Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada

Suite 204, 1 Regent Square
Corner Brook, NL
A2H 7K6

July 29, 2015

Att: Keith Brinston
Public Works and Government Services Canada
10 Barters Hill
St. John's, NL, A1C 5X1

RE: Port aux Choix breakwater construction project – CEAA endorsement

Please find attached the completed Canadian Environmental Assessment Act (CEAA) environmental assessment (EA) screening report completed for the abovenoted project. The attached EA report was completed in June 2010 under the former CEAA, which was revised in 2012.

To ensure DFO SCH's responsibilities stipulated under Section 67 of the current CEAA2012 legislation have been met, Public Works and Government Services Canada have reviewed the abovenoted report in the context of CEAA2012. As a result of this assessment, it has been determined that the previously completed CEAA screening report meets DFO's CEAA Section 67 obligations. Therefore, PWGSC can endorse the previously completed CEAA EA screening report. No further environmental assessment is required for the currently proposed scope of work.

Regulatory approvals/responses obtained for the 2010 breakwater project have also been updated to reflect the currently proposed project and are attached to this letter. They include: 1) Newfoundland and Labrador Department of Environment and Conservation, Permit to Alter a Body of Water Permit No. ALT7980-2015 2) Transport Canada, Navigation Protection Act 6(1) approval File No. 8200-10-1001 and 3) Service NL approval for dredge spoil disposal at a landfill. Fisheries and Oceans Canada, Fisheries Protection Program have also reviewed the current scope of work and have advised that "Serious Harm" can be avoided by utilizing a "Letter of Advice" previously issued for the 2010 project, which has also been appended to this letter.

Should you have any questions or require any clarification on the content of this letter or the attached report please feel free to contact me.

Regards,

Mark McNeil, M.Sc.
PWGSC, Environmental Services
mark.mcneil@pwgsc-tpsgc.gc.ca
Tel. (709) 637-4481

Atch.
cc. P. Curran, DFO SCH

Canada

DEPARTMENT OF FISHERIES AND OCEANS - SMALL CRAFT HARBOURS (DFO-SCH) AND TRANSPORT CANADA NEWFOUNDLAND REGION

PWGSC NO. R.032227.001

ENVIRONMENTAL SCREENING
BREAKWATER CONSTRUCTION
PORT AU CHOIX, NEWFOUNDLAND AND LABRADOR

Prepared for DFO-SCH by
Public Works and Government Services Canada (PWGSC)
Environmental Services
Corner Brook, NL
June 2010

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada
Canada

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PART A DESCRIPTION OF THE PROPOSED PROJECT

A-1 Project Identification

Date:	December 21, 2009	PATH Number:	
		CEAR Number:	09-01-52156
TC File No.:			
Harbour Code / Name:	Port au Choix		
Location:	Latitude : 50° 43' 11" N	Longitude: 57° 22' 01" W	
County/Province:	Newfoundland and Labrador		
Region:	Newfoundland		
Screening Title:	Breakwater Construction		
Proposal Description:	The proposed project involves the construction of a 7.6 m wide by 92 m long treated timber cribwork breakwater wharf at the DFO SCH facilities in Port au Choix, NL. Approximately 6000 m^3 of primarily Class A (bedrock) and Class B (gravel, cobble, sand) material may be excavated from the project site to allow for proper seating of the new structure as well as to provide adequate berthage depth and approach.		
Primary Undertaking:	☒	Physical Activity:	☐
Assessor(s):	Mark McNeil, Environmental Officer, PWGSC-ES, Corner Brook, NL		
DFO Spokesperson:	Don Samson, Area Manager, DFO SCH, Corner Brook, NL		
Assessment Contact:	Mark McNeil, Environmental Officer, PWGSC-ES, Corner Brook, NL		
Public Registry Contact:	DFO-CEA Registry Office - Newfoundland and Labrador Region		
Lead RA:	Department of Fisheries and Oceans • Small Craft Harbours Branch, Central Area, Newfoundland		
Other RA's:	Transport Canada		
DFO Trigger:	Project proponent: ☒	Financial assistance:	☐
	Interest in land: ☐	Law List or Issuing a Permit:	☐
TC Trigger:	Project proponent: ☐	Financial assistance:	☐
	Interest in land: ☐	Law List (NWPA 5(2)):	☒
Type of Assessment:	Screening: ☒	Class Screening:	☐

A-2 Project Justification

Purpose of the Project

The existing harbour is congested and poses a potential safety risk for both larger and smaller vessels. The proposed breakwater construction will increase protected berthage and reduce the congestion at the existing facilities, and allow for safer harbour operations.

Alternative Sites and Options

The proponent considered a variety of similar options, including locating the breakwater approximately 30 m to the north and removing the headblock. As a result of consultations with local facility users, the harbour authority, and Public Works and Government Services Canada, the currently proposed structure was agreed upon as the most viable option to meet the needs of local fishers.

A-3 Description of the Proposed Project

Location

The proposed project area is located in Port au Choix, NL an active fishing site located on the west coast of the Great Northern Peninsula, Newfoundland and Labrador. The harbour is accessible via provincial route 430. The approximate NAD83 coordinates of the project site are Latitude 50° 43' 11" N and Longitude 57° 22' 01" W.

A-4 Related Issues

Approximately 250 m north of the project site, a boat launch and boat storage area was constructed in 2009. The boat launch project was assessed pursuant to the *Canadian Environmental Assessment Act* (*CEAA*). No negative environmental impacts were anticipated or reported. Additionally, dredging, wharf repairs and fishery related infrastructure construction projects have been proposed and completed on an as-required basis over the lifespan of the DFO SCH Port au Choix site. Any additional projects carried out in the future at this site would require the completion of a separate *Canadian Environmental Assessment Act* (*CEAA*) screening. This project was considered in the context of past (i.e., dredging and construction activities), present, and future projects, and no potential negative cumulative environmental effects were predicted.

A-5 Components of the Project

Construction Phase:

The proposed project involves the construction of a breakwater wharf at the DFO SCH facilities in Port au Choix (refer to attached site plan and photographs). The proposed wharf will measure approximately 7.6 m wide by 92 m long and will be constructed of treated timber cribbing topped with concrete decking. The structure will be seated on a rock mattress. Approximately 6000 m^3 of Class A (bedrock) and Class B (sand, cobble, gravel) material may be excavated from the project site to allow for proper seating of the new structure as well as to provide adequate berthage depth and approach.

Scour protection will likely be required around the perimeter of the structure and armourstone may be placed on the seaward side for additional protection against wind, wave, and storm activity. Rock material required for the rock mattress, ballast stone, scour protection, and armourstone will be acquired from a provincially approved quarry and trucked to the project site. The exact construction methodology will be determined by the successful contractor, but a common method

for placing rock material involves excavators working from the existing shoreline and building the structure up as they move seaward.

Operation Phase:

The Environmental Management System (EMS) with an integrated Environmental Management Plan (EMP) for the Harbour Authority of Port au Choix covers operational aspects of environmental management and is the mitigation measure for the environmentally responsible aspects of harbour operation (fueling, waste disposal, activities on the property and water).

Decommissioning/Abandonment:

There are currently no plans to decommission this site. At the time of de-commissioning, Small Craft Harbours will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and Fisheries and Oceans Canada policies.

A-6 Time frame

Commencement of this project is anticipated for the Summer of 2010 with completion tentatively scheduled for the Winter of 2010; subject to DFO SCH operational priorities and funding.

Description of the Surrounding Environment

A-7 Description of the Natural Area

Port au Choix is located on the western side of the Great Northern Peninsula, adjacent to the Port au Choix National Historic Site and approximately 284 km north of Corner Brook. It is accessible via provincial route 430. According to the 2006 census, the town has a population of 893. Occupations unique to primary industry form the largest sectors of the local economy.

The project site is a developed fishing area consisting of a number of small wharves, floating docks, sheds, and stages. A large marginal wharf is located immediately adjacent to the project site. The natural shoreline is characterized by exposed bedrock with intermittent areas of pebble-cobble material. The immediate upland consists of a large asphalt service area. Surrounding areas are gently sloped and sparsely vegetated with grass and trees. Residential properties are located in close proximity to the proposed project site. An active fish plant and National Historic Site are located in the general area, although it is not expected that the proposed project will have any impacts on either.

According to Fisheries and Oceans' Traditional Ecological Knowledge Maps of the area, seals, Red Moss, Knotted Wrack, and kelp may be found within or very near the project area. The project site falls within the Northern Peninsula ecoregion, Coastal Plain sub-region. This sub-region is dominated by bogs and scrub forest underlain by limestone. The general area provides winter range for caribou and habitat for moose, small mammals, and birds. Natural resources provide opportunities for hunting, outdoor recreation, and tourism. However, the immediate area around the project site and nearby areas is not likely to provide critical or limiting habitat for any of the abovenoted species.

There are no scheduled salmon rivers within 200 m of the project site. The project site is within the distribution range of the Blue Whale (Atlantic population), North Atlantic Right Whale, Harlequin Duck (Eastern Population), Red Crossbill (*percna* subspecies), Atlantic Wolffish, Spotted Wolffish, Boreal Felt Lichen (Boreal population), Fernald's Braya, and Fernald's Milk-vetch; placed on Schedule 1 of the Species at Risk Act by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is not expected that the project site provides critical or limiting habitat for any of the abovenoted species at risk.

A-8 Description of the Human Environment

Port au Choix is a Class "A" fishing harbour with an established local Harbour Authority. According to DFO's 2007 statistics, Port au Choix serves two hundred and fifty-four (254) enterprises operating from one hundred and seven (107) vessels with total vessel length of one thousand and thirty-four (1034) metres. Homeport vessels reported landing a total of 5 930 734 kgs with a total landed value of $5 605 728. Transient vessels reported landing a total of 3 061 566 kgs with a total landed value of $2 434 306.

PART B ENVIRONMENTAL ASSESSMENT OF THE PROJECT

(POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION / COMPENSATION MEASURES)

Boundaries:

A boundary is a function of the extent and duration of potential interaction, physical and chemical, between the proposed undertaking and the Valued Environmental Component (VEC). Generally, these boundaries are defined by the temporal and spatial characteristics encompassing those periods and areas, during and within which, the VECs are likely to interact with, or be influenced by, the project.

Project Boundaries:

Project boundaries refer to the spatial and temporal extent of project activities, and are dictated primarily by project specific characteristics indicated in the information for each construction site. Temporal project boundaries include operation and decommissioning. Spatial project boundaries are defined as the specific site area that includes the areas of construction and the zones of influence around the construction site (biological and physical), specifically the construction area footprint and adjacent lands.

Ecological Boundaries:

Ecological boundaries refer to the temporal and spatial scales over which environmental components or populations function. Temporal ecological boundaries take into consideration the variety of relevant characteristics of environmental components or populations including: 1) Magnitude, frequency and trends in the natural variation of a population or ecological component. 2) Time required for a biological, physical and/or chemical response to an effect to become evident. 3) Time required for a population or ecological system to recover from an effect and return to its pre-impact state.

Temporal ecological boundaries for impact assessment need to consider biologically meaningful intervals with respect to the life cycle of the species being examined. The degree of a potential impact on a particular species or environmental component is also influenced by other temporal characteristics including: 1) the portion of the year that the species or component remains in the proposed project area. 2) The timing of sensitive life history periods (such as larval life phase or bird nesting periods) in relation to the schedule of proposed activities. 3) Whether the project activity cycle includes a period of dormancy.

The distribution, patterns of movement, and potential zones of interaction between a VEC and the project determine spatial ecological boundaries. Direct project-environment interactions are unlikely to occur beyond the spatial extent of the project boundary, however migratory species/stock ranges are considered in the assessment.

Socioeconomic Boundaries:

Socioeconomic boundaries refer to the temporal and spatial scales for economic systems and socioeconomic aspects of the environment, which include: 1) The time required for a response to a change in the socioeconomic environment to become evident. 2) The time necessary for a response to a project-related effect to become evident. 3) The time required for the socioeconomic environment to recover from an effect and return to its original state.

Only socioeconomic effects resulting from the direct impacts of a project on existing environmental conditions are considered. Spatial boundaries are established on the basis of the spatial characteristics of the socio-cultural and economic environment. These take into consideration resource harvesting activities, some of which are specific to particular places (e.g. fisheries resources) and times (e.g. fishing seasons).

Definition and Evaluation of Significance of Effects:

Significance is established based on the extent, duration and magnitude of the potential impact, as well as the environmental component's sensitivity to, and ability to recover from, the potential impact.

For **ecosystem** VECs that are population based, the definitions of significance are defined as follows:

Likely to have a significant effect - affects a population or portion thereof in such a way as to cause a decline or change in abundance or distribution of the population over one or more generations; natural recruitment may not re-establish the population to its original level; or

Not likely to have a significant effect - affects a population or a specific group of individuals in a localized area over a short period of time in a manner similar to natural variation and has no measurable effect on the integrity of the population as a whole.

For **socioeconomic** VECs, the definition of significance is as follows:

Likely to have a significant adverse effect - has an adverse effect on a community as a whole in a localized area and has a duration sufficient to adversely affect a change in the economic, physical or psychological well-being or in the long established activity patterns of the community in question; or

Not likely to have a significant adverse effect - has a negligible effect on communities, is of very short duration, is extremely localized and/or affects communities in a manner similar to small random changes due to natural socioeconomic fluctuations.

This environmental assessment considers the full range of project/environmental interactions and the environmental factors that could be affected by the project as defined above. Potential interactions between the project and the environment were reviewed and are outlined in Table 2. Potential Project/Environment Interactions Matrix.

Table 1: Potential Project / Environment Interactions Matrix
Port au Choix, Breakwater Construction, Newfoundland

P = Potential Effect of Project on Environment; ? = Not enough Information; ' - ' = No Interaction

Project Phase / Physical Work/Activity	Soil (Surface and Subsurface)	Groundwater Quality	Rivers/Lakes/Streams (and associated drainage) Quality	Marine/Estuary/Saltmarsh Water Quality	Wetlands (Bens, Fogs, Swamps)	Fish / Fish Habitat	Birds / Bird Habitat	Mammals/Mammalian Habitat	Rare / Endangered Species / Species at Risk Act (SARA)	Aboriginal Interests	Socio-economic Environment	Agriculture/Aquaculture	Land Use	Archaeology / Palaeontology / Heritage	Air Quality / Noise	Health / Safety
Specific Work Activity																
Dredging	P	-	-	P	-	P	-	P	-	-	-	-	-	P	P	-
Rock mattress installation	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-	-
Cribwork construction/installation	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-	-
Armourstone/scour protection installation	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-	-
Operation/Maintenance/ Decommissioning																
Operation/Maintenance	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-	-
Decommissioning																
Accidents/Malfunctions, and Unplanned Events	P	-	-	P	-	P	-	P	-	-	-	-	-	P	P	-

The selected VECs are addressed in Tables 3.1 – 3.6 in its entirety below. The residual effects of the project on the environment are defined. Similarly, the physical works / activities and required mitigation are detailed, and the significance of residual (post mitigation) effects are estimated.

The following ratings are based on information provided by the proponent:

- **A review of project related activities;**
- **An appraisal of the environmental setting, and identification of resources at risk;**
- **The identification of potential impacts within the temporal and spatial bounds; and**
- **Own personal knowledge and professional judgement.**

The significance of project related impacts were determined in consideration of their frequency, the duration and geographical extent of the effects, and magnitude relative to natural or background levels, and whether the effects are reversible or are positive or negative in nature. These criteria are indicated in Tables 3.1 – 3.5.

Table 2: Assessment Criteria for Determination of Significance.

Magnitude	Magnitude, in general terms, may vary among Issues, but is a factor that accounts for size, intensity, concentration, importance, volume and social or monetary value. It is rated as compared with background conditions, protective standards or normal variability.	
	Small	Relative to natural or background levels
	Moderate	Relative to natural or background levels
	Large	Relative to natural or background levels
Reversibility	Reversible	Effect can be reversed
	Irreversible	Effects are permanent
Geographic Extent	Immediate	Confined to project site
	Local	Effects beyond immediate project site but not regional in scale
	Regional	Effects on a wide scale
Duration	Short Term	Between 0 and 6 months in duration
	Medium Term	Between 6 months and 2 years
	Long Term	Beyond 2 years
Frequency	Once	Occurs only once
	Intermittent	Occurs occasionally at irregular intervals
	Continuous	Occurs on a regular basis and regular intervals

Table 3.1 – 3.6: Potential Project / Valued Ecosystem Interactions and Mitigation *(S.16(1))*

<table>
<tr><td colspan="5">Table 3.1 Valued Ecosystem Component – Soil (Surface and Subsurface)</td></tr>
<tr><td colspan="5">Potential Effect: Contamination of upland material.</td></tr>
<tr><td colspan="2">Potential Interaction</td><td colspan="3">Mitigation</td></tr>
<tr><td colspan="2" rowspan="2">Excess erosion of soil during construction activities.

Mobilization of contaminated benthic sediments during dredging.

Contamination of upland area due to deposition / transportation of dredge material.

Contamination of soil due to hazardous material spill.</td><td colspan="3">The proponent is required to adhere to all mitigations stipulated in the provincial Government Service Centre disposal approval.</td></tr>
<tr><td colspan="3">Standard Mitigation Practices

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the construction phase.

To avoid spillage of dredge material onto roadways which could create slippery road conditions and threaten domestic water supplies along the route, it is recommended that dump trucks be equipped with a leak-proof liner or proper gasketing of the tailgate.

Exposed soil areas should be minimized by limiting the area exposed at any one time and by limiting the amount of time that any area is exposed.

As part of this project’s pre-planning process, four (4) marine sediment samples were collected from the proposed dredge areas (see attached project description) and submitted for chemical analysis (Reference Maxxam Job No: A959042, May 20, 2009, Maxxam Job No: A960198, May 22, 2009 and MAXXAM Job No: A971630, June 15, 2009). The Class B portion of the sampled material exceeded CCME industrial soil quality guidelines and is not suitable for re-use on-site. Class B dredge material must be disposal of at an approved waste disposal site, as per the provincial Government Service Centre disposal approval. Any Class A dredge material may be re-used on-site.

All wastes should be recycled where possible or otherwise disposed of appropriately.

Refer to Table 4 – Accidents and Malfunctions for more information.</td></tr>
<tr><td>Magnitude</td><td>Reversibility</td><td>Geographic Extent</td><td>Duration</td><td>Frequency
Significance</td></tr>
<tr><td>Small</td><td>Reversible</td><td>Immediate</td><td>Short-term</td><td>Once</td></tr>
<tr><td>Residual Effects:</td><td colspan="4">Insignificant</td></tr>
<tr><td>Monitoring / Follow-up:</td><td colspan="4">None required.</td></tr>
<tr><td colspan="5">Comments: The implementation of effective mitigation practices can reduce potential effects to insignificant levels.</td></tr>
</table>

Table 3.2 Valued Ecosystem Component – Marine/Estuary Water Quality				
Potential Effect: Sedimentation and contamination of marine environment				
Potential Interaction	**Mitigation**			
Sedimentation as a result of dredging and placement of rock mattress/armourstone material may decrease marine water quality. Accidental discharge of machinery fuel and/or fluids may decrease marine water quality. Construction related refuse and waste may be deposited in the marine environment. Drainage and washwater from concrete production are very alkaline and can degrade marine water quality.	**Standard Mitigation Practices** Project activities should only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site. The proponent is advised to discuss any site sensitivities with local facility users before implementation of the project. All drainage and wash water from concrete production should be properly contained and should not drain into the marine environment. The proponent is advised to monitor turbidity plumes to ensure that the extent and duration of sedimentation are within acceptable limits. The proponent should be aware of the CCME "Canadian Environmental Quality Guidelines (1999) that recommend that for the protection of marine waters, human activities should not cause suspended solids levels to increase by more than 10% of the natural conditions expected at the time. The guidelines also recommend that no solid debris, including floating or drifting materials or settleable matter, be introduced into marine waters. Deployment of a floating boom around the construction site should contain any wooden material that might otherwise escape the site and present a threat to navigation or nearby fishing gear. The proponent is advised to consult with the Navigable Waters Protection Program – Transport Canada before implementing a floating boom near the proposed project site. Any material entering a water body should be quickly removed and properly disposed of. Refer to **Table 4 – Accidents and Malfunctions** for more information.			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			
Comments: The implementation of effective mitigation practices can reduce such effects to insignificant levels.				

Table 3.3 Valued Ecosystem Component - Fish / Fish Habitat				
Potential Effect: Harmful alteration, destruction or disruption of fish/fish habitat.				
Potential Interaction	**Mitigation**			
Sedimentation as a result of dredging and wharf construction activities may negatively affect any aquatic flora/fauna near or within the project area. Potential benthic habitat present within the footprint of the project will be destroyed. Dredging may result in the deaths of any flora within the dredge limits. Project activities may result in the temporary avoidance of the area by local fish fauna. Construction related refuse and waste may be deposited in the marine environment, decreasing fish habitat quality. Underwater blasting may result in fish kills and result in damage to fish eggs and/or larvae.	The proponent has obtained the approval of the DFO Area Habitat Biologist prior to carrying out the project. The mitigations stipulated in the DFO Letter of Advice are designed to protect fish and fish habitat and must be adhered to. Ammonium nitrate based explosives must not be used in or near water due to the production of toxic by-products. The proponent should adhere to any additional mitigations stipulated in the attached DFO Habitat Factsheets for the Effects of Silt on Fish and Fish Habitat and Blasting – Fish and Fish Habitat Protection. **Standard Mitigation Practices** Construction activities should only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site. The proponent is advised to monitor turbidity plumes to ensure that the extent and duration of sedimentation are within acceptable limits. Excessive disturbance to any large areas of aquatic vegetation should be minimized, wherever possible. The proponent should be aware of the CCME "Canadian Environmental Quality Guidelines (1999) that recommend that for the protection of marine waters, human activities should not cause suspended solids levels to increase by more than 10% of the natural conditions expected at the time. The guidelines also recommend that no solid debris, including floating or drifting materials or settleable matter, be introduced into marine waters. Deployment of a floating boom around the construction site should contain any wooden material that might otherwise escape the site and present a threat to navigation or nearby fishing gear. The proponent is advises to consult with the Navigable Waters Protection Program – Transport Canada before implementing a floating boom near the proposed project site. Any material entering a water body should be quickly removed and properly disposed of. Refer to **Table 4 – Accidents and Malfunctions** for more information.			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Intermittent**
Residual Effects:	**Insignificant**			

Monitoring / Follow-up:	None required.
Comments: The implementation of effective mitigation measures can reduce potential impacts to insignificant levels.	

Table 3.4 Valued Ecosystem Component – Mammals/Mammalian Habitat				
Potential Effect: Increases in noise, pollution, and dust.				
Potential Interaction	**Mitigation**			
An increase in noise levels may result in the temporary avoidance of the project area by marine mammals. Shock waves associated with marine blasting may result cause injuries to nearby marine mammals.	The proponent has obtained the approval of the DFO Area Habitat Biologist prior to carry out of the project. The mitigations stipulated in the DFO Letter of Advice are designed to protect fish and fish habitat and must be adhered to. Ammonium nitrate based explosives must not be used in or near water due to the production of toxic by-products. If marine mammals are observed within 500 m of dredging activities, then blasting should be halted until the mammals have left the area. **Standard Mitigation Practices** Refer to **Table 4 – Accidents and Malfunctions** for more information.			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			
Comments: Disruptions related to noise are expected to be minimal and insignificant.				

Table 3.5 Valued Ecosystem Component – Archaeology/Paleontology/Heritage				
Potential Effect: Negative impacts to potential archaeological sites.				
Potential Interaction	**Mitigation**			
Proposed project site is within general vicinity of Port au Choix National Historic Site, an important archeological site. Undiscovered artifacts may be destroyed as a result of project activities. Potential fossils present in underlying limestone bedrock may be destroyed as a result of project activities.	Should the project result in the discovery of any items or artefacts that might be of historical importance, work must be immediately suspended and the discovery reported to the NL Historic Resources archaeologist at 709-729-2462 for further assessment. **Standard Mitigation Practices**			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			
Comments: None				

<table>
<tr><td colspan="5">Table 3.6 Valued Ecosystem Component – Air Quality/Noise</td></tr>
<tr><td colspan="5">Potential Effect: Increases in noise, pollution, and dust.</td></tr>
<tr><td colspan="2">Potential Interaction</td><td colspan="3">Mitigation</td></tr>
<tr><td colspan="2" rowspan="3">An increase in noise levels may result in the temporary avoidance of the project area by fish fauna and marine mammals.

Some minor disruptions and annoyance to facility users and residents who live in close proximity to the project site can be anticipated from blasting activities and the use of heavy equipment.</td><td colspan="3"></td></tr>
<tr><td colspan="3">Standard Mitigation Practices</td></tr>
<tr><td colspan="3">Construction should be carried out during the daylight hours to avoid disturbances to local users.

Machinery should be well muffled.

Local municipality construction by-laws must be adhered to.</td></tr>
<tr><td>Magnitude</td><td>Reversibility</td><td>Geographic Extent</td><td>Duration</td><td>Frequency</td></tr>
<tr><td>Small</td><td>Reversible</td><td>Immediate</td><td>Short-term</td><td>Once</td></tr>
<tr><td>Residual Effects:</td><td colspan="4">Insignificant</td></tr>
<tr><td>Monitoring / Follow-up:</td><td colspan="4">None required.</td></tr>
<tr><td colspan="5">Comments: Disruptions related to noise are expected to be minimal and insignificant.</td></tr>
</table>

Table 4. Decommissioning and Abandonment				
Potential Effect: Potential negative impacts on selected VEC's previously-listed				
Potential Interaction	**Mitigation**			
The spatial boundaries for decommissioning are expected to be similar to the construction phase boundaries.	These components of the proposed harbor development are considered to be permanent structures. A time line for removal has not been assigned. Routine maintenance and repair projects, including repairs or replacement of damaged or deteriorated timbers and concrete, will be carried out on an as required basis over the estimated 30-year life of the structures.			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			

Table 5. Accidents and Malfunctions				
Potential Effect: Negative impacts on selected VEC's previously-listed				
Potential Interaction	**Mitigation**			
Accidents and/or malfunctions of heavy equipment fuel, engine oil, and hydraulic fluids may negatively impact: Soils Marine Water Quality Fish/Fish Habitat Mammals/Mammalian Habitat Archaeology Air Quality/Noise	Servicing should be carried out off-site on level terrain and 30 m from any water bodies. The contractor should be equipped with Emergency Response Spill Kits to respond to any accidental spills of deleterious substances in a quick and effective manner. Response equipment, such as absorbents and open-ended barrels for collection of cleanup debris, should be stored in an accessible location on-site. Personnel working on the project should be knowledgeable about response procedures. The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event. All spills or leaks should be promptly contained, cleaned up, and reported to the 24-hour environmental emergencies report system (1-800-563-9089).			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			

Table 6. Potential Effect of the Environment on the Project				
Potential Effect: The climate (i.e. wind, ice, flood, etc.) could damage or cause loss of equipment/materials, which could have an immediate negative impact on the project.				
Potential Interaction	**Mitigation**			
Permanent damage and/or loss of equipment. Damage to, or reduction of, intended use of infrastructure.	Weather conditions should be assessed on a daily basis to determine the potential risk on project activities. The Contractor is encouraged to consult Environment Canada's local forecast at http://www.weatheroffice.ec.gc.ca/ so that the construction work can be scheduled at an appropriate time.			
Magnitude	**Reversibility**	**Geographic Extent**	**Duration**	**Frequency**
Small	**Reversible**	**Immediate**	**Short-term**	**Once**
Residual Effects:	**Insignificant**			
Monitoring / Follow-up:	None required.			

Table 6. Cumulative Effects		
Potential Effect: Past, present and likely future project activities resulting in cumulative effects.		
Other Projects / Activities	**Potential Cumulative Interaction**	**Mitigation**
Past, present, and likely future projects and activities at this site have been considered in cumulative effects assessment. - Boat launch/storage area construction 2009	Cumulative effects are not expected as a result of any past, present, and likely future activities.	Proper safety procedures must be followed for the duration of the project as per applicable municipal, provincial and federal regulations. Mitigation for potential effects in **Tables 3.1 - 5** in its entirety constitutes sufficient mitigation to deal with any potential cumulative effects. Refer to **Part D: Mitigation/Standard Mitigation Practices** for more information.
Monitoring / Follow-up:	None required.	
Significance of Cumulative Effects: Insignificant		
Comments: The construction project under assessment is not projected to have a cumulative effect considering the past and potential future projects. There are no other predicted effects that may result from the proposed construction activities. With appropriate planning and implementation of effective mitigation measures, such negative impacts can be avoided.		

PART C PUBLIC CONCERNS

Public Opinion

C-1: No problems or concerns have been registered as a result of similar activities in the past. Users of the Port au Choix site require the proposed activities to increase protected berthage and reduce the congestion at the existing facilities, and allow for safer harbour operations. As such, it is not anticipated that there would be any public opposition to the project.

Public Information

C-2: A public notice of commencement of the environmental assessment of this project was posted on the Canadian Environmental Assessment Registry (CEAR) on January 13, 2010. Please refer to **Appendix B** and **Appendix C** for the *notice of commencement* posting and a record of the public participation process, respectively.

The proposed project was referred to Transport Canada for review under the Navigable Waters Protection Act (NWPA) on December 21, 2009. It was determined that the project would require authorization pursuant to section 5(2) of the NWPA indicating that the project will result in an interference to navigation requiring the deployment of navigational aids. As part of the NWPA section 5(2) process, the project was advertised in the Canada Gazette and two local newspapers – The Northern Pen and The Western Star – and the plans were made available for public viewing for a 31-day period at the town office in Port au Choix. No concerns with respect to the effects of the project on navigation or the environment were registered. Any other requirements such as Notice to Mariners, etc. that might be stipulated by the Navigable Waters Protection Program, must be adhered to. Any activities that could result in temporary interference will be discussed and coordinated with the local Harbour Authority and facility users.

Local Planning

C3: The project complies with the DFO mandate to provide safe harbour facilities for the small boat fishing fleet and is required to maintain the site as a viable fishery location into the future.

Mitigation and Compensation Measures

C-4: The project is covered under Fisheries and Oceans Habitat Protection Division Letter of Advice, NL Department of Environment and Conservation Permit to Alter a Body of Water ALT#5036, Transport Canada NWPA section 5(2) approval and the NL Department of Government Services approval for the disposal of dredge material. All mitigation measures that are stipulated by the regulatory approvals (**Appendix D**) must be adhered to and should be sufficient to mitigate any potential negative impacts. There are no other anticipated environmental impacts that must be mitigated or compensated for.

Aboriginal Concerns

C-5: There are no known sites of historical significance such as heritage buildings, archaeological sites, traditional hunting and fishing grounds or any important natural heritage areas at the project site. Should the project result in the discovery of any items or artefacts that might be of historical importance, work must be immediately suspended and the discovery reported to the NL Historic Resources archaeologist at 709-729-2462 for further assessment.

PART D SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES - FOLLOW-UP PROGRAM

Residual Impacts
Impacts of the project and mitigation measures/standard mitigation practices

D-1: The project is not predicted to have a negative environmental effect with the following mitigation/Standard Mitigation Practices measures:

Soil (Surface and subsurface)

Mitigation:

The proponent is required to adhere to all mitigations stipulated in the provincial Government Service Centre disposal approval.

Standard Mitigation Practices:

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the construction phase.

To avoid spillage of dredge material onto roadways which could create slippery road conditions and threaten domestic water supplies along the route, it is recommended that dump trucks be equipped with a leak-proof liner or proper gasketing of the tailgate.

Exposed soil areas should be minimized by limiting the area exposed at any one time and by limiting the amount of time that any area is exposed.

As part of this project's pre-planning process, four (4) marine sediment samples were collected from the proposed dredge areas (see attached project description) and submitted for chemical analysis (*Reference Maxxam Job No: A959042, May 20, 2009, Maxxam Job No: A960198, May 22, 2009 and MAXXAM Job No: A971630, June 15, 2009).* The Class B portion of the sampled material exceeded CCME industrial soil quality guidelines and is not suitable for re-use on-site. Class B dredge material must be disposal of at an approved waste disposal site, as per the provincial Government Service Centre disposal approval. Any Class A dredge material may be re-used on-site.

All wastes should be recycled where possible or otherwise disposed of appropriately.

Marine/Estuary Water Quality

Mitigation:

nil

Standard Mitigation Practices:

Project activities should only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site.

The proponent is advised to discuss any site sensitivities with local facility users before implementation of the project.

All drainage and wash water from concrete production should be properly contained and should not drain into the marine environment.

The proponent is advised to monitor turbidity plumes to ensure that the extent and duration of sedimentation are within acceptable limits.

The proponent should be aware of the CCME "Canadian Environmental Quality Guidelines (1999) that recommend that for the protection of marine waters, human activities should not cause suspended solids levels to increase by more than 10% of the natural conditions expected at the time. The guidelines also recommend that no solid debris, including floating or drifting materials or settleable matter, be introduced into marine waters.

Deployment of a floating boom around the construction site should contain any wooden material that might otherwise escape the site and present a threat to navigation or nearby fishing gear. The proponent is advised to consult with the Navigable Waters Protection Program – Transport Canada before implementing a floating boom near the proposed project site. Any material entering a water body should be quickly removed and properly disposed of.

Fish and Fish Habitat

Mitigation:

The proponent has obtained the approval of the DFO Area Habitat Biologist prior to carrying out the project. The mitigations stipulated in the DFO Letter of Advice are designed to protect fish and fish habitat and must be adhered to.

Ammonium nitrate based explosives must not be used in or near water due to the production of toxic by-products.

The proponent should adhere to any additional mitigations stipulated in the attached DFO Habitat Factsheets for the Effects of Silt on Fish and Fish Habitat and Blasting – Fish and Fish Habitat Protection.

Standard Mitigation Practices:

Construction activities should only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site.

The proponent is advised to monitor turbidity plumes to ensure that the extent and duration of sedimentation are within acceptable limits.

Excessive disturbance to any large areas of aquatic vegetation should be minimized, wherever possible.

The proponent should be aware of the CCME "Canadian Environmental Quality Guidelines (1999) that recommend that for the protection of marine waters, human activities should not cause suspended solids levels to increase by more than 10% of the natural conditions expected at the time. The guidelines also recommend that no solid debris, including floating or drifting materials or settleable matter, be introduced into marine waters.

Deployment of a floating boom around the construction site should contain any wooden material that might otherwise escape the site and present a threat to navigation or nearby fishing gear. The proponent is advises to consult with the Navigable Waters Protection Program – Transport Canada before implementing a floating boom near the proposed project site. Any material entering a water body should be quickly removed and properly disposed of.

Mammals/Mammalian Habitat

Mitigation:

The proponent has obtained the approval of the DFO Area Habitat Biologist prior to carry out of the project. The mitigations stipulated in the DFO Letter of Advice are designed to protect fish and fish habitat and must be adhered to.

Ammonium nitrate based explosives must not be used in or near water due to the production of toxic by-products.

If marine mammals are observed within 500 m of dredging activities, then blasting should be halted until the mammals have left the area.

Standard Mitigation Practices:

nil

Archaeology/Palaeontology/Heritage

Mitigation:

Should the project result in the discovery of any items or artefacts that might be of historical importance, work must be immediately suspended and the discovery reported to the NL Historic Resources archaeologist at 709-729-2462 for further assessment.

Standard Mitigation Practices:

nil

Air Quality/Noise

Mitigation:

nil

Standard Mitigation Practices:

Construction should be carried out during the daylight hours to avoid disturbances to local users.

Machinery should be well muffled.

Local municipality construction by-laws must be adhered to.

Accidents and Malfunctions

Mitigation:

nil

Standard Mitigation Practices:

Servicing should be carried out off-site on level terrain and 30 m from any water bodies.

The contractor should be equipped with Emergency Response Spill Kits to respond to any accidental spills of deleterious substances in a quick and effective manner.

Response equipment, such as absorbents and open-ended barrels for collection of cleanup debris, should be stored in an accessible location on-site.

Personnel working on the project should be knowledgeable about response procedures.

The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.

All spills or leaks should be promptly contained, cleaned up, and reported to the 24-hour environmental emergencies report system (1-800-563-9089).

Potential Effect of the Environment on the Project

Mitigation:

nil

Standard Mitigation Practices:

Weather conditions should be assessed on a daily basis to determine the potential risk on project activities.

The Contractor is encouraged to consult Environment Canada's local forecast at http://www.weatheroffice.ec.gc.ca/ so that the construction work can be scheduled at an appropriate time.

Other

Mitigation:

Prior to project commencement, the project will receive a Fisheries and Oceans Habitat Protection Division Letter of Advice, NL Department of Environment and Conservation Permit to Alter a Body of Water ALT#5036, Transport Canada NWPA section 5(2) approval and the NL Department of Government Services approval for the disposal of dredge material. All mitigation measures that are stipulated by the regulatory approvals (**Appendix D**) must be adhered to and should be sufficient to mitigate any potential negative impacts. There are no other anticipated environmental impacts that must be mitigated or compensated for.

Residual Impacts

D-2: There are no projected residual environmental effects. This assessment considered the potential negative environmental effects resulting from the proposed project. The potential effects were considered in context of project, ecological and socio-economic boundaries and for ecosystem and socio-economic significance that are appropriate for this project.

Specific mitigation measures for each Valued Environmental Component (VEC) are addressed in Tables 3.1 – 3.6 in its entirety included in **Part B.**

Cumulative Impacts

D-3: No significant cumulative effects (i.e., past (re-dredging and construction activities), present, and likely future projects) are predicted to affect the water characteristics, fish habitat, and fishing activities in the long-term as a result of this project. There are no other predicted effects that may result from the proposed project activities.

Specific mitigation measures for each Valued Environmental Component (VEC) are addressed in Tables 3.1 – 3.6 in its entirety included in **Part B.**

Monitoring Program

D-4: A site inspector will monitor this project during the project activities. DFO-SCH representatives will also carry out a site inspection after the project has been completed.

Section 38 of the *Canadian Environmental Assessment Act (CEAA)* requires the RA to consider whether a follow-up program for the project is appropriate in the circumstances and, if so, shall design a follow-up program and ensure its implementation. A follow-up program would determine

the accuracy of the conclusions of the environmental assessment and the effectiveness of the mitigation measures.

Follow-up program is not likely required for this project. However, site monitoring may be conducted to verify whether required mitigation measures were implemented. The proponent must provide site access to Responsible Authority officials and/or its agents upon request. Specific mitigation measures for each Valued Environmental Component (VEC) are addressed in Tables 3.1 – 3.6 in its entirety, included in **Part B.**

PART E SIGNATURES, CONTACTS, AND RECOMMENDATIONS

E-1: References - persons contacted and reports referred to during the screening process.

Persons Contacted:

Don Samson	DFO-SCH Program Officer, Western Area
Frank Breen	NWP Officer, Transport Canada
Darrin Sooley	Area Habitat Biologist, Fisheries and Oceans Canada
Tanya Simms	Environmental Protection Officer, Department of Government Services
Clyde Mclean	Manager Investigations, Water Resources, NL Department of Environment and Conservation

Reports References:

Environment Canada. 2009. Species at Risk Registry. Accessed December 21, 2009 at http://www.sararegistry.gc.ca.

Public Works and Government Services Canada. 2002. Phase II/III Environmental Site Assessment – Port aux Choix DFO Small Craft Harbour. SNC Lavalin.

Baileys Marine. December 2009. Marine Benthic Survey. Port au Choix, NL.

Fisheries and Oceans Canada. 2008. Traditional Ecological Knowledge Maps – Newfoundland and Labrador. Accessed December 19, 2009 at http://geoportal.gc.ca/en/services.html

Public Works and Government Services Canada. 2009. DFO SCH Port au Choix Boat Launch and Service Area Construction. Canadian Environmental Assessment Act Screening Report.

E-2: Permits / Authorizations / Approvals

SUMMARY TABLE OF ENVIRONMENTAL PERMITTING

Port au Choix, Breakwater Construction – June 2010

REQUIRED PERMITS	ISSUING DEPARTMENT	PERSON TO OBTAIN PERMIT
Navigable Waters Protection Act subsection 5(2) approval	Transport Canada – Navigable Waters Protection Program	PWGSC – Environmental Services has obtained this permit on behalf of the proponent, DFO-SCH
Fish Habitat Letter of Advice	Fisheries and Oceans Canada, Habitat Protection Division	PWGSC – Environmental Services has obtained this permit on behalf of the proponent, DFO-SCH
Minor Works Permit ALT#5036	Newfoundland and Labrador Department of Environment and Conservation, Waters Resources Division	PWGSC – Environmental Services has obtained this permit on behalf of the proponent, DFO-SCH.
GSC Approval for Dredge Material Disposal	NL Department of Government Services	PWGSC – Environmental Services has obtained this permit on behalf of the proponent, DFO-SCH.
NL Quarry Permit	NL Department of Mines and Energy	If required, the successful contractor will be responsible for obtaining this permit.

The Navigable Waters Protection Act 5(2) approval requires that a statutory declaration indicating that the project was constructed as per the approved plans be submitted to the Navigable Waters Protection Program upon completion of project activities.

The Minor Works Permit ALT#5036 requires that a completion report be submitted to the issuing body, as described on the permit **(Appendix D),** following completion of project activities.

It is the proponents' responsibility to ensure that the notification report is properly submitted. Failure to properly submit the report could result in permit revocation and the delay of future projects.

Recommendations

This screening form:

Was completed by: _____ Recommended rating: ____
Print name: Mark McNeil
Position/role: PWGSC Environmental Officer
Comments:
Date:

Was reviewed by: _____ Recommended rating: ____
Print name: Noel Hogan
Position/role: PWGSC Project Manager - Western
Comments:
Date:

Was reviewed by: _____ Recommended rating: ____
Print name: Sharon Branton
Position/role: DFO-Small Craft Harbours, Area Manager, Western
Comments:
Date:

RATING DESCRIPTIONS:

- Significant adverse environmental effects unlikely, taking into account mitigation measures; project may proceed, ensure implementation of measures 1
- Significant adverse environmental effects likely and not justified in the circumstances; project as presented cannot proceed 2
- Uncertain adverse environmental effects, taking into account mitigation measures; refer the project to the Minister of the Environment for a referral to a mediator or review panel 3
- Significant adverse environmental effects, but that can be justified in the circumstances; refer the project to the Minister of the Environment for a referral to a mediator or a panel review 4
- Public concerns warrant a reference to the Minister of the Environment for a referral to a mediator or a panel review 5

PART F FINAL DECISION FOR BREAKWATER CONSTRUCTION, PORT AU CHOIX, NL

Final Recommendation

The SMALL CRAFT HARBOURS REGIONAL DIRECTOR, the REGIONAL ENGINEER, or the SMALL CRAFT HARBOURS REPRESENTATIVE WITH SIGNING AUTHORITY for the specific project under assessment must complete this section.

Decision rating: _____ (see previous page for rating descriptions)

SCH REPRESENTATIVE, PLEASE CHECK (√) ONLY ONE:

____ Project as presented can proceed:

- adverse environmental effects are unlikely or mitigable

_____ Project as presented must be abandoned:

- adverse environmental effects are likely and cannot be justified in the circumstances

_____ Project must be referred to the Minister of the Environment for referral to a mediator or a panel review:

- adverse environmental effects are uncertain
- adverse environmental effects are likely but justified in the circumstances
- public concerns warrant a reference to a mediator or a panel review

Approved by: _____ Date : _____/____/____.

Title: _____

SMALL CRAFT HARBOURS BRANCH ENVIRONMENTAL SCREENING

Transport Canada Recommendation:

This section must be completed by Transport Canada:

Environmental effects of the project on navigation are taken into consideration as part of the environmental assessment when the effects are indirect, that is when the effect is the result of a change in the environment. Direct effects on navigation are not considered in the environmental assessment, but any measures necessary to mitigate direct effects will be included as conditions of the *Navigable Waters Protection Act* approval.

[X] For this environmental assessment only direct effects were identified; therefore, the effects of the project on navigation are not addressed in the environmental assessment.

[ ] For this environmental assessment indirect effects were identified and have been addressed in the environmental assessment.

Recommended by :_____ Date: _____
Randy Decker, Senior Environmental Assessment Officer – Environmental Affairs, Atlantic Region - Transport Canada

Approved by : _____ Date: _____
Margie Whyte, Regional Manager– Environmental Affairs, Atlantic Region - Transport Canada.

Table 7. PATH CEAR Environmental Interaction Summary

Environmental Management	
Alteration of Flora, Fauna or Soil	**X**
Dredging, Filling, Salvaging Dredge Spoil Disposal	**X**
Hazardous Waste (excluding nuclear)	
Remediation of Contaminated Land	
Solid Waste	
Water Management	
Infrastructure	
Airport and Airfields	
Bridges and Culverts	
Building and Property Development	
Communications and Radar	
Dams, Weirs and Reservoirs	
Highways and Roads	
Industrial	
Other municipal infrastructure	
Ports and Harbours	**X**
Railways	
Recreation and Tourism	
Natural Resources	
Agriculture	
Alternative Energy	
Aquaculture	
Forestry	
Fossil Fuel Energy	
Hydroelectric Energy	
Mines and Minerals	
Nuclear Energy	
Seismic activities	

Table 8. PATH CEAR Mitigation and Follow-up Summary

Mitigation	**PATH-CEAR Intranet Page**	**Mitigation (select one or more)** Mitigation measures for this project addressed the following environmental components (select as many as may apply)
		Biological
		Amphibians and/or their habitat
		Birds and/or their habitat
		Fauna at risk (as defined under the Species at Risk Act)
	X	Fish and/or their habitat
		Flora at risk (as defined under the Species at Risk Act)
		Invertebrates and/or their habitat
	X	Mammals and/or their habitat
		Reptiles and/or their habitat
		Human (effect of any change in the environment on …)
		Current use of land and resources for traditional purposes by aboriginal persons
		Human health and safety
		Physical and/or Cultural Heritage
		Socio-economic Impacts
	X	Structure, Site or Thing of Historic, Archaeological, Paleontological or Architectural Significance
		Physical
	X	Air Quality
		Climate change
	X	Noise Levels
	X	Sedimentation
	X	Soil Quality
		Surface and Bedrock Features
		Vegetation
	X	Water Quality
		Water Quantity
Follow up Program	**PATH CEAR Intranet Page**	**Yes: _____** **No: ____X_____**

CONTRACTOR'S COPY

OF

REGULATORY APPROVALS/RESPONSES

FISHERIES AND OCEANS CANADA

SMALL CRAFT HARBOURS BRANCH

BREAKWATER CONSTRUCTION

PORT AUX CHOIX, NL

JULY 29, 2015

Newfoundland Labrador

Government of Newfoundland and Labrador
Department of Environment and Conservation
Water Resources Management Division

PERMIT TO ALTER A BODY OF WATER

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, Section(s) 48

Date: **MARCH 26, 2015**

File No: **532-02**
Permit No: **ALT7980-2015**

Proponent: **Department of Fisheries and Oceans Canada**
Small Craft Harbour Branch
10 Barters Hill
St. John's NL A1C 5X1

Attention: **Mr. Paul Curran**

Re: **Port Au Choix - DFO-SCH Dredging**

Permission is hereby given for : **the removal of approximately 6000 cubic meters of material from Back Arm in the Town of Port Au Choix to accommodate the construction of a breakwater wharf to increase protected berthage, reduce congestion at existing facilities and allow safe harbour operations as outlined in the application received, dated February 4, 2015.**

- This permit does not release the proponent from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The proponent must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This permit is subject to the terms and conditions indicated in Appendix A (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this permit must be obtained from the Department of Environment and Conservation under Section 49 of the *Water Resources Act*.
- Failure to comply with the terms and conditions will render this permit null and void, place the proponent and their agent(s) in violation of the *Water Resources Act* and make the proponent responsible for taking any remedial measures as may be prescribed by this Department.

MINISTER

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Environment and Conservation

File No: **532-02**
Permit No: **ALT7980-2015**

APPENDIX A

Terms and Conditions for Environmental Permit

Special Conditions

1. The Proponent and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, any and all works or equipment in or outside the said project areas, or any act or omission of the Proponent or its agent(s), subcontractor(s), and consultant(s) in or outside the said project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Proponent or its agent(s), subcontractor(s), and consultant(s).

2. This Permit is subject to the Water Resources Act, 2002 and all applicable laws of the Province of Newfoundland and Labrador.

3. The Proponent and its agent(s), subcontractor(s), and consultant(s) are fully responsible for any and all works, measures, reservations, exceptions and provisions stated in all terms and conditions of this Permit. The acknowledgement of the receipt of this Permit confirms that the Proponent and its agent(s), subcontractor(s), and consultant(s) agree to accept this Permit and to abide by all terms and conditions, reservations, exceptions and provisions stated this Permit.

4. If the Proponent or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions of this Permit and/or Ministerial orders and guidelines, as determined by this Department, the Minister may, after providing ten (10) day notice to the Proponent, amend, modify, suspend or cancel this Permit in accordance with the Water Resources Act, 2002.

5. Any further activity within a freshwater body (including wetlands and flood risk areas), requires a permit under Section 48 of the Water Resources Act, 2002. Proponent must avoid construction activities in a wetlands wherever possible.

6. Any development activity within a Protected Public Water Supply Area (PPWSA) requires a permit under Section 39 of the Water Resources Act, 2002. This permit refers to Section 48 of the Water Resources Act, 2002 and does not grant permission for the above stated work.

Wharf/Slipway

7. Armour stone must be placed around cribbing, where required, to prevent erosion.

8. Suitable booms must be deployed around construction sites to contain any floating debris that might otherwise be carried away. All booms must be properly maintained and remain in place until all work is completed.

9. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease, or license for occupancy.

10. The wharf / dock must be constructed in accordance with this department's *Environmental Guidelines for Construction and Maintenance of Wharves, Breakwaters, Slipways and Boathouses* located on the departmental website: http://www.env.gov.nl.ca/env/waterres/regulations/appforms/Guidelines_for_Wharves.pdf

Dredging

11. Dredging activity must only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site.

12. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the proponent sample, analyse, and submit results of water quality tests, for the purpose of ensuring that the water quality is maintained within acceptable guidelines. All analyses must be undertaken by a C.A.E.A.L. accredited laboratory.

13. The area to be dredged must be enclosed and isolated from the rest of the body of water through the use of a filter fabric curtain or similar method.

14. Dredged material must be disposed of in accordance with the regional Service NL Centre of the Department of Service NL. The Department of Service NL may require samples to be submitted for testing and analysis.

General Alterations

15. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003.*

16. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.

17. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.

18. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.

19. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.

20. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of the Department.

21. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.

22. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.

23. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

24. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.

25. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.

26. The attached Completion Report (Appendix B) for Permit No. 7980 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.

27. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.

28. The location of the work is highlighted on the Location Map for this Permit attached as Appendix C.

cc: Dr. Abdel-Zaher Kamal Abdel-Razek, Ph. D., P.Eng
Manager, Water Rights and Investigations Section
Water Resources Management Division
Department of Environment and Conservation
P.O. Box 8700
St. John's NL A1B 4J6

cc: File Copy for Binder

cc: Marine Safety
Transport Canada
P.O. Box 42
Moncton, NB E1C 8K6

cc: Town of Port Au Choix
Mr. Maurice Kelly
PO Box 89
Port Au Choix, NL A0K 4C0

cc: Mr. Mark McNeil
Public Works and Government Services Canada, ES
1 Regent Square, Suite 204,
Corner Brook NL A2H 7K6

Newfoundland Labrador

Government of Newfoundland and Labrador
Department of Environment and Conservation
Water Resources Management Division

Appendix B - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, Section(s) 48

Date: **MARCH 26, 2015**

File No: **532-02**
Permit No: **ALT7980-2015**

Proponent: **Department of Fisheries and Oceans Canada**
Small Craft Harbour Branch
10 Barters Hill
St. John's NL A1C 5X1

Attention: **Mr. Paul Curran**

Re: **Port Au Choix - DFO-SCH Dredging**

Permission was given for : **the removal of approximately 6000 cubic meters of material from Back Arm in the Town of Port Au Choix to accommodate the construction of a breakwater wharf to increase protected berthage, reduce congestion at existing facilities and allow safe harbour operations as outlined in the application received, dated February 4, 2015.**

I (the proponent named above or agent authorized to represent the proponent) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Environment and Conservation and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date: _____ Signature: _____

This completion report must be completed and forwarded to the following address upon completion of the approved work.

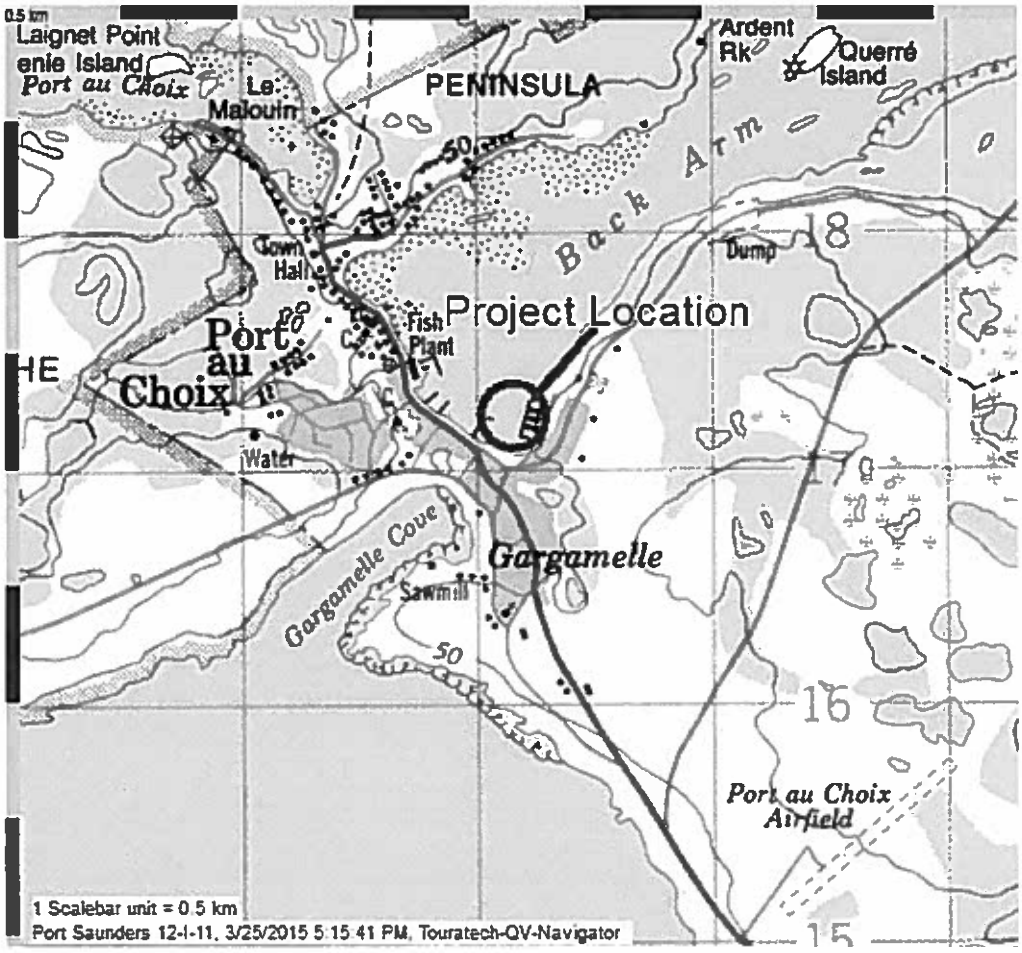
Department of Environment and Conservation
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Environment and Conservation

Permit No: **ALT7980-2015**

APPENDIX C

Location Map for Environmental Permit



Newfoundland Labrador

Government of Newfoundland and Labrador
Service NL

July 17, 2015

Mr. Mark McNeil
Environmental Services
Public Works and Government Services Canada
1 Regent Square, Suite 204
Corner Brook, NL A2H 7K6

RE: Dredge Disposal – Basin Dredging, Small Craft Harbour Basin in Port au Choix, NL

Dear Mr. McNeil:

The Government Service Centre and Department of Environment and Conservation have reviewed your request submitted on June 18, 2015 regarding the disposal of dredged materials from basin dredging at Port au Choix, NL.

Based on the results of the chemical analyses provided of the representative sampling, the Government Service Centre has no objections to the disposal of the dredged material at an approved waste disposal site, subject to the following stipulations:

1. Dredged materials are to be disposed of at the local waste disposal site only. Approval is to be obtained from the owner/operator of the site prior to disposal.

2. Dredged materials are to be stockpiled on site for a minimum of 24 hours before transportation to allow for the drainage of water. The stockpile area is to be located as close as possible to the high water mark. Care is to be taken in choosing this site to limit the negative effect of odors emitting from the stockpile.

3. Dredged materials are to be transported in water tight trucks or containers to prevent leakage.

4. The re-use of dredged materials for other purposes is not permitted under this approval.

5. It is the responsibility of the proponent to obtain any other necessary permits or approvals from federal, provincial, or municipal authorities.

6. The Department reserves the right to cancel this approval at any time for non-compliance with any of the above conditions or for another reason that the Department deems to warrant such action.

If you have any questions, please call (709) 637-2454.

Sincerely,

Tanya Simms
Environmental Protection Officer

Fisheries and Oceans Canada | Pêches et Océans Canada

1 Regent Square Suite 201
Corner Brook NL A2H 7K6

Your file *Votre référence*

May 31, 2010

Our file *Notre référence*
09-HNFL-NA6-00174

Ms. Sharon Branton
Area Chief Small Craft Harbours - Western NL
Fisheries and Oceans Canada
1 Regent Square, Suite 201
Corner Brook NL A2H 7K6

Dear Ms. Branton:

Subject: Proposal not likely to result in impacts to fish and fish habitat provided that additional mitigation measures are applied.

Fisheries and Oceans Canada - Fish Habitat Management Program (DFO) received your proposal on March 22, 2010. Please refer to the file number and title below:

DFO File No.:	09-HNFL-NA6-00174
Referral No.:	10-3-038
Title:	Construction of Breakwater Wharf within the exisitng Small Craft Harbours Facility – Port aux Choix, NL.

Your proposal has been reviewed to determine whether it is likely to result in impacts to fish and fish habitat which are prohibited by the habitat protection provisions of the *Fisheries Act* or those prohibitions of the *Species at Risk Act* that apply to aquatic species.*

Our review consisted of:

- *CEAA Federal Coordination Request Project Description*
- *Application for Request for Project Review*
- *Project Description and Site Photograhs*
- *Dive Survey Report and Video (December 21, 2009)*

We understand that you propose to:

- Construct a new timber crib rock fill breakwater wharf (7.6 m (wide) x 92 m (long)) including rock foundation mattress extending from the existing marginal wharf at Port aux Choix, NL.

*Those sections most relevant to the review of development proposals include 20, 22, 32 and 35 of the *Fisheries Act* and sections 32, 33 and 58 of the *Species at Risk Act*. For more information please visit www.dfo-mpo.gc.ca.

Canada

To reduce potential impacts to fish and fish habitat we are recommending the following mitigation measures be included into your plans:

- The proposed project must be carried out in such a manner that turbid water, sediment, concrete, and/or other related material do not enter the waters of Port aux Choix Harbour or any other adjacent water body.

- The in water use of heavy equipment is not permitted. The operation of such equipment must be from dry stable shore locations.

- All vehicles and equipment must be clean and in good repair, free of mud, fuel, and oil, or other harmful substances that could impair water quality.

- Dredging / excavation required to seat and place timber cribs should be carried out during low tide and low wind/wave conditions to minimize turbidity, and to minimize the area that might be affected by turbidity to that area immediately adjacent to the project area.

- Dredging should be suspended whenever wind or tide conditions cause sediment to be visible outside the immediate project area.

- All dredged or excavated material must be disposed of at an approved site above the high water mark. If necessary adequate siltation control measures should deployed around stored dredge material to minimize potential erosion and siltation from the material.

- Material used for timber crib ballast and /or rock foundation mattress must not be removed from streambeds, stream banks, or intertidal areas. This material should be clean quarry run material with minimal fines.

- Rock material should not be end dumped; rather it should be placed on dry stable areas and put in position using an excavator or similar equipment to avoid excessive splashing and/or displacement of substrate.

- Waste materials should not be deposited in any inland or tidal waters;

- Shoreline areas disturbed during the proposed activities must be stabilized to prevent erosion. See mitigation factsheet #11 (attached) for further direction.

- See Factsheet #24 – Timber Crib – for further advice.

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- The Fisheries and Oceans office at Rocky Harbour (709.458.3083) should be notified prior to the start of construction of this proposed work.

Provided that the additional mitigation measures described above are incorporated into your plans, DFO has concluded that your proposal is not likely to result in impacts to fish and fish habitat.

You will not need to obtain a formal approval from DFO in order to proceed with your proposal.

Please notify this office at least 10 days before starting the work. A copy of this letter should be kept on site while the work is in progress.

If the plans have changed or if the description of your proposal is incomplete you should contact this office to determine if the advice in this letter still applies.

Please be advised that any impacts to fish and fish habitat which result from a failure to implement this proposal as described or incorporate the additional mitigation measures included in this letter could lead to corrective action such as enforcement.

If you have any questions please contact the Fish Habitat Protection Division office in Corner Brook at (709) 637-4349/4346, fax (709) 637-4445 or email at darrin.sooley@dfo-mpo.gc.ca.

Yours sincerely,

Darrin R. Sooley
Area Habitat Biologist - Western Newfoundland and Southern Labrador
Fish Habitat Protection Division

CC: B, Reid - DFO Conservation and Protection, Rocky Harbour (email)
J. Meade - Section Head, Habitat Planning and Operations, RHQ St. John's (PATH)
C. McLean - NL Department of Environment and Conservation, St. John's (email)
M. McNeil - PWGSC, Corner Brook (email)