



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

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DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)		
(4)		
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GENERAL WATER LICENCE APPLICATION (APPLICATION FOR NEW WATER LICENCE)

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

LICENCE NO: (for NWB use only)	
1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address)	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION
Natalie Plato Aboriginal Affairs and Northern Development Contaminated Sites Division PO Box 2200 Iqaluit, NU Phone: (867) 975-4730 Fax: (867) 975-4736 e-mail: Natalie.plato@aandc.gc.ca	Stephen Hooey Aboriginal Affairs and Northern Development Contaminated Sites Division PO Box 2200 Iqaluit, NU Phone: (867) 975-4731 Fax: (867) 975-4736 e-mail: stephen.hooey@aandc.gc.ca
3. NAME OF PROJECT (including the name of the project location)	
Durban and Padloping Islands Remediation Project	
4. LOCATION OF UNDERTAKING	
Project Extents	
Overall Area	
NW: Latitude: (67° 05' 20" N) Longitude: (62° 46' 13" W)	
NE: Latitude: (67° 05' 20" N) Longitude: (62° 05' 30" W)	
SE: Latitude: (67° 02' 07" N) Longitude: (62° 05' 30" W)	
SW: Latitude: (67° 02' 07" N) Longitude: (62° 46' 13" W)	
Durban Island	
NW: Latitude: (67° 05' 08" N) Longitude: (62° 12' 20" W)	
NE: Latitude: (67° 06' 08" N) Longitude: (62° 08' 22" W)	
SE: Latitude: (67° 05' 28" N) Longitude: (62° 05' 49" W)	
SW: Latitude: (67° 04' 02" N) Longitude: (62° 10' 50" W)	
Padloping Island	
NW: Latitude: (67° 02' 52" N) Longitude: (62° 45' 05" W)	
NE: Latitude: (67° 02' 52" N) Longitude: (62° 42' 50" W)	
SE: Latitude: (67° 02' 22" N) Longitude: (62° 40' 54" W)	
SW: Latitude: (67° 02' 04" N) Longitude: (62° 44' 22" W)	

Camp Location(s)

Possible camp locations (approximate):

Durban Island: Latitude: (67 ° 04 ' 20" N) Longitude: (62° 10' 30" W)

Durban Island: Latitude: (67 ° 05' 51" N) Longitude: (62° 08' 10" W)

Padloping Island: Latitude: (67° 02 ' 15 " N) Longitude: (62° 42' 45" W)

Precise camp locations will be determined after contract award but will be on Crown Land within the Project Area.

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

NTS Map Sheets:

016M01, BLOCK I ISLAND 1:50:000

016M02, DELIGHT ANCHORAGE 1:50:000

Additional detailed maps of the sites are provided in Appendix 5.

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

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)

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

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)

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

Surface

☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)

Date (expected date) of issuance: June 1, 2012 Date of expiry: March 31, 2017

☐ 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: June 1, 2012 Date of expiry: March 31, 2017

☐ Commissioner's Land Use Authorization

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

☐ Other: _____

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

Name of entity(s) holding authorizations:

Aboriginal Affairs and Northern Development Canada

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

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

Is a land use plan conformity determination required?

- ☐ Yes ☒ No

If Yes, indicate date issued and attach copy _____

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

Confirmation that NPC land use plan conformity is not required is pending.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

- ☐ Yes ☐ No

If Yes, indicate date issued and attach copy _____

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

Nunavut Impact Review Board (NIRB) Part 1 and 2 Forms have been submitted concurrently with this application (see Appendices 1 and 2)

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

Environmental remediation projects on Durban Island and Padloping Island are being planned concurrently. All debris, contaminated soil and buildings are planned for removal and shipping off-site for disposal. Type B, light hydrocarbon contaminated soils will be treated using landfarms. A camp will be established on each island to support remediation activities. All camp facilities will be dismantled and removed following project completion.

The 'Walkaway Solution' is being implemented and no landfills are being constructed on either Durban or Padloping Islands. Detailed project plans are provided in Appendix 4.

The general activities to be carried out on each site include:

- **establish field camp via sealift and helicopter access**
- **site infrastructure will be demolished**
- **all hazardous and non-hazardous waste will be packaged and transported via sea-lift south for appropriate disposal in licensed facilities**
- **existing landfills and dumps will be remediated as described in the Remedial Action Plan**
- **landfarms will be used to treat hydrocarbon contaminated soils**
- **other contaminated soils will be treated as described in the Remedial Action Plans, typically**

	<p style="color: red;">removed from site and shipped south for disposal</p> <ul style="list-style-type: none"> <li style="color: red;">- barrels and other debris will be collected, crushed, packaged and sent south for disposal <li style="color: red;">- Road upgrades will be implemented as required for site access <li style="color: red;">- Several borrow sources will be used to provide fill material for road upgrades and remedial work <li style="color: red;">- At Padloping Island, two partially submerged barges along the shoreline will be removed. 										
10.	<p>OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.</p> <p style="color: red;">Various remedial options were reviewed as described in the Remedial Action Plans (Appendix 4).</p> <p style="color: red;">One possible option was the construction of non-hazardous landfills at Padloping and Durban Islands. The technically superior option selected was the ‘walk-away’ solution whereby all materials that may have normally been disposed of in on-site landfills, will be removed from the sites for disposal in the south.</p>										
11.	<p>CLASSIFICATION OF PRIMARY UNDERTAKING - Indicate the primary classification of undertaking by checking one of the following boxes.</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Agricultural</td> </tr> <tr> <td><input type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Conservation</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Municipal (includes camps/lodges)</td> <td><input type="checkbox"/> Recreational</td> </tr> <tr> <td><input type="checkbox"/> Power</td> <td><input checked="" type="checkbox"/> Miscellaneous (describe below):</td> </tr> </table> <p style="color: red;">Remediation Project</p> <p>See Schedule II of <i>Northwest Territories Waters Regulations</i> for Description of Undertakings.</p> <p>Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Hydrostatic Testing <input type="checkbox"/> Tannery <li style="color: red;"><input checked="" type="checkbox"/> Tourist / Remote Camp <li style="color: red;"><input checked="" type="checkbox"/> Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil <input type="checkbox"/> Onshore Oil and Gas Exploration Drilling <input type="checkbox"/> Mineral Exploration / Remote Camp <input type="checkbox"/> Advanced Exploration <input type="checkbox"/> Mine Development <input type="checkbox"/> Municipal <input type="checkbox"/> General Water Works <input type="checkbox"/> Power 	<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):
<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):										
12.	<p>WATER USE - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.</p> <ul style="list-style-type: none"> <li style="color: red;"><input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes <input type="checkbox"/> To obtain water for industrial purposes <input type="checkbox"/> To cross a watercourse <input type="checkbox"/> To alter the flow of, or store water <input type="checkbox"/> Other: _____ <input type="checkbox"/> To divert a watercourse <input type="checkbox"/> To modify the bed or bank of a watercourse <input type="checkbox"/> Flood control 										

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

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

Padloping Island – Fresh Water Lake

Durban Island – Two streams; Blast hole

Please see maps in Appendix 5.

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

Water was sampled from all sources during Phase III Environmental Assessments and met Canadian Drinking Water Quality Guidelines (CDWQG).

Additional water samples will be tested regularly for coliforms and CDWQG criteria during camp operation.

There is sufficient capacity to meet requirements on each island from identified sources.

Provide the overall estimated quantity of water to be used: 36 m³/day (A maximum of 18 cu.m on both Islands)

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

Padloping Island: Fresh Water Lake: up to 18 m³/day

Durban Island:

'Stream 1' close to the Old Construction Camp: up to 12 m³/ day

'Stream 2' close to the beach landing area: 6 m³/day

Blast Hole close to the Station area: 6 m³ day

Camp Use: 12 m³/day

Equipment washing, barrel washing etc: 6 m³/day

Water withdrawal rates will not exceed 10% of the total water body volume.

Describe the method of extraction(s): Water will be pumped out of the water sources using a hose with a screen to prevent fish from becoming trapped. The water will be transported by hose or truck to a reservoir for use on site.

Estimated quantity(s) of water returned to source(s): 0 m³/day

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

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

☒ Sewage

☒ Solid Waste

☒ Hazardous

☒ Bulky Items/Scrap Metal

☐ Animal Waste

☐ Other (describe): _____

☒ Waste oil

☒ Greywater

☐ Sludges

☒ Contaminated soil and/or water

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

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Sewage	Black Water	30 litres/day x 50 people = 1,500 litres/day	Sewage Lagoon	Sewage Lagoon
Waste Oil	Oil	< 600 l	Collected in drums	Shipped south for recycling or disposal
Solid Waste	Camp waste (Paper, packaging, food, etc.)	1.0 cubic metre per day	Incineration (combustibles only)	Packaged and shipped off-site for disposal
Greywater	Grey Water	4,000 litres/day	Sewage Lagoon	Sewage Lagoon
Non-hazardous waste and debris	Crushed barrels, non-hazardous metals, etc.	Durban: 2,500 cu.m. Padloping: 2, 000 cu.m	Packaged and shipped south for disposal	Disposal at a southern landfill
Hazardous Waste – PCBs, Heavy Metals, asbestos	Items contaminated with PCBs and Heavy Metals, asbestos	Durban: 150 cu. m Padloping: 50 cu. m.	Material will be packaged as per the requirements of the TDG Regulations.	Shipped south for treatment or disposal at Licenced Hazardous Waste Facilities
Contaminated Soil – Tier I	Soil lightly contaminated with inorganic elements and/or PCBs or heavy oils	Durban: 50 cu. m Padloping: 250 cu. m	Packaged and shipped south for disposal	Packaged and shipped south for disposal
Contaminated Soil – Tier II	Highly contaminated with inorganic elements and/or PCBs	Durban: 50 cu. m Padloping: 500 cu. m	Packaged and shipped south for disposal	Packaged and shipped south for disposal
Contaminated soil – Hydrocarbon Tybe B	Soil contaminated with light hydrocarbons	Durban: 2,000 cu. m Padloping: 100 cu. m.	Soil is excavated and treated in on-site landfarms	Landfarm is monitored until contamination levels fall below criteria
Buried Debris Excavation	Dump areas where potential for erosion of close to water bodies.	Durban: 50 cu. m Padloping: 600 cu. m	Excavated/sorted according to hazardous/non-hazardous waste. Area regarded.	Packaged and shipped south for disposal as required.
Barrel contents	Hydrocarbons and waste water.	Durban Island: 10,000 l Padloping 1,000 l	Incineration of hydrocarbons. Waste water released when criteria are met. Off-site disposal when necessary	Incineration, Release when discharge criteria are met. or and removal (Appendix 4, Durban Island,

			Page 30)
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16. OTHER AUTHORIZATIONS – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:

Authorization: **Not Applicable**

Administering Agency: _____

Project Activity: _____

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

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

Environmental Impact Assessments were completed for Durban and Padloping Islands and are included in Appendix 6.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

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

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

N/A

19. INUIT WATER RIGHTS

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

N/A

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

A community consultation was held on February 21, 2011 in Qikiqtarjuaq, the nearest community to the sites. The meeting was well advertised in town, on the radio and posted at various locations around the

town. Twenty-seven (27) residents signed the attendance sheet. The meeting was held in the gym at the Hamlet Office building. The 'walk-away' solution was described to the community by an AANDC project Manager and technical representative from the consultant that prepared the draft RAP and conducted the Phase III environmental assessment. Two Inuktitut translators from the community were employed to ensure communications were effective. No concerns or questions were raised during the open forum of the meeting.

During the follow-up to the meeting, the project was discussed with representatives from the Local Hunter's and Trapper's Organization (HTO). The HTO expressed concerns regarding potential impacts of former site activities on shellfish along the shoreline near the barge landing area and fish in the two lakes adjacent to the Padloping Island site. AANDC will sample and test the fish and shellfish to ensure there are no impacts. No concerns were expressed about remediation activities or potential impacts on Durban Island.

An informal discussion of the site history, mostly about Padloping Island, was held at the end of the meeting. Details of the consultation are provided in the Remedial Action Plans (Appendix 4).

Additional consultation activities are planned as the project progresses.

21. SECURITY INFORMATION

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

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

N/A

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

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

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

N/A

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

Durban island

FOX-E Durban Island Phase III Environmental Assessment	AECOM	2010
FOX-E Durban Island Remedial Action Plan	AECOM	2011
FOX-E Durban Island Environmental Impact Assessment	AECOM	2011

Padloping Island

Padloping Island Phase III Environmental Site Assessment	AECOM	2010
Padloping Island Remedial Action Plan	AECOM	2011

Padloping Island Environmental Impact Assessment	AECOM	2011
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Note: The Remedial Action Plans and Environmental Impact Assessments have been provided in Appendices 4 and 5. Copies of the Phase III Site Assessments can be provided upon request.

Additional reports pre-dating 2010 are also available upon request. These reports are listed in Appendix 9.

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

Construction
Proposed Start Date: August 2012 Proposed Completion Date: September 2014

Operation
Proposed Start Date: August 2012 Proposed Completion Date: September 2014

Closure
Proposed Start Date: August 2014 Proposed Completion Date: December 2014

Post - Closure
No post closure monitoring is required.

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

Number of years (maximum of 25 years): five (5) years

Requested Date of Issuance: July 2012 Requested Expiry Date: July 2017

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

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

Propose to use standard NWB reporting.

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

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

☐ Yes ☒ No If no, date expected: **March 2012**

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

☐ Yes ☒ No If no, date expected **April 2012**

Completed General Water Licence Application form.

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

English Summary of Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected _____

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

☐ Yes ☒ No If no, date expected N/A

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 N/A

28. SIGNATURE

Natalie Plato

**Director, Contaminated
Sites**

**Original Signed by
Natalie Plato**

**February 24,
2012**

Name (Print)

Title (Print)

Signature

Date