

**FISHERIES AND OCEANS
CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) 2012
PROJECT EFFECTS DETERMINATION REPORT**

GENERAL INFORMATION

1. Project Title: Wharf extension, Summerville, NL	
2. Proponent: Fisheries and Oceans Canada, Small Craft Harbours (DFO SCH)	
3. Other Contacts (Other Proponent, Consultant or Contractor): Public Works and Government Services Canada	4. Role: OGD Consultant
5. Source of Project Information: Paul Curran, DFO Small Craft Harbours Branch, Chief Engineer	
6. Project Review Start Date: January 20, 2015	
7. DFO File No.: 15-HNFL-00010	8. PWGSC File No: R.071033.035
9. TC File No.: 8200-01-1338	

BACKGROUND

10. Background about Proposed Development (including a description of the proposed development):

The Department of Fisheries and Oceans Small Craft Harbours Branch proposes to extend an existing finger pier wharf at the Summerville site to increase both berthage space and protection at the facility.

PROJECT REVIEW

11. DFO's rationale for the project review:

Project is on federal land ☒ and:

- ☒ DFO is the proponent
- ☐ DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
- ☐ DFO to provide financial assistance to another party to enable the project to proceed
- ☐ DFO to lease or sell federal land to enable the project to proceed
- ☐ Other

12. Fisheries Act Sections (if applicable): n/a

13. Other Authorities

Transport Canada, Navigation Protection Program

14. Other Authorities rationale for involvement:

Navigation Protection Act

15. Other Jurisdiction: Service NL

16. Other Expert Departments Providing Advice: Fisheries and Oceans Canada, Fisheries Protection Program Environment Canada	17. Areas of Interest of Expert Departments: Fisheries Act
18. Other Contacts and Responses: n/a	
19. Scope of Project (details of the project subject to review): <p><u>Project Description</u></p> <p><u>Construction/Installation:</u> The Department of Fisheries and Oceans Small Craft Harbours Branch proposes to extend an existing finger pier wharf. Currently the wharf extends from the shoreline for approximately 36m then turns 90 degrees, to run parallel to the shoreline, and extends approximately a further 17m. The project proposes two additions to the finger pier wharf. One wharf addition will extend outward from the head of the current finger pier for approximately 36m turn 45 degrees toward the south and extend approximately an additional 23m (approximate total length of extension is 59m) giving the wharf a total length of approximately 96m. The second addition will extend the section of finger pier wharf running parallel to the shoreline by 21m for a total length of 38m. All additions will have a width of approximately 7.6m, similar to the width of the existing structure. Scour protection will be placed around the base of wharf cribwork to prevent undermining of the wharf structure. The scour protection will extend outward from the base of the wharf for 1.5m, increasing the dredge area required, thereby increasing the project footprint.</p> <p>Prior to the construction of the finger pier extensions an area of approximately 900m² (yielding approximately 685m³ of material) of the seafloor will have to be dredged to accommodate seating of the new cribwork and associated scour protection. The finger pier extensions will be constructed using CCA treated timber cribwork and include a 250 mm reinforced concrete deck, untreated hardwood fenders, chocks and ladders, treated coping and wheel guard, mooring cleats and rings. Scour protection will be used around the perimeter of the wharf additions to prevent storm damage and undermining. All rock crib ballast and scour protection material will be obtained from a local licensed quarry and trucked to the site.</p> <p><u>Operation</u> The Environmental Management System (EMS) with an Integrated Environmental Management Plan (EMP) for the Harbour Authority of Summerville will cover operational aspects of environmental management at the harbour (fuelling, waste disposal, activities on the property and water).</p> <p><u>Decommissioning</u> This facility is not presently planned to be decommissioned. At the time of decommissioning, 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.</p> <p><u>Scheduling</u> Subject to regulatory approval and DFO SCH operational priorities and funding, this project may commence during the 2015 fiscal year.</p>	

20. Location of Project:

Summerville is located approximately 253km northwest of the city of St. John's at coordinates 48° 27' 15" N, 53° 33' 23" W. The project site can be accessed from provincial route 235.

21. Environment Description:

Physical Environment

Summerville is a small fishing community located in southern Bonavista Bay within the federal electoral district of Bonavista-Exploits. The project site is a developed harbour with fishing related infrastructure including a marginal wharf, fish storage shed, jib crane, and finger pier wharf. The surrounding upland area is characterized by residential dwellings, roadways, and native shrub. Bedrock outcrops and intermittent areas of pebble-cobble material are common along the shoreline.

Biological Environment

Summerville is in the Maritime Barrens Ecoregion of Newfoundland and Labrador. This Atlantic Ocean-influenced boreal ecoregion extends westward across the southern half of the uplands of Newfoundland to the Long Range Mountains. The ecoregion is marked by foggy, cool summers and short, relatively moderate winters along the coast and colder inland. The mean annual temperature is approximately 5.5°C. The mean summer temperature is 11.5°C and the mean winter temperature is -1°C. The mean annual precipitation ranges 1200 to over 1600 mm.

Species at Risk (Aquatic and Terrestrial)

A search of the Atlantic Canada Conservation Data Centre (ACCDC) database was conducted within a 5 km radius of the proposed project location (ACCDC 2014). The search yielded one species with a documented sighting within the search area. However, that species was not identified as being listed under Schedule 1 of the Species at Risk Act (SARA).

Summerville is located within the distribution range of the Blue Whale (Atlantic population), North Atlantic Right Whale, Barrow's Goldeneye (Eastern population), and the Red Crossbill (*perca* subspecies) that have been placed on Schedule 1 of the Species at Risk Act by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). However, the proposed project site is not likely to provide critical or limiting habitat for these species and does not contain any environmental components that are considered to be important, sensitive, threatened or endangered that are likely to be affected by the project.

22. Scope of Effects Considered (sections 5(1) and 5(2)):

Table 1: Potential Project / Environment Interactions Matrix

Project Phase / Physical Work/Activity	As per Section 5(1)			Section 5(1c) Aboriginal Interest				Section 5(2)			Due Diligence			
	Fish (Fisheries Act)	Aquatic Species (SARA)	Birds (MBCA)	Health and Socio economic	Physical and cultural heritage	Land use	*HAPA Significance	Health and Socio economic	Physical and cultural heritage	*HAPA Significance	Water (ground, surface, drainage, etc)	Terrestrial / Aquatic Species	Soil	Air Quality
Construction/Installation														
Sediment removal for crib placement	P	-	-	-	-	-	-	-	-	-	P	P	P	P
Construction of wharf extension	P	-	-	-	-	-	-	-	-	-	P	P	-	P
Operation / Maintenance	P	-	-	-	-	-	-	-	-	-	P	-	-	-
Decommissioning / Abandonment	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*structure, site or thing that is of historical, archaeological, paleontological or architectural significance.
Legend: P = Potential Effect of Project on Environment, '-' = No Interaction

23. Environmental Effects of Project:

Potential Project/Environment Interactions and their effects are outlined below:

Fish:

- Sedimentation as a result of wharf preparation, construction and installation may negatively impact fish and quality of potential fish habitat at the immediate project site.
- Dredging at the site will destroy potential fish habitat within project footprint.
- Accidental discharge of heavy machinery fuel/fluids could negatively impact fish and potential fish habitat.

Water:

- Sedimentation as a result of wharf preparation, construction and installation may decrease marine water quality at immediate project site.
- Construction related refuse may be deposited in water-body, decreasing marine water quality.
- Accidental discharge of heavy machinery fuel/fluids may result in a decrease of marine water quality.

Aquatic species:

- Sedimentation as a result of wharf preparation, construction and installation may negatively impact aquatic species present at the immediate project site.
- Dredging at the site will destroy flora and any sessile fauna within project footprint.
- Accidental discharge of heavy machinery fuel/fluids could negatively affect aquatic species present at the immediate project site.

Soil:

- Development of quarry to obtain material for crib ballast may result in loss of soils.
- Improper disposal of dredge spoils and treated timber may result in contamination of soils.

Air quality:

- Construction activities may result in nuisance impacts due to noise and dust.

24. Mitigation Measures for Project (including Habitat Compensation):

- Minimize duration of in-water work wherever possible.
- Conduct in-water work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat.
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
- Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that construction materials used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be

deleterious to fish.

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear.
- Remove all construction materials from site upon project completion.
- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks.
- Whenever possible, operate machinery on land above the high water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water. Waste materials should not be deposited in the tidal waters.
- Cribbing ballast material should be, to the greatest extent possible, free of fine grained materials to help minimize sedimentation of the waterbody and must not be obtained from below the highwater mark.
- The development of a quarry, if required, must be completed in accordance with applicable provincial legislation and regulations.
- All construction equipment should be fitted with standard and well-maintained noise suppression devices. Appropriate dust suppression methods should be employed, as required.
- Treated timber and sediment material is to be disposed of at an approved waste disposal site and must adhere to all conditions stipulated in the NDOEC PP and Service NL disposal approvals.

25. Significance of Adverse Environmental Effects of project:

Significant adverse environmental effects are unlikely, taking into account mitigation measures.

26. Other Considerations (Public Consultation, Aboriginal Consultation, Follow-up)

Public Consultation

The proposed project will provide safer and more secure access for vessels utilizing this facility. No negative public concern is expected as a result of this project. As such, public consultation was not deemed necessary as part of this determination.

Aboriginal Consultation

Aboriginal fishers are not known to utilize the Summerville SCH facility, nor are there any known aboriginal groups in the surrounding area. As such, aboriginal consultation was not deemed necessary as part of this determination.

Government Consultation

Federal and provincial authorities likely to have an interest in the project were consulted by Public Works & Government Services Canada, Environmental Services, during the course of this assessment. A project description was distributed to the following authorities:

- Fisheries and Oceans Canada – Fisheries Protection Program (DFO FPP)
- Transport Canada – Navigation Protection Program (TC NPP)
- Environment Canada

- Newfoundland Department of Environment and Conservation, Pollution Protection
- Service NL

DFO FPP determined that 'Serious Harm' to fish could be avoided by following standard mitigations as described within this document.

TC NPP determined that an approval would be required under the Navigation Protection Act.

Environment Canada provided advice as per their mandate under the Fisheries Act.

NDOEC Pollution Prevention provided a letter advising acceptance of treated timber at an approved landfill.

Service NL provided a letter advising acceptance of the sediment material at an approved landfill.

All expert advice/specialist information provided by the abovenoted departments has been incorporated into this document.

Accuracy and Compliance Monitoring

A follow-up program (as defined in S. 2(1) and as applicable to non-designated projects on federal lands) is a program for determining the effectiveness of any mitigation measures. Site monitoring (accuracy and compliance 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.

27. Other Monitoring and Compliance Requirements (e.g. *Fisheries Act* or *Species at Risk Act* requirements)

n/a

CONCLUSION

28. Conclusion on Significance of Adverse Environmental Effects:

The Federal Authority has evaluated the project in accordance with Section 67 of *Canadian Environmental Assessment Act (CEAA), 2012*. On the basis of this evaluation, the department has determined that the project is not likely to cause significant adverse environmental effects with mitigation and therefore can proceed using mitigative measures as outlined.

29. Prepared by:

Cathy Martin

30. Date: February 25, 2015

31. Name: Cathy Martin

32. Title: Environmental Specialist, PWGSC-ES

DECISION

33. Decision Taken

- ☒ DFO may exercise its power, duty or function, i.e. may issue the authorization - where the project is not likely to cause significant adverse environmental effects. Confirm below the specific power, duty or function that may be exercised.
- ☐ DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
 - ☒ DFO to proceed with project (as proponent)
 - ☐ DFO to provide financial assistance for project to proceed
 - ☐ DFO to provide federal land for project to proceed
- ☐ DFO has decided not to exercise its power, duty or function because the project is likely to cause significant adverse environmental effects.
- ☐ DFO to ask the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances

34. Approved by: *Paul Curran*

35. Date: *Apr 14/15*

36. Name: Paul Curran

37. Title: Regional Engineer, DFO-SCH, NL

38. References: n/a

TRANSPORT CANADA RECOMMENDATION

TRANSPORT CANADA RECOMMENDATION

39. 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 only when the effects are indirect, i.e. resulting from a change in the environment affecting navigation. 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 Navigation Protection Act approval.

- ☒ Only direct effects are identified, therefore the effects of the project on navigation are not addressed in this environmental assessment.
- ☐ Indirect effects were identified and have been addressed in this environmental assessment.

40. REVIEWED by:  41. Date: February 25, 2015

42. Name: Melissa Genn

43. Title: Environmental Officer – Environmental Affairs, Transport Canada

44. The above has reviewed the environmental screening report and recommends the determination as indicated above.

45. RECOMMENDED by:  46. Date: February 26, 2015-02-26

47. Name: Randy Decker

48. Title: Senior Environmental Assessment Officer
Environmental Affairs, Transport Canada

49. APPROVED by:  50. Date: March 3, 2015

51. Name: Kevin LeBlanc

52. Title: Regional Manager – Environmental Affairs, Transport Canada

53. The above has reviewed the environmental screening report and approves the recommended environmental effects determination.

APPENDICES

- Appendix A - Topographic Map and Aerial Photographs**
- Appendix B: Site Plan**

Appendix A
Topographic Map and Aerial Photos

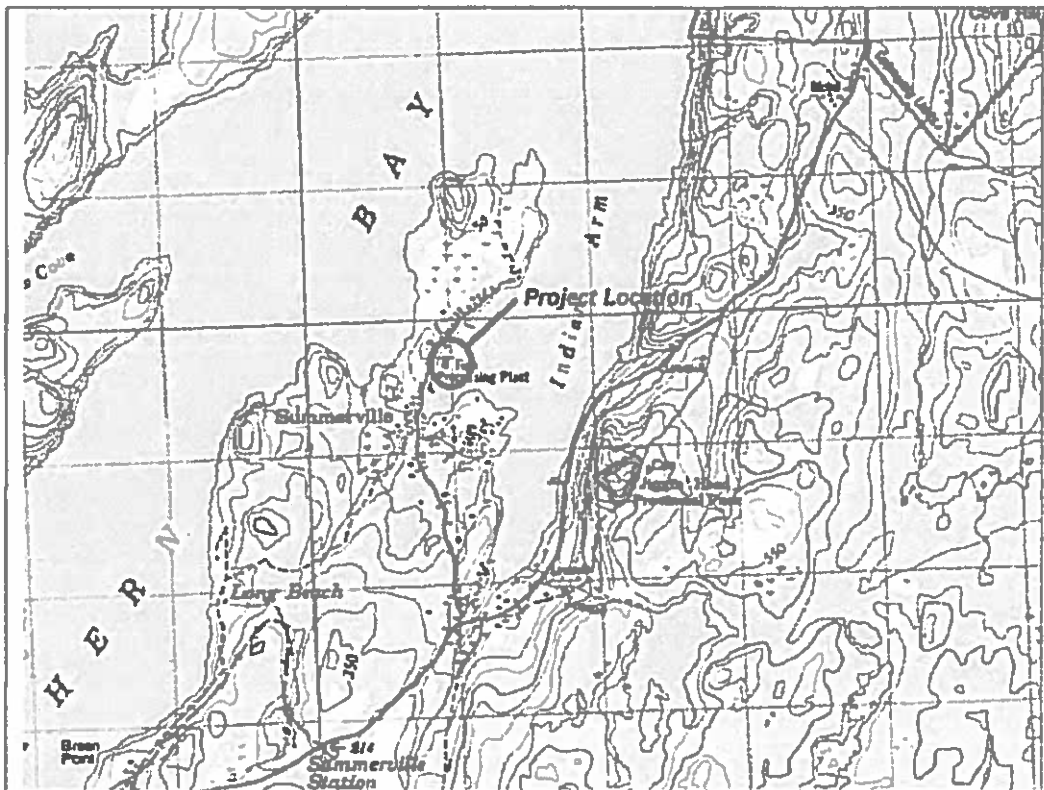


Figure 1. Topographic map indicating location of proposed project

Scale: 1:15,000





Aerial 1: Aerial overview of Summerville harbour with project site circled in red. Source: DFO Photos, 2010.



Aerial 2: Aerial close-up of proposed project site with wharf extension highlighted in red (not to scale). Source: DFO Photos, 2010.

Appendix B
Site Plan of proposed project



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: JANUARY 13, 2010

File No: 532-02
Permit No: ALT5054

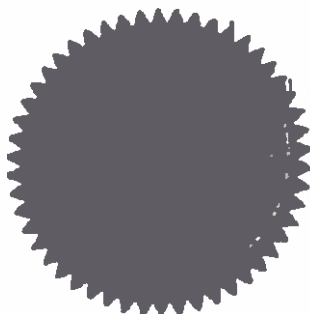
Proponent: Department of Fisheries and Oceans
Small Craft Harbours Branch
1144 Topsail Road
Mount Pearl NL A1N 5E8

Attention: William Goulding

Re: Minor DFO Dredging Projects (2010 - 2015)

Permission is hereby given for: routine dredging or beach grading of 2000 cubic metres or less of primarily sand, gravel, cobble, and boulder material in order to provide safe navigation at various harbour facilities around the Province, with reference to January 6, 2010 request to extend Permit ALT 2120.

- This permit does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies.
- 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

Permit No: ALT5054

APPENDIX A
Terms and Conditions for Environmental Permit

Minor DFO Dredging Projects (2010 - 2015)

Dredging

1. 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.
2. For each minor dredging project requiring the removal of more than 200 cubic metres of material, the proponent must notify this Department by e-mail or fax using the attached project notification form at least two (2) working days prior to the start date.

General Alterations

3. 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.
4. 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.
5. 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.
6. All areas 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.
7. All dredged materials resulting from this project must be disposed of at a site approved by the regional Government Services Centre of the Department of Government Services. Depending on test results, dredged materials may in some cases be redeposited and levelled along nearby shorelines.
8. This Permit is valid for five (5) years from the date of issue. An application for renewal or for amendments to this permit may be submitted prior to the expiry date.

Special Conditions

9. All work must take place within the proponent's legal boundary or with the approval of the upland owner. All work must comply with all other terms and conditions of the Crown Lands grant, lease or license for occupancy.

Water Quality

10. This Department reserves the right to require that the proponent sample, analyze, and submit results of water quality tests, for the purpose of ensuring that water quality is maintained within acceptable guidelines.

- cc: Mr. Bob Whiten, Director
Department of Government Services
PO Box 8700
St. John's NL A1B 4J6
- cc: Mr. Calvin Adams (Avalon)
Regional Manager, Department of Government Services
Regional Government Service Centre
PO Box 512
Harbour Grace NL A0A 2M0
- cc: Mr. Carl Hann (Western)
Department of Government Services
PO Box 2006
Corner Brook NL A2H 6J8
- cc: Mr. Ken Russell (Labrador)
Manager of Operations
Department of Government Services
PO Box 3014, Str. B
Happy Valley-Goose Bay NL A0P 1E0
- cc: Mr. Robert Groves (Clarenville Area)
Regional Government Services Centre
Department of Government Services
2 Masonic Terrace
PO Box 1148
Clarenville NL A5A 1N2
- cc: Mr. Robert Turner (Eastern Central)
Manager of Operations
Department of Government Services
PO Box 2222
Gander NL A1V 2N9
- cc: Ms Tanya Simms (Western)
Manager of Operations
Department of Government Services
PO Box 2006
Corner Brook NL A2H 6J8
- cc: Ms. Donna Folks (Western Central)
Manger of Operations, Department of Government Services
3 Cromer Ave.
Grand Falls-Winsor NL A2A 1W9
- cc: Mr. Darrin Sooley (W)
Area Habitat Co-ordinator
Department of Fisheries and Oceans
1 Regent Square, Suite 201
Corner Brook NL A2H 7K6
- cc: Mr. Jack O'Rourke (S)
Area Habitat Biologist - Southern
Department of Fisheries and Oceans
1144 Topail Road
St. John's NL A1N 5E8
- cc: Mr. Leon W. King (C)
Area Habitat Biologist - Central

Department of Fisheries and Oceans
4A Bayley Street, Suite 200
Grand Falls-Windsor NL A2A 2T5

- cc: Mr. Terry Fleet (E)
Area Habitat Biologist - Eastern
Department of Fisheries and Oceans
1144 Topsail Road
St. John's NL A1N 5E8
- cc: Ms. Kathleen Simms (L)
Area Habitat Biologist - Labrador
Department of Fisheries and Oceans
Bldg. 397, CFB Goose Bay
PO Box 7003, Station A
Happy Valley - Goose Bay, NL A0P 1S0
- cc: Ms. Ellen Pickett
NWPA
Transport Canada
John Cabot Building
PO Box 1300
St. John's NL A1C 6H8
- cc: Mr. A. W. Pitcher
Environmental Services
Department of Public Works and Government Services Canada
Suite 204, 1 Regent Square
Corner Brook NL A2H 7K6



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

File No. 532-02

PROJECT NOTIFICATION

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

Date: _____

Permit No: ALT 5054

Proponent: Department of Fisheries and Oceans
Small Craft Harbours Branch
PO Box 5667, John Cabot Bldg.
St. John's, NL A1C 5X1

Attention: William Goulding

Re: Minor DFO Dredging Projects (2010 – 2015)

This Permit is valid for: Routine dredging or beach grading of 2000 cubic metres or less of primarily sand, gravel, cobble, and boulder material in order to provide safe navigation at various harbour facilities around the Province, with reference to January 6, 2010 request to extend Permit ALT 2120.

DETAILS:

Waterbody: _____ Region: _____ Location: _____
UTM: N: _____ E: _____ Zone: _____ NAD: _____

Contact Person: _____ Project Schedule: From _____ to _____
Contact Tel #: _____

Work Description: _____

This NOTIFICATION must be completed and forwarded as noted below to Department of Environment and Conservation a minimum of **TWO WORKING DAYS** prior to the start of construction. By FAX: (709) 729-0320 or by email: clvdemclean@gov.nl.ca



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

File Reference #

December 15, 2010

Paul Curran, P. Eng.
Regional Engineer
Small Crafts Harbours
St. John's NL A1C 5X1

Dear Mr. Curran:

**Re: Section 48 Permitting Requirements under the Water Resources Act –
Wharves, Breakwaters, Slipways and Boathouses**

This letter is to inform you that as of January 1, 2011 permits will no longer be required under Section 48 of the Water Resources Act for the construction and maintenance of wharves, breakwaters, slipways and boathouses. Therefore blanket permit ALT5055 is canceled effective January 1, 2011. Water Resources Management Division is currently preparing guidelines on environmental controls which should be followed during the construction and maintenance of wharves, breakwaters, slipways and boathouses. These guidelines will be posted on the department's website once they are completed. In the interim, we have attached a list of terms and conditions which we recommend be followed when completing these types of projects.

This letter does not affect other activities, such as dredging, which will continue to require permits under Section 48 of the Act. As such existing blanket permit ALT5054 remains valid.

This letter does not release Small Crafts Harbours from the obligation to obtain permits and approvals from other concerned provincial, federal and municipal agencies for wharves, breakwaters, slipways and boathouses.

Please do not hesitate to contact this office at 729-5713 if you have any questions.

Yours truly,

Clyde McLean, P.Eng
Manager Water Investigations

cc. Shawn Kean
Haseen Khan

RCM/MSWord 2003
SCH Wharves Breakwaters Permitting Dec 15 2010.doc

PO Box 8700, St. John's NL A1B 4J6 tel: 709.729.2563 fax 709.729.0320 www.gov.nl.ca/env/water

Environmental Terms and Conditions

General Alterations

1. All work must take place within the legal boundaries of the proponent or with the approved of the land owner. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease or license for occupancy.
2. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
3. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
4. Water pumped from excavations for 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*.
5. 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.
6. 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.
7. 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.
8. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
9. 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.
10. The use of creosote treated wood is strictly prohibited within 15 metres of all bodies of fresh water in the province.
11. 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 of Environment and Conservation.

12. All waste materials resulting from this project must be disposed of at a site approved by the regional Government Service Center of the Department of Government Services. The Department of Government Services may require samples to be submitted for testing and analysis.
13. 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.
14. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by the wind, wave, ice action, or structural failure.
15. 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.
16. Fill or ballast 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.
17. Armour stone must be placed around cribbing, where required, to prevent erosion.
18. 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.
19. The proponent must consult with the Department of Fisheries and Oceans should the total combined footprint of the dock exceed 15 metres squared (15m^2) and/or it is made of concrete or steel sheeting or any other skirting that isolates the inside of the crib from the rest of the water.
20. This work must not interfere with the operation of any sanitary or storm sewer outfalls in the area. If it is determined that your work adversely impacts any outfalls, you will be responsible for any repairs, modifications or associated costs to correct the problem.
21. Before commencing work on this project, approval must first be obtained from any municipality in which the work is planned.



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Your file *Votre référence*
n/a

Our file *Notre référence*
15-HNFL-00010

Paul Curran
Regional Engineer
DFO, SCH
10 Barters Hill
St. John's, NL A1C 5X1

Dear Mr. Curran:

Subject: Serious harm to fish can be avoided or mitigated

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your proposal to construct an extension to the SCH wharf in Summerville, NL on Jan. 20, 2015.

Based on the information provided, your proposal has been identified as a project where a *Fisheries Act* authorization is not required given that serious harm to fish can be avoided by following standard measures. Proposals in this category are not considered to need an authorization from the Program under the *Fisheries Act* in order to proceed. In order to comply with the Act, it is recommended that you follow our guidance tools which can be found at the following website (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>). It remains your responsibility to meet the other requirements of federal, provincial and municipal agencies.

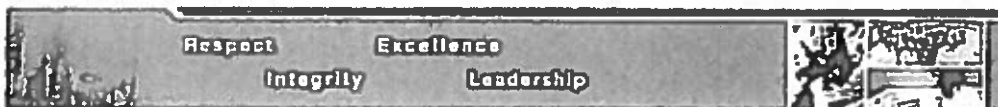
Should your plans change or if you have omitted some information in your proposal such that your proposal meets the criteria for a site specific review, as described on our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>), you should complete and submit the request for review form that is also available on the website.

Should you have any questions or concerns about the compliance of your proposal with the *Fisheries Act*, you may wish to engage an environmental professional familiar with measures to avoid impacts to fish and fish habitat (<http://www.dfo-mpo.gc.ca/pnw-ppe/env-pro-eng.html>).

Yours sincerely,


Michelle M. Roberge
Team Leader, Triage & Planning

Canada



Response to Project Notification For:

Wharf Extension, Summerville, NL

- ☐ Our Department/Agency may issue a letter of advice, permit or approval for this project.

Federal Authority DFP

Name & Title Bart Pilgum, Fisheries Protection Biologist

Signature Bart Pilgum Date May 25, 2015

PLEASE SEND THE ORIGINAL SIGNED COPY TO
CATHY MARTIN
PWGSC ENVIRONMENTAL SERVICES
FAX NUMBER (709) 772-5852
cathy.martin@pwgsc.gc.ca



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Andrew Temple

From: Cathy Martin
Sent: April-14-15 3:46 PM
To: 'Curran, Paul P'; Bruce Downer
Cc: Andrew Temple; Upward, Dion B
Subject: FW: sediment disposal from Summerville

Good Afternoon,

Here is the approval from Service NL for Summerville.
Please ensure it gets included with the rest of the regulatory response for the spec.

Any questions please let me know,
Cathy M

From: Adams, Barry [<mailto:BarryAdams@gov.nl.ca>]
Sent: April-14-15 3:43 PM
To: Cathy Martin
Subject: sediment disposal from Summerville

Hi Cathy:

Please be advised that based on your report, it is acceptable to dispose of the dredged material from the Summerville wharf extension project at an Approved Waste Disposal site with the permission of the owner/operator. Please note that if there are any fly or odor issues, the material should be covered with hydrated lime (dolomite) or a layer of clean, non-dredged cover material.

Hope you're starting to see spring!

Cheers,
Barry

Barry Adams
Environmental Protection Officer,
Service NL,
8 Myer's Avenue, Suite 201
Clareville, NL A5A 1T5

TEL: 709-466-4063
FAX: 709-466-5674

Email: barryadams@gov.nl.ca

"This email and any attached files are intended for the sole use of the primary and copied addressee(s) and may contain privileged and/or confidential information. Any distribution, use or copying by any means of this information is strictly prohibited. If you received this email in error, please delete it immediately and notify the sender."



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: JANUARY 13, 2010

File No: 532-02
Permit No: ALT5054

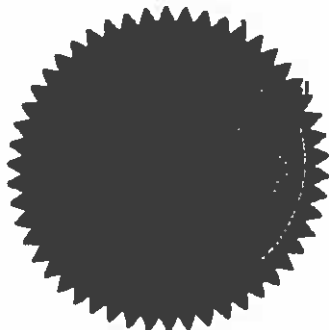
Proponent: Department of Fisheries and Oceans
Small Craft Harbours Branch
1144 Topsail Road
Mount Pearl NL A1N 5E8

Attention: William Goulding

Re: Minor DFO Dredging Projects (2010 - 2015)

Permission is hereby given for: routine dredging or beach grading of 2000 cubic metres or less of primarily sand, gravel, cobble, and boulder material in order to provide safe navigation at various harbour facilities around the Province, with reference to January 6, 2010 request to extend Permit ALT 2120.

- This permit does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies.
- 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

Permit No: ALT5054

APPENDIX A
Terms and Conditions for Environmental Permit

Minor DFO Dredging Projects (2010 - 2015)

Dredging

1. 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.
2. For each minor dredging project requiring the removal of more than 200 cubic metres of material, the proponent must notify this Department by e-mail or fax using the attached project notification for at least two (2) working days prior to the start date.

General Alterations

3. 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.
4. 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.
5. 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.
6. All areas 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.
7. All dredged materials resulting from this project must be disposed of at a site approved by the regional Government Services Centre of the Department of Government Services. Depending on test results, dredged materials may in some cases be redeposited and levelled along nearby shorelines.
8. This Permit is valid for five (5) years from the date of issue. An application for renewal or for amendments to this permit may be submitted prior to the expiry date.

Special Conditions

9. All work must take place within the proponents legal boundary or with the approval of the upland owner. All work must comply with all other terms and conditions of the Crown Lands grant, lease or license for occupancy.

Water Quality

10. This Department reserves the right to require that the proponent sample, analyze, and submit results of water quality tests, for the purpose of ensuring that water quality is maintained within acceptable guidelines.

- cc: Mr. Bob Whitten, Director
Department of Government Services
PO Box 8700
St. John's NL A1B 4J6
- cc: Mr. Calvin Adams (Avalon)
Regional Manager, Department of Government Services
Regional Government Service Centre
PO Box 512
Harbour Grace NL A0A 2M0
- cc: Mr. Carl Hann (Western)
Department of Government Services
PO Box 2006
Corner Brook NL A2H 6J8
- cc: Mr. Ken Russell (Labrador)
Manager of Operations
Department of Government Services
PO Box 3014, Stn. B
Happy Valley-Goose Bay NL A0P 1E0
- cc: Mr. Robert Groves (Clarenville Area)
Regional Government Services Centre
Department of Government Services
2 Masonic Terrace
PO Box 1148
Clarenville NL A5A 1N2
- cc: Mr. Robert Turner (Eastern Central)
Manager of Operations
Department of Government Services
PO Box 2222
Gander NL A1V 2N9
- cc: Ms Tanya Simms (Western)
Manager of Operations
Department of Government Services
PO Box 2006
Corner Brook NL A2H 6J8
- cc: Ms. Donna Folks (Western Central)
Manger of Operations, Department of Government Services
3 Cromer Ave.
Grand Falls-Winsor NL A2A 1W9
- cc: Mr. Darrin Sooley (W)
Area Habitat Co-ordinator
Department of Fisheries and Oceans
1 Regent Square, Suite 201
Corner Brook NL A2H 7K6
- cc: Mr. Jack O'Rourke (S)
Area Habitat Biologist - Southern
Department of Fisheries and Oceans
1144 Topail Road
St. John's NL A1N 5E8
- cc: Mr. Leon W. King (C)
Area Habitat Biologist - Central

Department of Fisheries and Oceans
4A Bayley Street, Suite 200
Grand Falls-Windsor NL A2A 2T5

- cc: Mr. Terry Fleet (E)
Area Habitat Biologist - Eastern
Department of Fisheries and Oceans
1144 Topsail Road
St. John's NL A1N 5E8
- cc: Ms. Kathleen Simms (L)
Area Habitat Biologist - Labrador
Department of Fisheries and Oceans
Bldg. 397, CFB Goose Bay
PO Box 7003, Station A
Happy Valley - Goose Bay, NL A0P 1S0
- cc: Ms. Ellen Pickett
NWPA
Transport Canada
John Cabot Building
PO Box 1300
St. John's NL A1C 6H8
- cc: Mr. A. W. Pitcher
Environmental Services
Department of Public Works and Government Services Canada
Suite 204, 1 Regent Square
Corner Brook NL A2H 7K6



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

File No. 532-02

PROJECT NOTIFICATION

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

Date: _____

Permit No: ALT 5054

Proponent: Department of Fisheries and Oceans
Small Craft Harbours Branch
PO Box 5667, John Cabot Bldg.
St. John's, NL A1C 5X1

Attention: William Goulding

Re: Minor DFO Dredging Projects (2010 – 2015)

This Permit is valid for: Routine dredging or beach grading of 2000 cubic metres or less of primarily sand, gravel, cobble, and boulder material in order to provide safe navigation at various harbour facilities around the Province, with reference to January 6, 2010 request to extend Permit ALT 2120.

DETAILS:

Waterbody: _____ Region: _____ Location: _____
UTM: N: _____ E: _____ Zone: _____ NAD: _____

Contact Person: _____ Project Schedule: From _____ to _____
Contact Tel #: _____

Work Description: _____

This NOTIFICATION must be completed and forwarded as noted below to Department of Environment and Conservation a minimum of **TWO WORKING DAYS** prior to the start of construction. By FAX:
(709) 729-0320 or by email: clvdemclean@gov.nl.ca



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

File Reference #

December 15, 2010

Paul Curran, P. Eng.
Regional Engineer
Small Crafts Harbours
St. John's NL A1C 5X1

Dear Mr. Curran:

**Re: Section 48 Permitting Requirements under the Water Resources Act –
Wharves, Breakwaters, Slipways and Boathouses**

This letter is to inform you that as of January 1, 2011 permits will no longer be required under Section 48 of the *Water Resources Act* for the construction and maintenance of wharves, breakwaters, slipways and boathouses. Therefore blanket permit ALT5055 is canceled effective January 1, 2011. Water Resources Management Division is currently preparing guidelines on environmental controls which should be followed during the construction and maintenance of wharves, breakwaters, slipways and boathouses. These guidelines will be posted on the department's website once they are completed. In the interim, we have attached a list of terms and conditions which we recommend be followed when completing these types of projects.

This letter does not affect other activities, such as dredging, which will continue to require permits under Section 48 of the Act. As such existing blanket permit ALT5054 remains valid.

This letter does not release Small Crafts Harbours from the obligation to obtain permits and approvals from other concerned provincial, federal and municipal agencies for wharves, breakwaters, slipways and boathouses.

Please do not hesitate to contact this office at 729-5713 if you have any questions.

Yours truly,

Clyde McLean, P.Eng
Manager Water Investigations

cc, Shawn Kean
Haseen Khan

RCM/MSWord 2003
SCH Wharves Breakwaters Permitting Dec 15 2010.doc

PO Box 8700, St. John's NL A1B 4J6 tel: 709.729.2563 fax: 709.729.0320 www.gov.nl.ca/env/water

Environmental Terms and Conditions

General Alterations

1. All work must take place within the legal boundaries of the proponent or with the approved of the land owner. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease or license for occupancy.
2. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
3. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
4. Water pumped from excavations for 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*.
5. 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.
6. 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.
7. 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.
8. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
9. 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.
10. The use of creosote treated wood is strictly prohibited within 15 metres of all bodies of fresh water in the province.
11. 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 of Environment and Conservation.

12. All waste materials resulting from this project must be disposed of at a site approved by the regional Government Service Center of the Department of Government Services. The Department of Government Services may require samples to be submitted for testing and analysis.
13. 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.
14. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by the wind, wave, ice action, or structural failure.
15. 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.
16. Fill or ballast 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.
17. Armour stone must be placed around cribbing, where required, to prevent erosion.
18. 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.
19. The proponent must consult with the Department of Fisheries and Oceans should the total combined footprint of the dock exceed 15 metres squared (15m^2) and/or it is made of concrete or steel sheeting or any other skirting that isolates the inside of the crib from the rest of the water.
20. This work must not interfere with the operation of any sanitary or storm sewer outfalls in the area. If it is determined that your work adversely impacts any outfalls, you will be responsible for any repairs, modifications or associated costs to correct the problem.
21. Before commencing work on this project, approval must first be obtained from any municipality in which the work is planned.



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Your file Votre référence
n/a

Our file Notre référence
15-HNFL-00010

Paul Curran
Regional Engineer
DFO, SCH
10 Barters Hill
St. John's, NL A1C 5X1

Dear Mr. Curran:

Subject: Serious harm to fish can be avoided or mitigated

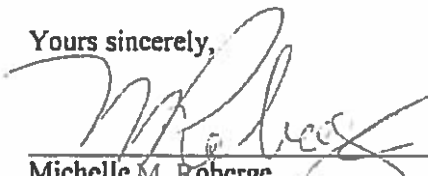
The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your proposal to construct an extension to the SCH wharf in Summerville, NL on Jan. 20, 2015.

Based on the information provided, your proposal has been identified as a project where a *Fisheries Act* authorization is not required given that serious harm to fish can be avoided by following standard measures. Proposals in this category are not considered to need an authorization from the Program under the *Fisheries Act* in order to proceed. In order to comply with the Act, it is recommended that you follow our guidance tools which can be found at the following website (<http://www.dfo-mpo.gc.ca/pnw-ppe/measure-mesures/index-eng.html>). It remains your responsibility to meet the other requirements of federal, provincial and municipal agencies.

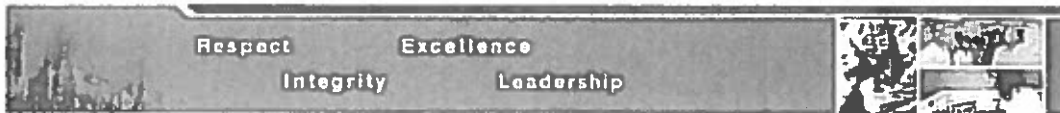
Should your plans change or if you have omitted some information in your proposal such that your proposal meets the criteria for a site specific review, as described on our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>), you should complete and submit the request for review form that is also available on the website.

Should you have any questions or concerns about the compliance of your proposal with the *Fisheries Act*, you may wish to engage an environmental professional familiar with measures to avoid impacts to fish and fish habitat (<http://www.dfo-mpo.gc.ca/pnw-ppe/env-pro-eng.html>).

Yours sincerely,


Michelle M. Roberge
Team Leader, Triage & Planning

Canada



Response to Project Notification For:

Wharf Extension, Summerville, NL

- ☐ Our Department/Agency may issue a letter of advice, permit or approval for this project.

Federal Authority DDFO

Name & Title Bret Pelgand, Fisheries Protection Biologist

Signature Bret Pelgand Date May 28, 2015

PLEASE SEND THE ORIGINAL SIGNED COPY TO
CATHY MARTIN
PWGSC ENVIRONMENTAL SERVICES
FAX NUMBER (709) 772-5852
cathy.martin@pwgsc.gc.ca



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada



Transport Canada Transports Canada

Navigation Protection Program
95 Foundry Street, 6th Floor
Moncton N.B. E1C 8K6

Your file

COPY

Our file
8200-01-1338

March 23, 2015

Fisheries and Oceans Canada - SCH
4th Floor, John Cabot Building
10 Barter's Hill, P.O. Box 5667
St. John's, NL A1C 5X1

Attention: Paul Curran

RE: Notice to the Minister under the *Navigation Protection Act* for review of the Wharf, Located at Approximately 48° 27' 12.00" N: 053° 33' 24.00" W, at Summerville, in the Province of Newfoundland and Labrador

Our assessment of your work has determined that it is not likely to substantially interfere with navigation.

Therefore your work is permitted under section 9(1) – Alteration of the *Navigation Protection Act* (NPA) and you may proceed per the attached plan(s) reviewed on March 19th, 2015 in accordance with the following terms and conditions:

1. All vessels navigating the waterway must be allowed access through or around the work site at all times during construction and must be assisted as necessary.
2. The proponent must notify the Canadian Coast Guard Vessel Traffic Centre Noteship desk at (709) 695-2168 or notshippax@dfc-mpo.gc.ca at least 24 hours in advance of commencement and upon completion of the project and also for the discontinuance or placement of navigation aids.
3. Construction material and debris are not to become waterborne. During construction all floating debris must be contained in the immediate area and removed from the water in a timely manner.
4. The existing navigation aid placed on the wharf (list of lights number 442.519) is to be relocated to the outermost seaward leading edge of the wharf and prior to the discontinuance of the existing aid and replacement of the navigation aid Canadian Coast Guard Level of Service - Aids to Navigation must be contacted and consulted by phone at 709-772-2800.

Please note that permission relates only to the effect of your work on navigation under the NPA. It is the owner's responsibility to comply with any other applicable laws and regulations.

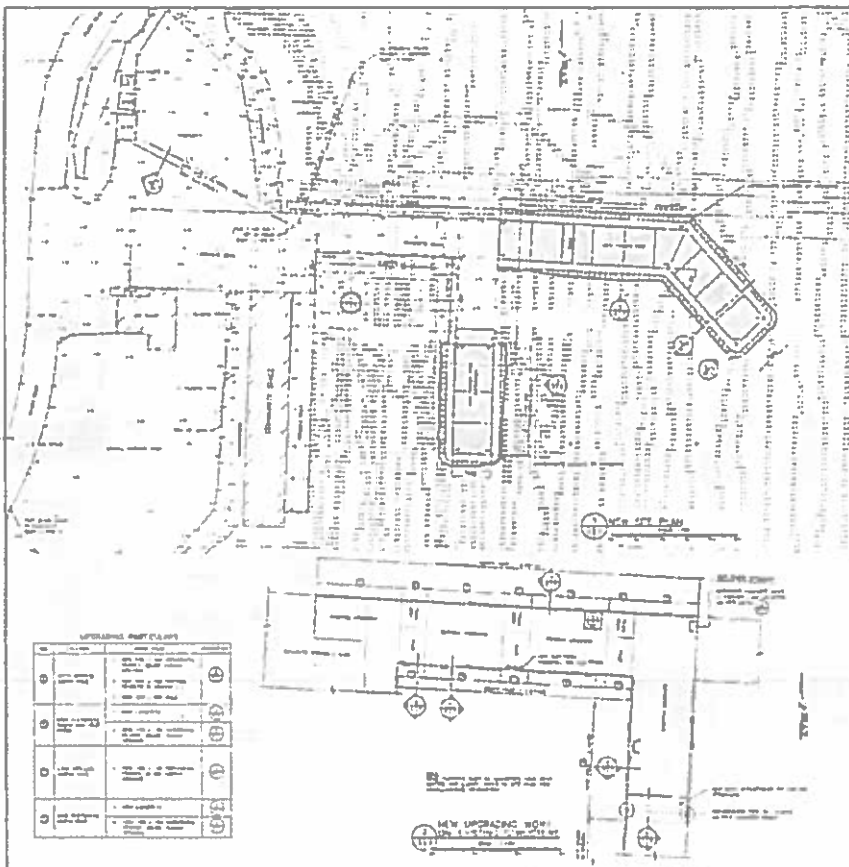
Should you have any questions, please do not hesitate to contact our office in Moncton by phone at (506) 851-3113, by fax at (506) 851-7542 or by e-mail at NPPATL-PPNATL@tc.gc.ca.

Respectfully,

Virginia Drew
Officer
Navigation Protection Program
Programs Group
Transport Canada
Atlantic Region

cc: DFO CHS - Carrie Bryall
PWGSC - Cathy Martin

Canada



UPPER LEVEL FLOOR PLAN

Room No.	Room Name	Area (sq. ft.)	Notes
101	Office	120	
102	Office	120	
103	Office	120	
104	Office	120	
105	Office	120	
106	Office	120	
107	Office	120	
108	Office	120	
109	Office	120	
110	Office	120	
111	Office	120	
112	Office	120	
113	Office	120	
114	Office	120	
115	Office	120	
116	Office	120	
117	Office	120	
118	Office	120	
119	Office	120	
120	Office	120	

NOTES

1. All dimensions are in feet and inches.
2. All areas are in square feet.
3. All elevations are in feet above sea level.
4. All materials are to be of the highest quality.
5. All work is to be done in accordance with the latest edition of the Building Code of the City of New York.
6. All work is to be done in accordance with the latest edition of the National Building Code.
7. All work is to be done in accordance with the latest edition of the International Building Code.
8. All work is to be done in accordance with the latest edition of the American Institute of Architects Code of Ethics.
9. All work is to be done in accordance with the latest edition of the American Institute of Architects Code of Standards.
10. All work is to be done in accordance with the latest edition of the American Institute of Architects Code of Practice.

LEGEND

1. Office

2. Parking

3. Easement

4. Property Line

5. Street

6. Sidewalk

7. Driveway

8. Fence

9. Wall

10. Window

11. Door

12. Stair

13. Elevator

14. Core

15. Shaft

16. Utility Room

17. Storage Room

18. Janitor's Closet

19. Restroom

20. Kitchen

21. Dining Room

22. Living Room

23. Bedroom

24. Bath

25. Terrace

26. Balcony

27. Porch

28. Deck

29. Pool

30. Garden

31. Lawn

32. Trees

33. Shrubs

34. Fences

35. Walls

36. Windows

37. Doors

38. Stairs

39. Elevators

40. Cores

41. Shafts

42. Utility Rooms

43. Storage Rooms

44. Janitor's Closets

45. Restrooms

46. Kitchens

47. Dining Rooms

48. Living Rooms

49. Bedrooms

50. Baths

51. Terraces

52. Balconies

53. Porches

54. Decks

55. Pools

56. Gardens

57. Lawns

58. Trees

59. Shrubs

60. Fences

61. Walls

62. Windows

63. Doors

64. Stairs

65. Elevators

66. Cores

67. Shafts

68. Utility Rooms

69. Storage Rooms

70. Janitor's Closets

71. Restrooms

72. Kitchens

73. Dining Rooms

74. Living Rooms

75. Bedrooms

76. Baths

77. Terraces

78. Balconies

79. Porches

80. Decks

81. Pools

82. Gardens

83. Lawns

84. Trees

85. Shrubs

86. Fences

87. Walls

88. Windows

89. Doors

90. Stairs

91. Elevators

92. Cores

93. Shafts

94. Utility Rooms

95. Storage Rooms

96. Janitor's Closets

97. Restrooms

98. Kitchens

99. Dining Rooms

100. Living Rooms

Reviewed/Examiné

Mar 19, 2015

2

Youssef Elwan

Youssef Elwan

Propriétaire de l'Immeuble de New York

CONSTRUCTION

SAISONVILLE, N.Y.

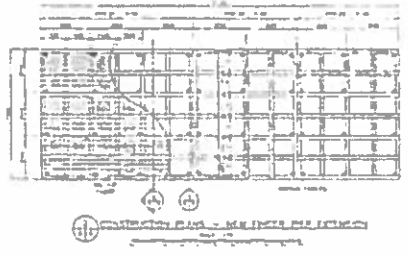
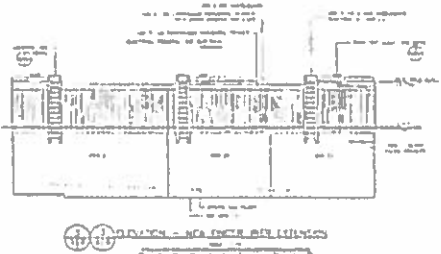
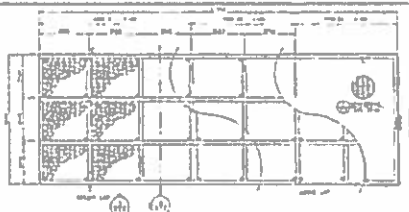
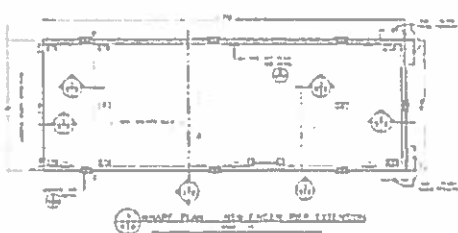
NEW SITE PLAN

Scale: 1" = 10'

Sheet No. 1 of 1

0 01191-1-001

CJ OF 1

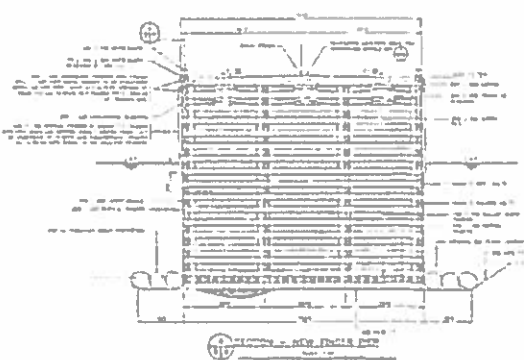


NOTES:

1. ALL DIMENSIONS ARE IN FEET AND INCHES.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
3. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
5. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
7. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
9. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
10. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN FEET AND INCHES.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
3. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
5. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
7. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
9. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT.
10. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.



Reviewed/Examined
 Mar 19, 2015
 Page 5 of 5
 Virginia Power
 Construction Management Program
 Project # 10000000000000000000

CONSTRUCTION
 SHEET # 10
 NEW FLOOR PER
 EXISTING
 PLANS AND DETAILS
 001215-1000
 00 OF 0



Environment
Canada

Environnement
Canada

Environmental Stewardship Branch
6 Bruce Street
Mount Pearl, NL A1N 4T3

26 January 2015

Cathy Martin
Environmental Services
Public Works and Government Services Canada
P.O. Box 4600
St. John's, NL A1C 5T2

Dear Ms. Martin:

RE: Wharf Extension, Summerville, NL

EAS 2015-007

As requested in your email of 20 January 2015, Environment Canada (EC) has reviewed the project description for the above-noted project. Please note that our review comments, in areas related to EC's mandate, are provided to support your environmental management process for this project.

The Department of Fisheries and Oceans (Small Craft Harbours Branch) proposes to extend the existing finger pier wharf at Summerville. The present wharf extends from the shoreline for approximately 36m then turns 90 degrees, to run parallel to the shoreline, and extends approximately a further 17m.

It is understood that the project will involve two additions to the finger pier wharf:

- One wharf addition will extend outward from the head of the current finger pier for approximately 36m turn 45 degrees toward the south and extend approximately an additional 23m (approximate total length of extension is 59m) giving the wharf a total length of approximately 96m.
- The other addition will extend the section of finger pier wharf running parallel to the shoreline by 21m for a total length of 38m.

Scour protection will be placed around the base of wharf cribwork to prevent undermining of the wharf structure. The scour protection will extend outward from the base of the wharf for 1.5m, increasing the dredge area required, thereby increasing the project footprint.

Prior to the construction of the finger pier extensions, an area of approximately 900m² of the seafloor (yielding approximately 685m³ of material) will have to be dredged to accommodate seating of the new cribwork and associated scour protection.

The additions will have a width of approximately 7.6m, similar to the width of the existing structure. The finger pier extensions will be constructed using CCA treated timber cribwork and include a 250mm reinforced concrete deck, untreated hardwood fenders, chocks and ladders, treated coping and wheel guard, mooring cleats and rings. Scour protection will be used around the perimeter of the wharf additions to prevent storm damage and undermining. All rock crib ballast and scour protection material will be obtained from a local licensed quarry and trucked to the site.

EC is responsible for administering several statutes including the *Department of Environment Act*, *Fisheries Act* (Section 36), *Canadian Environmental Protection Act*, *Canada Water Act*, *Canada Wildlife Act* and the *Migratory Birds Convention Act*, which are focused on promoting sustainable development, protecting the environment, conserving certain renewable resources and reporting on environmental conditions. Environment Canada is also the lead federal department in promoting a variety of federal policies and programs including, *A Wildlife Policy for Canada*, the *Toxic Substances Management Policy*, and *Pollution Prevention - A federal strategy for action*. Stemming from these responsibilities, EC possesses expertise relevant to this proposed project that should be considered by the proponent, in conducting the environmental review of this project.

REVIEW COMMENTS

Regulatory Requirements

Fisheries Act

Pollution prevention and control provisions of the *Fisheries Act* are administered and enforced by Environment Canada. The deposit of a deleterious substance to water frequented by fish may constitute a violation of the *Fisheries Act*, whether or not the water itself is made deleterious by the deposit. Subsection 36(3) of the *Fisheries Act* prohibits anyone from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water. The notion of a deleterious substance applies both to fish and to fish habitat.

It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.

Migratory Birds Convention Act

Migratory birds, their eggs, nests, and young are protected under the *Migratory Birds Convention Act* (MBCA). Migratory birds protected by the MBCA generally include all seabirds except cormorants and pelicans, all waterfowl, all shorebirds, and most landbirds (birds with principally terrestrial life cycles). Most of these birds are specifically named in the Environment Canada (EC) publication, *Birds Protected in Canada under the Migratory Birds Convention Act*, Canadian Wildlife Service Occasional Paper No. 1.

Under Section 6 of the *Migratory Birds Regulations* (MBR), it is forbidden to disturb, destroy or take a nest or egg of a migratory bird; or to be in possession of a live migratory bird, or its carcass, skin, nest or egg, except under authority of a permit. It is important to note that under the current MBR, no permits can be issued for the incidental take of migratory birds caused by development projects or other economic activities.

Furthermore, Section 5.1 of the MBCA describes prohibitions related to deposit of substances harmful to migratory birds:

- "5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance — in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area — that is harmful to migratory birds."

It is the responsibility of the proponent to ensure that activities are managed so as to ensure compliance with the MBCA and associated regulations.

Species at Risk Act

The proponents should also be reminded that the prohibitions under SARA are now in force. The complete text of SARA, including prohibitions, is available at www.sararegistry.gc.ca.

It should be noted that Section 79 of the *Species at Risk Act* states:

79. (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 67(a) or (b) of the Canadian Environmental Assessment Act, 2012 in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.
- (2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

Canadian Environmental Protection Act

The proponent should also be aware of the potential applicability of the *Canadian Environmental Protection Act* (CEPA 1999). CEPA 1999 enables protection of the environment, and human life and health, through the establishment of environmental quality objectives, guidelines and codes of practice, and the regulation of toxic substances, emissions and discharges from federal facilities, international air pollution, and disposal at sea. Under CEPA 1999 a substance is considered toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity, constitute or may constitute a danger to the environment on which life depends; constitute or may constitute a danger in Canada to human life or health.

Potential Requirement for Ocean Disposal

The project description does not have any information on the method of disposal of the dredged materials. If at any point project activities will include the placement or disposal of dredged or excavated materials into seawater or brackish waters (waters with salinity levels above 0.5 ppt measured under conditions of high tide, low flow), the proponent is advised to contact EC, to verify applicability of Part 7 Division 3 of the *Canadian Environmental Protection Act* (contact Natasha Boyd at 709-772-2161 or Natasha.Boyd@ec.gc.ca).

Migratory Birds and Species at Risk

The Canadian Wildlife Service of Environment Canada (EC-CWS) has reviewed the above project and offers the following comments:

Vegetation Clearing

Clearing vegetation during construction activities and placement of dredge spoils on vegetated uplands may cause disturbance to migratory birds and inadvertently cause the destruction of their nests and eggs (<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=FA4AC736-1>). Many species use trees, as well as brush, deadfalls and other low-lying vegetation for nesting, feeding, shelter and cover. This would apply to songbirds throughout the region, as well as waterfowl in

wetland areas. Disturbance of this nature would be most critical during the breeding period. The breeding season for most birds within the project area occurs between April 15th and August 15th in this region, however some species protected under the MBCA do nest outside of this time period. Please see the webpage "General Nesting Periods of Migratory Birds in Canada" (Website: <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1>). This project area falls within zone "D3-4") for more information concerning the breeding times of migratory birds.

Environment Canada provides the following recommendations:

1. to avoid the risk of nest destruction, the proponent should avoid vegetation clearing during the most critical period of the migratory bird breeding season, which is April 15th through August 15th in this region.
2. to develop and implement a management plan that includes appropriate preventive measures to minimize the risk of impacts on migratory birds (See "Planning ahead to reduce risks to migratory bird nests", PDF: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=50C4FE11-801E-4FE3-8019-B2D8537D76CF>). It is the responsibility of the individual or company undertaking the activities to determine these measures. For guidance on how to avoid the incidental take of migratory birds nests and eggs, please refer to the Avoidance Guidelines (Website: <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1>). The management plan should include processes to follow should an active nest be found at any time of the year.

Disposal of Dredged Material

The project description does not state to where dredged material will be disposed. EC-CWS has the following comments if the proponent intends to dispose of dredged material on beaches.

Care should be taken to not inadvertently create habitat that would be attractive to nesting migratory birds (e.g. ground nesting birds such as Piping Plover, terns or Killdeer) in areas where considerable human activity is likely. While birds may choose to nest in deposits of dredged sediment, as documented in past cases in Atlantic Canada, this type of habitat would only be marginal for chick rearing.

For each year of proposed use, steps should be taken to ensure no nests or fledglings of migratory birds are present in areas where dredge material would be deposited. It is recommended that a professional ornithologist or a highly skilled birder be instructed to survey the entire area and vicinity where dredged materials would be placed for evidence of breeding migratory birds. Should any birds be found to be nesting or rearing chicks in the area, EC-CWS should be contacted for further instructions. In such an event, it is likely that it would be necessary to delay placement of dredge materials until birds have naturally migrated south.

Stockpiles

Certain species of migratory birds (e.g. Bank Swallows) may nest in large piles of dredge spoils left unattended/unvegetated during the breeding season (April 15th to August 15th). To discourage this, the proponent should consider measures to cover or to deter birds from these large piles of unattended soil during the breeding season. If migratory birds take up occupancy of these piles, any industrial activities (including hydroseeding) will cause disturbance to these migratory birds and inadvertently cause the destruction of nests and eggs. Alternate measures will then need to be taken to reduce potential for erosion, and to ensure that nests are protected until chicks have fledged and left the area. For a species such as the Bank Swallow, the period when the nests would be considered active would include not only the time when birds are incubating eggs or taking care

of flightless chicks, but also a period of time after chicks have learned to fly, because Bank Swallows return to their colony to roost.

It should be ensured that stockpiled dredge spoils are not placed in wetlands or watercourses or their buffers, or in the other sensitive habitats (e.g. habitats of Species at Risk or species of conservation concern).

Light Attraction and Migratory Birds

In Atlantic Canada, nocturnal migrants and night-flying seabirds (e.g. storm-petrels) are the migratory birds most at risk of attraction to lights and flares. Attraction to lights at night or in poor visibility conditions during the day may result in collision with lit structures or their support structures, or with other migratory birds. Disoriented migratory birds are prone to circling light sources and may deplete their energy reserves and either die of exhaustion or be forced to land where they are at risk of depredation.

To minimize risk of incidental take of migratory birds due to human-induced light, Environment Canada recommends at minimum the following beneficial management practices:

- The minimum amount of pilot warning and obstruction avoidance lighting should be used on tall structures.
- The use of only strobe lights at night, at the minimum intensity and minimum number of flashes per minute (longest duration between flashes) allowable by Transport Canada, is recommended.
- Using the minimum number of lights possible is recommended.
- The use of solid-burning or slow pulsing warning lights at night should be avoided.
- Lights should completely turn off between flashes.
- Lighting for the safety of the employees should be shielded to shine down and only to where it is needed, without compromising safety.
- Use of LED lights is highly recommended, as LED light fixtures are less prone to light trespass (i.e. are better at directing light where it needs to be, and do not bleed light into the surrounding area), and this property reduces the incidence of migratory bird attraction.

Other Coastal Infrastructure Activities

EC-CWS has the following recommended beneficial management practices for working on shorelines:

- Project staff should not approach concentrations of seabirds, sea ducks or shorebirds.
- Project staff should use the main navigation channels to get to and from the site; and should have well muffled vessels and machinery.
- Project staff should undertake any measures that may minimize or eliminate discharge of oily waste into the marine environment.
- Food scraps and other garbage left on beaches and other coastal habitats can artificially enhance the populations of avian and mammalian predators of eggs and chicks. The proponent should ensure that no litter (including food waste) is left in coastal areas by their staff and/or contractors
- If there is any noticeable change in seabird numbers or distribution at the location during operations, EC-CWS should be notified.

Fuel Leaks

The Canadian Wildlife Service of Environment Canada recommends that the proponent adhere to best practices with regard to fuelling and servicing equipment, using biodegradable fluids, fuel spills and spill contingency plans, to protect migratory birds and their habitats (described in more detail under *Management of Hazardous Materials and Waste*). Furthermore, the proponent should ensure that contractors are aware that under the *Migratory Birds Regulations*, "no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds."

Species at Risk

The following species at risk (as listed on Schedule 1 of the *Species at Risk Act*) may occur within the study area: Olive-sided flycatcher (Threatened), Red Crossbill (*Rufa* subspecies; Endangered) and Ivory Gull (Endangered). Though unlikely to be found within the project footprint, these species may occur within the study area and we request that sightings be reported to EC-CWS.

On-land Disposal and Site Disturbance

In general, impacts related to onshore disturbance should be designed so as to:

- place a priority on pollution prevention;
- facilitate compliance with the general prohibition against the deposit of a deleterious substance into waters frequented by fish (Section 36 of the *Fisheries Act*); and
- respect applicable Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines.

In terms of site disturbance the following 'best practices' should be reflected in efforts to manage impacts so as to respect the above-noted objectives:

- install siltation control structures (e.g. silt curtains, cofferdams, sediment fences) prior to beginning any activities involving disturbance of the site and work along the shoreline if appropriate;
- schedule work to avoid periods of heavy precipitation;
- maintain a vegetated buffer zone, as appropriate and where possible, to protect surface waters;
- immediately stabilize any disturbed areas along the shoreline to prevent erosion;
- monitor the integrity and effectiveness of the siltation control structures daily for the duration of the project; and
- upon completion of the project, only remove silt control structures when suspended sediment concentrations within any contained water have returned to background conditions.

Construction

At the project planning stage, all available construction materials should be considered (e.g., untreated wood, treated wood, pre-cast concrete, corrosive-resistant steel, plastic lumber), and those materials best suited to the conditions and intended use of the structure should be selected. Analysis of the preferred construction material should include a consideration of the full life-cycle of the material (ease of use, design factors associated with the construction material, maintenance requirements, and final disposal). Environmental implications (e.g. storm and ice damage) associated with each life-cycle phase should also be considered. For example, it may not be cost effective to use pressure treated wood for a coastal structure that may be destroyed or damaged by storm surge during the life expectancy of the structure.

Pressure Treated Wood

The long-term impacts of pressure treated wood in aquatic environments remains uncertain, and therefore, EC urges that a precautionary approach be taken. If pressure treated wood (e.g. Chromated Copper Arsenate [CCA]) is determined to be the most suitable material for the project, the proponent is encouraged to incorporate the following standards into the planning and management of construction activities:

- the product should be approved for use by Health Canada's Pest Management Regulatory Agency, which sets out use limitations for all treated wood products under the *Pest Control Products Act*;
- only wood treated according to the 2006 industry publication entitled "Best Management Practices for the Use of Treated Wood in Aquatic and Other Sensitive Environments" should be used (this report and its 2006 amendment and 2007 addendum are available at <http://www.WWPInstitute.org/>). These BMPs ensure that surface pesticide residual is minimized and only small amounts of pesticide are released over the life span of the structure;
- only proper construction techniques should be used (e.g. keep as much of the product above the high water mark as possible, capture sawdust to avoid entry into water bodies);
- the use of pressure treated wood in *freshwater* environments is discouraged; and,
- according to Hutton and Samis (2000), the use limitation restriction for Ammoniacal Copper Quaternary (ACQ) treated wood does not allow its use in aquatic environments when submerged (this report is available online at <http://www.dfo-mpo.gc.ca/Library/245973.pdf>); however, it can be used for above-water applications such as decking.

Concrete Production

Discharges from project work involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials may have a high pH, and work should be planned and conducted to ensure that sediments, debris, concrete, and concrete fines are not deposited, either directly or indirectly into the aquatic environment. Any potentially contaminated water (e.g. exposed aggregate wash-off, wet curing, equipment and truck washing), should be prevented from entering the aquatic environment unless it can be confirmed that this water will not be deleterious to fish or harmful to migratory birds. Containment facilities should be provided at the site as required.

Suspension of Sediments

The disturbance of substrate during in-water activities increases sediment concentrations and turbidity in the water column. This disturbance may alter light penetration, temperature and water chemistry regimes, and may affect photosynthesis. The CCME (Canadian Council of Ministers of the Environment) *Canadian Environmental Quality Guidelines* (1999) recommend that, for 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 and estuarine waters.

Management of Hazardous Materials and Waste

In order to ensure compliance with Section 36 (3) of the *Fisheries Act* and with the *Migratory Birds Convention Act* and related Regulations, provisions for the management of hazardous materials (e.g. fuels, lubricants) and wastes (e.g. contaminated soil, sediments, waste oil) should be identified and implemented so as to ensure the risk of chronic and accidental releases is minimized. Additionally, the following mitigation recommendations are made with respect to the transport,

storage, use and disposal of petroleum products and toxic substances which, when employed, may minimize impacts to nearby receiving waters:

- Even small spills of oil can have very serious effects on migratory birds and fish. Therefore, every effort should be taken to ensure that no oil spills occur in the area. Refuelling and maintenance activities should be undertaken on level terrain, at least 30m from any surface water (including shorelines), on a prepared impermeable surface with a collection system to ensure oil, gasoline and hydraulic fluids do not enter surface waters. Waste oil should be disposed of in an approved manner.
- Biodegradable alternatives to petroleum-based hydraulic fluid for heavy machinery and chainsaw bar oil are commonly available from major manufacturers. Such biodegradable fluids should be considered for use in place of petroleum products whenever possible, as a standard for best practices.
- Drums of petroleum products or chemicals should be tightly sealed against corrosion and rust and surrounded by an impermeable barrier in a dry, water-tight building or shed with an impermeable floor.
- In order to ensure that a quick and effective response to a spill event is possible, spill response equipment should be readily available on-site. Response equipment, such as adsorbents 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. The proponent should indicate how the contingency plans will be prepared, and response measures implemented, to reflect site-specific conditions and sensitivities. In developing a contingency plan, it is recommended that the Canadian Standards Association publication Emergency Planning for Industry CAN/CSA-Z731-03, be consulted as a useful reference.
- The proponent should report any spills of petroleum or other hazardous materials to the Environmental Emergencies 24 Hour Report Line (St. John's 709-772-2083; other areas 1-800-563-9089).

Management of Non-hazardous Waste

Provisions for the disposal of construction wastes (e.g. wood, concrete, steel, etc.) and other refuse should be identified, including opportunities for recycling/reuse. If reuse or recycling opportunities are not available, then the refuse should be disposed of at an approved site.

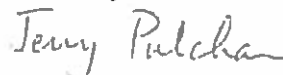
Effects of Weather and Climate on the Project

Over its lifetime, coastal infrastructure will be sensitive to the impacts of wind, waves, storm surge, sea ice and sea level rise. Global average sea level rise projections range from 18 to 59 cm over the next century (Intergovernmental Panel on Climate Change). Some recent trends in research indicate that due to ice sheet melt, this range can be much higher than the projected 59cm by the year 2100. Coastal erosion will add to the effects of sea level rise. Sea level rise and crustal subsidence will exacerbate the effects of winds, waves and storm surges. In addition, climate warming will also lead to an increase in the water-holding capacity of the atmosphere, and more intense precipitation events are likely over the coming decades. This may affect local flooding and infrastructure drainage. In considering the full life-cycle of the project, any sensitivity to climate change should be identified and adjustments made if necessary. It may be more cost-effective to adjust design criteria at this stage than to retrofit in future.

Historical data and local area knowledge should be utilized to determine adequacy of design. Based on an analysis of the potential effects of climate and weather elements, mitigation should be focused on minimizing risk of environmental damage and other accidents. Climatological data can be found at <http://www.climate.weatheroffice.ec.gc.ca/>, and value-added data can be obtained from EC's Climate Services. Contact: 1-900-565-1111 or email: weather.info.meteo@ec.gc.ca. Hydrometric station data, both archived and real-time, are available at <http://www.ec.gc.ca/rhc-wsc/>. The proponent is also encouraged to regularly consult EC's local forecast at <http://www.weatheroffice.ec.gc.ca/>.

I trust that this information will be of assistance in your review of this project. If you wish to discuss these comments or have further questions, please do not hesitate to contact me at 709-772-4313 or via email at jerry.pulchan@ec.gc.ca at your convenience.

Yours truly,



Jerry Pulchan
Environmental Assessment Analyst
Environmental Protection Operations Directorate- Atlantic

Cc: M. Hingston

