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

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> North Baffin | <input type="checkbox"/> Keewatin |
| <input type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq |
| <input type="checkbox"/> Akunnig | <input type="checkbox"/> West Kitikmeot |

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

Yes No

If Yes, indicate date issued and attach copy. _____

Does the proposed renewal change the original NPC conformity determination or the need to obtain one?

Yes No

If Yes, indicate date issued (or expected) and attach a copy. _____

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

Yes No

If Yes, indicate date issued and attach copy. **Copies of May 31, 2009 and July 24, 2010 attached**

Does the proposed renewal change the original NIRB screening determination or the need to obtain one?

Yes No

If Yes, indicate date issued (or expected) and attach a copy. **Request forwarded to NIRB**

If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING

Is the description of the undertaking the same as that considered in the existing water licence?

Yes No

List and attach plans and drawings or project proposal.

10. OPTIONS

Are the alternative methods and locations that were considered to carry out the project the same as those considered in the existing water licence?

Yes No

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

11. CLASSIFICATION OF PRIMARY UNDERTAKING

Is the primary undertaking the same as that considered in the existing water licence?

Yes No

Indicate the primary classification of undertaking by checking one of the following boxes.

- | | |
|---|---|
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) | |
| <input type="checkbox"/> Conservation | |
| <input type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Power | <input checked="" type="checkbox"/> Miscellaneous (describe below):
Harbour Development |

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

12. WATER USE

Is the type(s) of water use(s) the same as that considered in the existing water licence?

Yes No

Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

- | | |
|---|---|
| <input type="checkbox"/> To obtain water for camp/ municipal purposes | <input type="checkbox"/> To divert a watercourse |
| <input type="checkbox"/> To obtain water for industrial purposes | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input type="checkbox"/> To cross a watercourse | <input type="checkbox"/> Flood control |
| <input type="checkbox"/> To alter the flow of, or store water | |
| <input type="checkbox"/> Other: _____ | |

13. QUANTITY OF WATER INVOLVED

Is the source of water the same as that considered in the existing licence? Yes No

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

Is the quality of the water source and its available capacity the same as that considered in the existing licence?

Yes No

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

Is the overall estimated quantity of water to be used the same as that considered in the existing licence?

Yes No

Provide the overall estimated quantity of water to be used: _____ m³/day

Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?

Yes No

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

Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?

Yes No

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

Are the method(s) of extraction the same as those considered in the existing licence? Yes No

Describe the method(s) of extraction: _____

Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?

Yes No

Estimated quantity(s) of water returned to source(s): _____ m³/day

Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?

Yes No

Describe the quality(s) of water(s) returned to source(s): _____

14. WASTE

Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?

Yes **N/A** No

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

- | | |
|--|---|
| <input type="checkbox"/> Sewage | <input type="checkbox"/> Waste oil |
| <input type="checkbox"/> Solid Waste | <input type="checkbox"/> Greywater |
| <input type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input type="checkbox"/> Bulky Items/Scrap Metal | <input type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste | |
| <input type="checkbox"/> Other (describe): _____ | |

15. QUANTITY AND QUALITY OF WASTE INVOLVED

Are the quantity(s) of the types of wastes involved the same as those considered in the existing licence?

Yes No

Are the composition(s) of the types of wastes involved the same as those considered in the existing licence?

Yes No

Are the method(s) of treatment for the types of waste involved the same as those considered in the existing licence?

Yes No

Are the method(s) of disposal for the types of waste involved the same as those considered in the existing licence?

Yes No

For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method

16. OTHER AUTHORIZATIONS

In addition to the sub-surface and surface land use authorizations provided in Block 6, are the same authorizations required as considered in the existing licence?

Yes No

For each provide the following:

Authorization: _____

Administering Agency: _____

Project Activity: _____

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

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES

Are predicted environmental impacts of the undertaking and proposed mitigation measures the same as those considered in the existing water licence?

Yes No

Describe direct, indirect, and cumulative impacts related to water and waste.

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS

Are the effects of the undertaking on any known persons or property including those that hold licences for water use in precedence 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, the same as those considered in the existing water licence?

Yes No

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.

19. INUIT WATER RIGHTS

Are the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) the same as those considered in the existing water licence?

X Yes No

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).

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.

21. SECURITY INFORMATION

Is the financial security assessment the same as that considered in the existing water licence?

X Yes No

Is the estimate of the total financial security for final reclamation the same as that considered in the existing water licence?

X Yes No

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.

22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

Yes No

Provide an updated statement of financial security.

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

Yes No

Provide a list of the officers of the company.

Is the Certificate of Incorporation or evidence of registration of the company name the same?

Yes No **Government of Canada**

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

23. STUDIES UNDERTAKEN TO DATE

List and attach updated studies, reports, research etc.

Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.

If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist.

24. PROPOSED TIME SCHEDULE

Is the time schedule for all phases of development (construction, operations, closure and post closure) the same as that considered in the existing licence?

Yes No

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

Construction

Proposed Start Date: **August 2009** Proposed Completion Date: **October 2013**
(month/year) (month/year)

Operation

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

Closure

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

Post - Closure

Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

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

Construction

Winter Spring Summer Fall All season

Operation

Winter Spring Summer Fall All season

Closure

Winter Spring Summer Fall All season

Post - Closure

Winter Spring Summer Fall All season

25. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? **October 31, 2011**

Indicate the proposed term of the renewal (maximum of 25 years): _____

Requested date of renewal issuance: **October / 2011**
(month/year)

Requested Expiry Date: **November/ 2013**
(month/year)

(The requested date of renewal 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

Is the annual report template expected to be the same as that considered in the existing licence?

Yes No

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:

27. CHECKLIST

The following must be included with the application for renewal for the water licensing process to begin.

Completed Application for Water Licence Renewal form.

Yes No If no, date expected _____

Updated plans, including designs and reports (see Block 23).

Yes No If no, date expected _____

Updated security assessment (see Block 21).

Yes No If no, date expected _____

Updated financial statement (see Block 22).

Yes No If no, date expected _____

Compliance Assessment / Status Report (see Block 23).

Yes No If no, date expected _____

English Summary of Renewal Application.

Yes No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Renewal Application.

Yes No If no, date expected _____

Application fee of \$30.00 CDN (Payee Receiver General for Canada).

Yes No If no, date expected _____

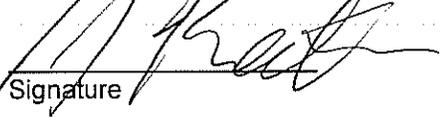
Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

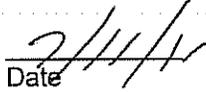
Yes No If no, date expected _____

28. SIGNATURE

I, **Alan Kathan** (print name)

certify that the application requires no changes to water use or waste disposal as previously authorized and that the information given on this form is, to the best of my knowledge, correct and complete.


Signature


Date

Application for Water License Renewal
Duvall River Crossing

The current application is for license renewal for the “Duvall River Crossing” for extension of the existing license until November 30, 2013. This crossing was constructed in October 2009 and consists of metal culverts and rock and gravel fill. The extension of time is requested to enable the crossing to be used for the next phase of this project which would include new sheet pile wharf, dredging of the channel and installation of floating docks. This river crossing is the only means of passage for heavy equipment between the municipal quarry and the Pagnirtung ‘Harbour Development Project.’

Construction Environmental Management Plan

Report Description:

The report reviewed the basic components of the project including access road upgrading and temporary river crossing of the Duval River, harbour dredging, fill placement for west breakwater and marshalling area, sea-lift ramp construction, fish habitat compensation construction, fixed wharf construction and the ocean disposal of dredge material. The report detailed the importance of each component of the project. The report outlines mitigative / effective control measures to minimize the impacts to the environment during construction such as water quality, underwater noise, waste disposal, and inadvertent spills of harmful substances.

Culvert Crossing of the Duval River – Hamlet of Pannirtung, Nunavut – Small Craft Harbour Development

Report Description:

This project involves the installation of a Crossing on the Duval River to allow transportation of crushed rock from an existing quarry to the existing harbour. The truck route will utilize an existing road network. The river crossing was made up of three culverts of the following size – 40 metres long by 1.8 metres in diameter. Fill to support the crossing was placed on the river bed and around the culverts. A total of 3,500 cubic metres of crushed rock was placed. The construction of the crossing was completed during the 2009 construction season and will remain in place to support the construction of the Pangnirtung Small Craft Harbour.



SPILL CONTINGENCY PLAN

for

Petroleum Product

for

Harbour Development Project

Pangnirtung, Nunavut

Issued by: Fisheries and Oceans Canada

Issue Date: October 15, 2009



Table of Contents

1.0	BACKGROUND	1
2.0	SCOPE OF CONTINGENCT PLAN	1
3.0	EMERGENCY PLAN AVAILABILITY AND USAGE	1
4.0	FUEL DISPENSING SYSTEMS AND SURROUNDINGS	1
4.1	System Description	1
4.2	Delivery Truck Locations and Surroundings	2
5.0	PETROLEUM PRODUCTS IN SYSTEMS	2
5.1	Hazards of Diesel Fuel.....	2
5.2	Precautionary Measures – Diesel Fuel.....	2
6.0	EMERGENCY RESPONSE – PRODUCT RELEASES	3
6.1	Minor and Significant Releases	3
6.2	Prevention of Product Releases	3
6.3	Preparation for Product Release Emergencies.....	4
6.4	Emergency Response – Product Releases	4
6.5	Recovery From Product Release Emergency.....	6
7.0	EMERGENCY RESPONSE ROLES AND RESPONSIBILITIES	6
7.1	Key Personnel/Groups	6
7.2	Roles and Responsibilities	7
7.3	Emergency Contact List	8
8.0	TRAINING REQUIREMENTS	9
9.0	EMERGENCY RESPONSE EQUIPMENT	9

List of Appendices

Appendix A Material Safety Data Sheets – Diesel Fuel

1.0 BACKGROUND

DFO has the responsibility for ensuring that the management of petroleum products storage and dispensing systems at the Harbour Development Project, Pangnirtung, Nunavut is in accordance with the most current legislation.

Petroleum products and allied petroleum products are defined in the Regulations and include product such as diesel fuel.

2.0 SCOPE OF CONTINGENCY PLAN

The site-specific emergency plan included in this document applies only to the petroleum product dispensing systems identified in this document. This plan addresses emergencies related to fire or product release associated with the noted dispensing systems only, and focuses mainly on the environmental and the human health and safety aspects of the plan.

Spills of petroleum products cannot be entirely prevented; however, the impacts of spills can be minimized by establishing a predetermined line of response and action plan. The remote location of developments in Nunavut and the environmental sensitivity of the region underlines the necessity for good spill contingency planning.

3.0 EMERGENCY PLAN AVAILABILITY AND USAGE

A copy of the site-specific emergency contact list will be kept on site.

4.0 FUEL DISPENSING SYSTEMS AND SURROUNDINGS

4.1 System Description

All diesel fuel used at the site by DFO contractors is delivered by fuel dispensing trucks owned and operated by Pangnirtung Eskimo Co-op Limited.

Diesel fuel is transferred from the dispensing truck to vehicles via an electric fuel dispensing pump and a rubber fuel transfer hose with a manually operated discharge nozzle. When not in use, the diesel fuel transfer hose is coiled inside the cabinet in the truck

4.2 Delivery Truck Locations and Surroundings

The contractors on site usually require fill-up at periodic times based on their construction activities and the number of equipment that is working at the site. The site generally utilizes 1-2 excavators (345/365) and 1-3 off-road HM400-2 Rock Trucks. The fuel delivery location is usually located a minimum of one hundred meters from the salt water of the Pangnirtung Harbour.

The site area in the vicinity of the harbour exterior is relatively level with a slight slope towards the adjacent municipal roads

5.0 PETROLEUM PRODUCTS IN SYSTEMS

Diesel fuel is dispensed for operating contractor's equipment at the site. A summary of the hazards associated with diesel fuel and gasoline and the first aid measures and precautionary measures for diesel fuel are included in the following sections.

5.1 Hazards of Diesel Fuel

Diesel fuel is a combustible liquid and a toxic material. Diesel fuel is rated as a slight health hazard, a moderate flammability hazard and an insignificant reactivity hazard. Diesel fuel can be easily ignited by heat, sparks or flames. Diesel fuel vapors are heavier than air and may collect in low-lying areas. Human exposure to diesel fuel can be through dermal contact, ingestion or inhalation. Acute exposure to diesel fuel can result in headaches and other symptoms of central nervous system (CNS) depression, such as nausea and dizziness, as well as a burning sensation in the chest following inhalation. Aspiration into the lungs can cause severe pneumonitis, with coughing, gagging, shortness of breath, chest pain and/or pulmonary edema. Ingestion may produce nausea, vomiting and cramping.

5.2 Precautionary Measures – Diesel Fuel

When handling diesel fuel or gasoline, the following precautionary measures should be used:

- **Personal Protective Equipment**
 - **Gloves** – Nitrile, Viton™ or polyethylene preferred.
 - **Eye Protection** – Chemical safety goggles or face shield, as a good general safety practice.
 - **Respiratory Protection** – NIOSH approved. SCBA or airline respirator with escape cylinder for confined spaces or work with sulphur-containing product. If an air-purifying respirator is appropriate, use organic vapor cartridges. A qualified occupational health and safety professional should advise on respirator selection.
 - **Clothing & Footwear** – Coveralls to prevent skin contact with product. If clothing or footwear becomes contaminated with product, completely decontaminate it before re-use, or discard it.

- **Handling Procedures and Equipment** – Keep containers closed. Keep work area free of ignition sources. Use non-sparking equipment, explosion-proof ventilation and intrinsically safe electrical equipment. Ground handling equipment.
- **Leak and Spill Procedure** – Keep unauthorized persons away. Eliminate all sources of ignition. Ventilate area. Stop leak if it can be done safely. Prevent entry into sewers, waterways or confined spaces. Absorb or cover with dry earth, sand or other non-combustible material and use clean, non-sparking tools to transfer to container.
- **Waste Disposal** – Consult local authorities for advice.

6.0 EMERGENCY RESPONSE – PRODUCT RELEASES

6.1 Minor and Significant Releases

The following are considered to be significant spills or leaks from a petroleum product storage system: any spill or leak that could threaten public health and safety, or reach a harbour or other body of water; any ongoing leak from a storage tank system; or any spill or overfill greater than 70 L.

The following are considered to be minor spills or leaks from a petroleum products storage tank system: any spill or leak that does not threaten public health and safety, and can not reach a harbour or other body of water; a leak of less than 70 L from a storage tank system, where the leak is no longer ongoing; or a spill or overfill less than 70 L.

The most probable minor product release at the site would occur as a result of minor spillage during the filling of equipment with diesel fuel, as the result of minor leakage or spillage during on-site dispensing of diesel fuel, or as the result of minor leakage from aboveground diesel fuel truck or hoses. The most probable significant product release at the site would occur as a result of overfilling the contractors' vehicles, as the result of leakage or spillage during on-site dispensing of diesel fuel or the result of leakage from the delivery trucks.

6.2 Prevention of Product Releases

The following measures will reduce the likelihood of occurrence of product releases at the storage tank systems:

1. Installation of suitable vehicle protection systems around the fuel delivery truck systems.
2. Installation of suitable supports and protection from impacts (e.g., proper location of fuelling vehicles).
3. Provision of spill overflow preventer/secondary containment on diesel fuel transfer trucks – each vehicle is equipped with an automatic floats which prevents the overfilling of fuel during refueling operations.

4. Prohibition of vehicle movement in and around the area while diesel fuel refueling operations are underway.
5. Completion of regular inspections and maintenance of fuel dispensing systems, including the dispenser and pumping systems, hoses and pipelines.
6. The contractor periodically checks all vehicles to ensure that they are running properly and no leaks of fuel or other products are present in the vehicles.
7. Following standard operating procedures during all petroleum products delivery and dispensing operations.
8. Full-time attendance of on-site personnel during all petroleum products delivery and dispensing operations.
9. Draining petroleum products transfer hoses before moving the hoses around the storage tank and refueling areas.

6.3 Preparation for Product Release Emergencies

The following measures will prepare the site for product release emergencies:

1. Development of a site-specific emergency / contingency plan.
2. Posting of an emergency contact list in the vicinity of the site.
3. Ensuring that, as a minimum, a fully charged ABC fire extinguisher is available on the site.
4. Ensuring that the personnel who operate, inspect or maintain the storage tank systems are familiar with the emergency plan and familiar with the location and usage of emergency response equipment, including fire extinguishers.
5. Ensuring that arrangements are made, where necessary, with local contractors to assist, if needed, in the event of an on-site emergency.

6.4 Emergency Response – Product Releases

In case of a significant or minor spill or leak from the fuel delivery trucks, the individual discovering the product release should follow the emergency response plan outlined below.

1. Contact the CCG Environmental Emergencies Line at 1-800-563-9089. Please note that all spills or leaks are reported to the CCG Environmental Emergencies Line, whether they occur on land or water.
2. Shut down petroleum products transfer operations, if they are in progress.
3. Shut off any ignition sources in the area (e.g., motors, electrical circuits, etc.).

4. Enforce "No Smoking" in the area.
5. Refer to the MSDSs in Appendix A for more detailed information on diesel fuel.
6. Contain the escaped petroleum products if possible and safe to do so. If possible, prevent the release from reaching any open drains or catch basins or the adjacent harbour. Dependent on the volume of the release, the escaped petroleum products may be contained with sorbent materials from the on-site spill kit or by constructing berms from sand, soil or other available materials. If possible, berms should be constructed around open drains and catch basins located down-gradient from the release point or between the harbour and the release point. Soil berms (i.e., a berm constructed by placement of a raised row of soil) are normally effective to contain petroleum products migration on soil, rock, asphalt and concrete. If sorbent materials are used to contain escaped petroleum products, the sorbent materials must be replaced continually when saturated with petroleum products.
7. Isolate leaking components on the fuel dispensing systems, if applicable and possible.
8. Arrange for the immediate removal of the remaining petroleum products from the leaking tanks, if necessary.
9. Take reasonable steps to recover or remove the escaped petroleum products. All personnel involved in the cleanup should wear appropriate personal protective equipment. Personnel on site should assess the potential for disturbance of the surrounding area and wildlife by the release or the planned clean up operations. All petroleum products contaminated soil, groundwater or surface water, contaminated berm materials and contaminated absorbent materials should be excavated/removed and disposed of off-site at an approved petroleum products disposal facility.
10. Inspect the storage systems and arrange via the Emergency Plan Coordinator for upgrade or replacement, if required.
11. When reporting a spill or leak, personnel will be asked to provide various information including:
 - Name and telephone number of the person reporting the spill;
 - Report date and time of spill;
 - Location of spill and direction of spill movement;
 - Extent of injuries, if any;
 - Classification, name and quantity of dangerous good spilled;
 - Party responsible;
 - Cause of spill;
 - Has the spill ceased or been terminated or is it continuing;
 - Extent of contaminated area;
 - Factors affecting spill recovery;



- Containment measures;
- Response actions to date;
- Request for assistance;
- Potential health and environmental hazards; and,
- Comments and recommendations (if any).

6.5 Recovery from Product Release Emergency

After a product release emergency has occurred on the site, various measures may be required:

1. Once the product release emergency has been removed, the Emergency Plan Coordinator must complete a DFO Emergency Response / Environmental Incident Record Form to document the details of the incident.
2. It may be necessary to complete subsurface investigations and/or remediation of impacted soil, groundwater or surface water in the vicinity of the storage tank systems.
3. If necessary, the removal and disposal of petroleum hydrocarbon impacted soil, groundwater or surface water or spilled petroleum products must be carried out in accordance with existing environmental regulations.
4. The storage tank systems must be fully inspected, with any damaged components repaired or replaced before the storage tank system is put back into service. Dependent on the extent of the damage, particularly if the product release emergency was also associated with a fire emergency, it may be necessary to remove the petroleum products from the storage tank systems and replace the entire system.
5. A temporary petroleum products storage tank system may be required for the site until the damaged system is inspected and repaired or replaced.
6. Dependent on the nature and circumstances of the product release emergency, it may be necessary to revise the storage tank system's operations, inspection or maintenance procedures or to revise the emergency plan.

7.0 EMERGENCY RESPONSE ROLES AND RESPONSIBILITIES

7.1 Key Personnel/Groups

Key personnel/groups in the implementation of this spill contingency plan include:

1. DFO Representative on Site.
2. Emergency Plan Coordinator
3. Personnel who operate the fuel dispensing system.

4. The current local contractor on site.
 5. Local emergency responders (i.e., fire department, local contractors).
-

7.2 Roles and Responsibilities

The roles and responsibilities of each of these personnel/groups with respect to the implementation of the emergency plan follow:

DFO Site Personnel, Pangnirtung or Winnipeg, MB

1. Ensure that the emergency plan is maintained up-to-date.
2. Ensure that an Emergency Plan Coordinator is in place.
3. Ensure that the Emergency Plan Coordinator is trained with respect to the content and implementation of the emergency plan and the usage of emergency response equipment.

Emergency Plan Coordinator

1. Is the main person to coordinate the implementation of the emergency plan.
2. Ensure that a copy of the emergency plan is provided to the subject site.
3. Ensure that a copy of the emergency plan is provided to the local fire department and to any local contractors retained by DFO to assist, if necessary, in the implementation of the emergency plan.
4. Ensure that the local diesel supplier contact names and numbers are added to the emergency contact list.
5. Ensure that a copy of the emergency contact list is posted on the job site.
6. Confirm the type and location of emergency response equipment available at the site.
7. Ensure that the necessary emergency response equipment is maintained at the site.
8. Ensure that personnel who operate, inspect and maintain the storage tank system are familiarized with the emergency plan and the location and usage of emergency response equipment.
9. Ensure that arrangements are in place with local contractors to provide equipment and materials, if necessary, to assist in emergency responses at the site, and that the contact names and numbers are on the emergency contact list.

Personnel Who Operate, Inspect or Maintain Fuel Dispensing Systems

1. Familiarize with the spill contingency plan.
2. Familiarize with the location and usage of emergency response equipment.
3. Follow the emergency plan if necessary.
4. Contact the local emergency responders in the event of an emergency.

Local Emergency Responders

1. **Local Fire Department** - The local fire department will respond to fire emergencies, when called. The local fire department will take control of the emergency response for fires, while on site.
2. **Local Contractors** – Local contractors will provide equipment (e.g., backhoe, loader, boat) and/or materials (e.g., sand, clean fill), at the request of the Emergency Plan Coordinator, to assist DFO in an emergency response at the site. 8.3

Emergency Contact List:

Emergency Contact	Telephone Number
Emergency Plan Coordinator – Peter Jacobsen, Tower Arctic Ltd. (This name may be changed as various phases of the work is completed.)	867-473-4114
DFO Representative on Site	867-473-4099
Diesel Fuel Supplier: Eskimo Co-op Limited Alan Patterson	867-473-8936
Local Contractor (Tower Arctic Ltd.)	867-473-4114
PPD Officer	867-899-7399 867-899-7308
NWT Spill Line	403-720-8130 403-873-5763
Fire Department	867-473-4422
SAR	767-473-8953
CCG Environmental Emergencies Line (24 hours)	1-800-563-9089

8.0 TRAINING REQUIREMENTS

Training associated with this emergency plan will consist primarily of review and general familiarization with the emergency plan, the emergency contact list and the location and usage of on-site emergency response equipment and resources. The Emergency Plan Coordinator will review the site-specific emergency plan and is familiar with the location and usage of the on-site emergency response equipment and resources. The Emergency Plan Coordinator will ensure that all site personnel and contractors involved in the fuel dispensing operations, and all contractors retained by DFO to provide assistance or resources during an emergency response at the site, review the site-specific emergency plan, sign off on the compliance agreement, and are familiar with the location and usage of the on-site emergency response equipment and resources.

The current supplier of diesel fuel has been trained in the following course:

- Department of Community and Government Services
Petroleum Products Division Aviation Fuel Handling Course Parts 1-6
- The Co-operative also has a Procedure Book for the Handling of gasoline and diesel fuel spills

9.0 EMERGENCY RESPONSE EQUIPMENT

The following constitutes the availability of emergency spill contingency equipment or materials on site:

The emergency response equipment stored on the fuel truck normally consists of a spill response kit and a fire extinguisher. Available site information indicates that three spill response kits are present in the on-site yard area. Each of these spill kits contains absorbent pads and loose absorbent materials. A fully stocked spill kit and a fully charged ABC fire extinguisher should be readily accessible in the petroleum products storage tanks areas. As a minimum, each spill kit should contain:

- One absorbent "Loose Particulate" (50 L bag);
- Thirty absorbent pads (17" x 19" x 3/8");
- Three disposal bags (large).

The current contractor, Tower Arctic Ltd., on site has an universal Spill Kit CSKJCARRIER95U which contains the following materials:

- 150 universal pads
- 12 universal socks 3"x4'
- 6 universal pillows 8"x 18"
- 1 pair of splash goggles
- 3 epoxy sticks
- 4 disposal bags
- 1 set of instructions
- 1 95 Gal. wheeled overpack

CCG Emergency Response Equipment & Materials - At the Pangnirtung Harbour site, there are three (3) trailers owned by CCG Emergency Response, Central and Arctic Region, that is stored for a marine emergency. The local RCMP has keys for these units in the case of an emergency.

Tobin, Brian

From: Brian Aglukark [aglukark@nunavut.ca]
Sent: July 14, 2011 11:53 AM
To: Tobin, Brian
Cc: Phyllis Beaulieu; Richard Dwyer; NIRB Info
Subject: RE: DUVALL RIVER CROSSING, PANGNIRTUNG HARBOUR

Good morning;

Email confirming that the above proposal falls outside an approved planning boundaries of both the North Baffin Regional Land Use Plan and the Keewatin Regional Land Use Plan. There a conformity review by the Nunavut Planning Commission will not be required.

Any questions concerns, please do not hesitate.

Brian Aglukark, NPC
Arviat

From: Tobin, Brian [mailto:Brian.Tobin@dfo-mpo.gc.ca]
Sent: Thursday, July 14, 2011 11:49 AM
To: Brian Aglukark
Subject: DUVALL RIVER CROSSING, PANGNIRTUNG HARBOUR

In response to the above noted project, we are requesting an extension of this current permit from the Nunavut Water Board (NWB) until March 2012. Construction of the temporary crossing occurred in November 2009 after freeze up. The work was performed by the Municipality of Pangnirtung and their subcontractor Tower Arctic Limited. The crossing has been a critical component of the first two (2) construction contracts which will be finished this fall. Additionally, this crossing will be required to be used for the new construction contract which has been awarded by PWGSC for the channel dredging, construction of fixed wharf and floating docks, which is to be scheduled for completion next summer.

The location of this work is in the Harbour of Pangnirtung with cordinates:

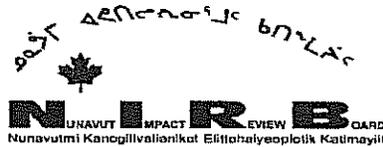
Latitude: 69 degrees 9' 2.87" N Longitude 65 degrees 41' 30.01" W

We are currently requesting an extension of the existing permit for this crossing from the Nunavut Water Board to January 21, 2012. The NWB require confirmation in writing that an NPC Conformity is not required for this renewal.

Could you please confirm this in writing at your earliest convenience.

Brian T. Tobin
A/Senior Project Engineer
Pangnirtung Harbour Improvements Project
Small Craft Harbours Branch
Department of Fisheries and Oceans
501 University Crescent, Winnipeg, MB R3T 2N6
Phone (204) 984-2827, Fax: (204) 983-7166
Email: Brian.Tobin@dfo-mpo.gc.ca

25/07/2011



SCREENING DECISION REPORT
NIRB FILE NO. 09UN052

July 24, 2009

To: Honourable Gail Shea
Minister of Fisheries and Oceans Canada
Ottawa, ON
-and-
Honourable John Baird
Minister of Transportation
Ottawa, ON
-and-
Honourable Jim Prentice
Minister of Environment
Ottawa, ON

Via email: shea.g@parl.gc.ca; baird.j@parl.gc.ca; and prentice.j@parl.gc.ca

Re: **Screening Decision for Fisheries and Oceans Canada's "Pangnirtung Small Craft Harbour Development" project proposal, NIRB File No. 09UN052**

Dear Honourable Ministers:

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

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

Section 12.4.4 of the NLCA states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) *the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;*
- b) *the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;*

- c) *the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or*
- d) *the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.*

NIRB ASSESSMENT AND DECISION

After a thorough assessment of all material provided to the Board (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with the principles identified within Section 12.4.2 of the NLCA, the decision of the Board as per Section 12.4.4 of the NLCA is:

12.4.4 (a): the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

The Board is recommending that the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

General

1. Fisheries and Oceans Canada (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all authorizations (licenses, permits, letters of approval, etc.) obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB, including:
 - a. NIRB Part 1 Summary Application Form (submitted June 22, 2009)
 - b. NIRB Part 2 Project Specific Information Requirements Form (submitted June 22, 2009)
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.
6. The Proponent shall not use freshwater, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.
7. The Proponent shall ensure no waste construction materials enter the water or are left on the ice.
8. The Proponent shall ensure only clean materials, free of fine particulates, are used for in-water works associated with this project.

Waste

9. The Proponent shall keep all garbage and debris properly contained and inaccessible to wildlife until disposed of. All wastes must be disposed of in an approved waste management facility.

Fuel and Chemical Storage

10. The Proponent shall submit a comprehensive Spill Contingency Plan to NIRB prior to the commencement of the project. Copies of this plan must be readily available on site, and all project personnel, contractors and sub-contractors must be made familiar with the appropriate response procedures in the event of a spill.
11. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
12. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
13. The Proponent shall use secondary containment or a surface liner (drip pans, fold-a-tanks, etc) at all fuel-transfer and refueling stations.
14. The Proponent shall ensure that an adequate supply of spill kits, shovels, barrels, sorbents and pumps are maintained on site at all times.
15. The Proponent shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures and spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130

Wildlife

16. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.

Physical Environment

17. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction until vegetation or other appropriate measures are established in order to prevent sediment from entering any waterbody.
18. The Proponent shall ensure construction materials used to build structures are not taken from the shoreline or below the high water level of any waterbody. Any boulders located within the footprint of any fixed wharf crib or pile should be relocated to a similar depth adjacent to the work site.
19. The Proponent shall ensure that an erosion control cloth or equivalent is placed between the rock and the back-fill material to contain sediments and help prevent undermining.

Other

20. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.

Other NIRB Concerns and Recommendations

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

1. Prior to issuance of any authorization or approval for ocean disposal of dredged sediments related to this project, Environment Canada shall forward the project proposal to NIRB in accordance with Section 12.4.1 of the NLCA.
2. All authorizing agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

3. Any activity related to this project proposal, and outside the original scope of the project as described in the applications submitted to the NIRB, will be considered a new project and should be submitted to the NIRB for Screening.

Regulatory Requirements

The following authorizations have been identified as requirements for this project:

- **Navigable Waters Protection Act Authorization** – Transport Canada (*applied for*)
 - For works in waters used for navigation (recreational boating, fishing vessels, etc.)
- **Class B Water License** – Nunavut Water Board (*applied for*)
 - For culvert installation on a freshwater stream
- **Fisheries Act Authorizations** – Fisheries and Oceans Canada (*applied for*)
 - For impacts to fish habitat
- **Disposal At Sea Permit** – Environment Canada (*may be required*)
 - For potential disposal-at-sea of dredged materials

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

1. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14//en>).
2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
4. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
5. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. The *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
7. The *Navigable Waters Protection Act (NWPA)* (<http://laws.justice.gc.ca/en/N-22/index.html>).
8. The *Canada Shipping Act* (<http://laws.justice.gc.ca/en/showtdm/cs/C-10.15>) which contains regulations regarding transfer of fuel and oil from vessels to shore-based fuel farms.
9. The *Arctic Waters Pollution Prevention Act* (<http://laws.justice.gc.ca/en/showtdm/cs/A-12>) which contains provisions related to the deposition of wastes in arctic waters.

Validity of Land Claims Agreement

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated July 24, 2009 at Sanikiluaq, NU.



Lucassie Arragutainaq, Chairperson

Attachments: Appendix A: Procedural History and Past Activities
Appendix B: Species at Risk in Nunavut
Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders.

Appendix A Procedural History and Project Activities

Procedural History

On June 22, 2009 the Nunavut Impact Review Board (NIRB) received Fisheries and Oceans Canada's (DFO) "Pangnirtung Small Craft Harbour Development" project proposal from DFO – Small Craft Harbours Branch. NIRB assigned this project proposal file number 09UN052.

This project proposal was distributed to community organizations in Pangnirtung, as well as to relevant federal and territorial government agencies, and Inuit organizations. NIRB requested that interested parties review the proposal and provide the Board with any comments or concerns by July 16, 2009 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before July 16, 2009, NIRB received comments from the following interested parties:

- **Environment Canada (EC)**
- **Government of Nunavut – Culture Language Elders and Youth (GN-CLEY)**
- **Transport Canada (TC)**
- **Fisheries and Oceans Canada (DFO)**

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following location: <http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>

Project Activities

This project is proposed to take place from August 1, 2009 to October 31, 2011 within the hamlet of Pangnirtung, South Baffin region. The objective of the proposed construction is to upgrade the existing docking facility in Pangnirtung into a small craft harbour capable of accommodating larger vessels.

The proposed project activities include:

- Dredging of marine area;
- Disposal of dredged sediments (potentially at sea, to be determined);
- Culvert installation on a freshwater stream;
- Temporary isolation/dewatering of tidal flats areas to permit in-water construction;
- Installation of floating docks;
- Construction of marshalling areas;
- Extension of existing breakwater;
- Construction of new breakwater; and,
- Use of existing fueling infrastructure.

Appendix B Species at Risk in Nunavut

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

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

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

Updated: January 3, 2007

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility ¹
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered ²	Schedule 1	EC
Peregrine Falcon (subspecies <i>anatum</i>)	Threatened	Schedule 1	Government of Nunavut
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (subspecies <i>tundrius</i>)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Peary Caribou	Endangered ³	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic –	Special Concern	Pending	DFO

Baffin Bay population)			
Bowhead Whale (Hudson Bay-Foxe Basin population)	Threatened ⁴	Pending	DFO
Bowhead Whale (Davis Strait-Baffin Bay population)	Threatened ⁴	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Rusty Blackbird	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern ³	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

¹ Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. EC = Environment Canada, DFO = Department of Fisheries and Oceans

² Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

³ Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, *Rangifer tarandus pearyi*, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), *Rangifer tarandus groenlandicus*. The subspecies *pearyi* is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies *pearyi* as Endangered.

⁴ The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

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



BACKGROUND: Archaeology

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

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

BACKGROUND: Palaeontology

Under the Nunavut Act¹, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*², it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

Definitions

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

“archaeological site” means a place where an archaeological artifact is found.

¹ s. 51(1)

² P.C. 2001-1111 14 June, 2001

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

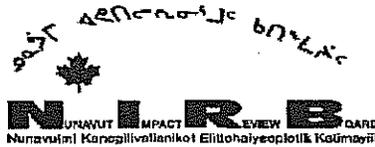
- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
 - a. survey
 - b. inventory and documentation of the archaeological or palaeontological resources of the land

- use area
- c. assessment of potential for damage to archaeological or palaeontological sites
- d. mitigation
- e. marking boundaries of archaeological or palaeontological sites
- f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.



NIRB File No.: 09UN052

DFO File No. NU-09-0003

TC File No. 8200-T-11419.1

EC File No. 4543-2-02896

May 31, 2010

Honourable Gail Shea
Minister of Fisheries and Oceans
c/o Gary Cooper, Habitat Management Biologist
Fisheries and Oceans Canada
Iqaluit, NU

Via email: Gary.Cooper@dfo-mpo.gc.ca

Re: Application Exempt from Screening pursuant to Section 12.4.3 of the NLCA: DFO's amendment request for the "Pangnirtung Small Craft Harbour Development" project

Dear Gary Cooper:

On May 12, 2010 the Nunavut Impact Review Board (NIRB or Board) received notification from Fisheries and Oceans Canada (DFO) regarding an amendment to DFO's "Pangnirtung Small Craft Harbour Development" project.

Please be advised that the original project proposal (NIRB File No.: 09UN052) was received by the NIRB from DFO on June 22, 2009, and was screened by the Board in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA). On July 24, 2009 the NIRB issued the enclosed NLCA 12.4.4(a) screening decision to the Minister of DFO indicating the proposed project could proceed subject to NIRB's recommended project-specific terms and conditions.

On August 11, 2009 the NIRB received notification from DFO regarding an amendment to the above project which included the addition of reinstating a crossing of the Duval River in Pangnirtung for the purpose of transporting rock from the existing quarry to the harbour for construction materials. After a thorough assessment of the application information and public comments received, the NIRB determined that this request would not change the general scope of the original project activities and re-issued the recommended terms and conditions contained in the July 24, 2009 Screening Decision Report.

The DFO application, the original NIRB screening file and Screening Decision, 09UN052 are available from the NIRB's ftp site at the following link:

http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/ARCHIVE/2009_SCREENINGS/09UN052-DFO%20-%20Pangnirtung%20Harbour/1-SCREENING/

Please note that Section 12.4.3 of the NLCA states that:

"Any application for a component or activity of a project proposal that has been permitted to proceed in accordance with these provisions shall be exempt from the requirement for screening by NIRB unless:

(a) such component or activity was not part of the original project proposal; or

(b) its inclusion would significantly modify the project."

After completing a review of the information provided, the NIRB is of the understanding that the application received from DFO does not change the general scope of the original project activities, and the exceptions noted in NLCA 12.4.3(a) and (b) do not apply. Therefore, this application is exempt from screening as per Section 12.4.3 of the NLCA and the activities therein remain subject to the terms and conditions recommended in the original July 24, 2009 Screening Decision Report (attached).

If you have any questions or concerns, feel free to contact Sophia Granchinho, Technical Advisor, at (867) 983-4607 or sgranchinho@nirb.ca.

Best regards,



Stephanie Autut
Executive Director

cc: Alan Kathan, DFO
Eric Kan, DFO
Rick Kiriluk, DFO
Phyllis Beaulieu, Nunavut Water Board

Enclosure: NIRB Screening Decision Report, File No.: 09UN052 (July 24, 2009)