



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

P.O. Box 1035  
Dartmouth, NS  
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FEB 06 2004

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Our file *Notre référence*  
03-SCH-015

Mr. Gary Hubbard  
Area Chief  
Fisheries and Oceans Canada  
Small Craft Harbours  
215 Main Street  
Yarmouth, NS  
B5A 1C6

Dear Mr. Hubbard:

RE: **Fisheries Act Section 35(2) Authorization – Proposed Harbour Development (Breakwater, Floating Dock, Dredging and Service Area, Digby County, Nova Scotia)**

This is in reference to your *Application For Works or Undertakings Affecting Fish Habitat*, to construct a breakwater, to construct a service/ parking area, to construct a floating dock, and to dredge 2.0 meters below chart datum at Tiverton, Digby County, Nova Scotia which may result in the harmful alteration, disruption, or destruction of fish habitat (HADD).

In our assessment of impacts on fish habitat from the proposed undertaking we have considered the following:

- Application for Authorization for Works or Undertakings Affecting Fish Habitat, for works proposed in Tiverton, Digby County, Nova Scotia, submitted by Mr. Gary Hubbard, on behalf of the Department of Fisheries and Oceans (DFO), Small Craft Harbours, August 20, 2003.
- Environmental Screening for Harbour Development (Breakwater, floating Dock, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.
- Small Craft Harbours Branch, Maritimes Region, Environmental Protection Plan as described in Appendix E of the Environmental Screening for Harbour Development (Breakwater, floating Dock, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.

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Mr. Gary Hubbard

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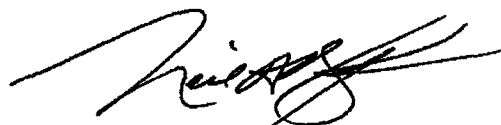
- Small Craft Harbours Branch, Maritimes Region, Letter of Intent, as described in Appendix F of the Environmental Screening for Environmental Screening for Harbour Development (Breakwater, floating Dock, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 9, 2004.
- Blasting Plan entitled Archibald Drilling and Blasting (1986) Ltd., as described in Appendix G of the Environmental Screening for Environmental Screening for Harbour Development (Breakwater, floating Dock, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.

Based on the above, DFO has determined that the works proposed in Tiverton, Digby County, Nova Scotia will cause the harmful alteration, disruption, or destruction of fish habitat. A HADD is any change in fish habitat that reduces its ability to support one or more life processes of fish. The 1998 DFO publication: "A Decision Framework for the Determination and Authorization of Harmful Alteration, Disruption or Destruction of Fish Habitat" provides information on this process.

Your request for *Applications For Works or Undertakings Affecting Fish Habitat* dated August 20, 2003 is therefore deemed appropriate. Attached please find the Authorization, granting authorization for works or undertakings affecting fish habitat as described in your application.

None of the foregoing should be taken to imply Authorization of these undertakings in accordance with any Section of the *Fisheries Act* other than Section 35. Also note that Authorization under the *Fisheries Act* does not release the proponent from the requirements of any other federal, provincial, or municipal legislation.

Yours sincerely,



Neil A. Bellefontaine  
Regional Director-General  
Maritimes Region

Attachment

cc: T. Wheaton  
M.B. Smith  
T. Rose

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C0616-002



**AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT /  
AUTORISATION POUR DES OUVRAGES OU ENTREPRISES MODIFIANT  
L'HABITAT DU POISSON**

**03-SCH-015**  
Authorization No./N° de l'autorisation

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**Authorization issued to:  
Autorisation délivrée à :**

**Name:** Department of Fisheries and Oceans, Small Craft Harbours Branch

**Attention:** Mr. Gary Hubbard

**Address:** Small Craft Harbours Branch SWNB  
215 Main Street  
Yarmouth, NS  
B5A 1C6

**Telephone:** (902) 742-6452

**FAX:** (902) 742-0876

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**Location of Project/Emplacement du projet**

Tiverton, (DFO – SCH Harbour Code No. 1323) Digby County, Nova Scotia; specifically can be found at latitude 44°23' 00"N and longitude 66°13' 00"W (Datum NAD 83).

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**Valid Authorization Period/Période de validité**

**From/De:** February 5, 2004      **To/À:** March 31, 2009

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**Description of Works or Undertakings (Type of work, schedule, etc.)  
Description des ouvrages ou entreprises (Genre de travail, calendrier, etc.)**

The harmful alteration, disruption, or destruction of fish habitat hereby authorized consists of infilling 15231.2 square meters and dredging 5213.8 square meters inside Petit Passage. The infill is required to construct a new breakwater and service/parking area. The dredging is required to attain a depth 2.0 meters below chart datum. The scope of the Authorization for this project is limited to the footprint of the actual infill area and the footprint of the actual dredge area.

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Description of Works or Undertakings (Type of work, schedule, etc.)  
Description des ouvrages ou entreprises (Genre de travail, calendrier, etc.)

The proposed harbour development project will be broken into three phases with construction scheduled over four years. Project components are listed below:

- (Phase I) - Construction of breakwater and installation of 7 floating docks;
- (Phase II) - Dredging of the basin (including blasting of Class A material within the basin), installation of remaining floating docks and construction of service/parking area; and
- (Phase III) - Construction of marginal wharf connected to the Provincial ferry wharf.

The first phase of the proposed project is the construction of an armourstone breakwater and the installation of 7 floating docks. The breakwater will extend 149 m east and then 69 m southward. The length of the proposed breakwater is approximately 213 meters. The breakwater will be 5 meters wide at the crest and approximately 50 meters wide at the base, depending on water depth.

The breakwater will be constructed of clean rock obtained from an approved quarry, and will consist of a 0.2 – 100 kg core stone surrounded by 2 layers of 200 - 800 kg filter stone, 1.5 meters thick. The north side (seaside and crest) will be protected with 2 layers of 8-10 tonne armourstone and a single layer of 6-8 tonne armourstone will protect the south side. Approximately 40,000 tonnes of armourstone, 25,000 tonnes of filter stone and 93,000 tonnes of core stone will be used in the construction of the breakwater. No dredging or blasting of Class A material (rock) within the new basin will be conducted in this phase. Seven floating docks will be installed, connected with an access ramp and secured to the breakwater with strong arms. Armourstone protection will extend along the shoreline for a length of approximately 120 meters to protect the neighboring property (in agreement with the property owner). The rock will be placed above the high water mark.

The second phase of the proposed project is dredging of the basin (including blasting of Class A material within the basin), the installation of remaining floating docks, and the construction of the service/parking area. An excavator will be used in the proposed land-based dredging. The anticipated dredge volume is approximately 10,000 cubic meters. Approximately 6000 cubic meters of the total dredge volume is anticipated to be Class A material (or rock) and approximately 4000 cubic meters of the total dredge volume is anticipated to be Class B material. Dredging of the new basin will consist of blasting of bedrock bottom to attain desired dredge depth. The dredge material will be used to form the proposed service/parking area (also proposed to be constructed in Phase II).

The six remaining floating docks will be installed, attached with strong arms that will be secured to concrete anchors within the service/parking area and connected with an access ramp. The floating docks will allow for maximum berthing capacity of 32 vessels in the proposed basin.

The proposed service/parking area will extend along the shoreline of the new basin (approximately 120 m). This infill (service/parking area) will be constructed of dredged material and rock fill and two layers of 500-1000 kg filter stone at a 1:25 to 1.0 slope. This service/parking area will provide parking space for up to 70 vehicles. Any remaining dredge material that cannot be utilized in the construction of the service/parking area will be disposed on land at a disposal site suggested by the Contractor, and approved by the Nova Scotia Department of Environment and Labour (NSDEL).

The final phase (Phase III) of the project involves the construction of a marginal wharf connected to the Provincial Ferry wharf. A marginal wharf will be constructed of timber piles tied into the existing Provincial Ferry wharf, and will serve as additional service area for loading and unloading. The marginal wharf will be finished with a concrete deck.

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**AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT /  
AUTORISATION POUR DES OUVRAGES OU ENTREPRISES MODIFIANT L'HABITAT  
DU POISSON**

03-SCH-015

Authorization No./N° de l'autorisation

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**Conditions of Authorization/Conditions de l'autorisation**

1. The conditions of this Authorization notwithstanding, should the above works or undertaking, due to weather conditions, different soil or other natural conditions, or for any other reason, appear, in the opinion of the Department of Fisheries and Oceans (DFO) likely to cause greater impacts than the parties previously contemplated, then DFO may direct the Proponent, and its agents, and contractors, to suspend or alter works or other activities associated with the project, to avoid or mitigate adverse impacts to fisheries resources. DFO may also direct the Proponent and its agents, and contractors, to carry out at the Proponent's expense any works or activities deemed necessary by DFO to avoid or mitigate further adverse impacts to fisheries resources. In circumstances where DFO is of the view that greater impacts may occur than were contemplated by the parties DFO may also modify or rescind this Authorization. If the Authorization is to be changed the Proponent will be given an opportunity to discuss any proposed modifications or rescission.
2. Conditions that relate to the proponent plan:
  - 2.1 The proponent confirms that all plans and specifications relating to this Authorization have been duly prepared and reviewed by appropriate professionals working on their behalf. The proponent acknowledges that (s)he is solely responsible for all design, safety and workmanship aspects of all works associated with this Authorization.
  - 2.2 The construction must comply with those criteria as identified within this Authorization. The harmful alteration, disruption, or destruction of fish habitat other than that specifically identified within this Authorization is not permitted.
  - 2.3 Works will be conducted following the practices outlined in the following:
    - 2.3.1 Application for Authorization for Works or Undertakings Affecting Fish Habitat, August 20, 2003.
    - 2.3.2 Environmental Screening for Harbour Development (Breakwater, Floating Docks, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004, Project # 308017, including all figures therein.
    - 2.3.3 Environmental Protection Plan, Appendix E of the Environmental Screening for Harbour Development (Breakwater, Floating Docks, Dredging and Service Area)

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at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.

2.3.4 Blasting plan, dated February 3, 2004, Appendix G of the Environmental Screening for Harbour Development (Breakwater, Floating Docks, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.

2.3.5 All requirements contained in the contract re: Public Works and Government Services Canada, project number 308017– Harbour Development (Breakwater, Floating Docks, Dredging and Service Area, Tiverton, Digby County, Nova Scotia.

3. Conditions that relate to the mitigation of the potential harmful alteration, disruption, or destruction of fish habitat. The following measures shall be implemented.

- 3.1 All mitigation described within the Environmental Screening for Harbour Development (Breakwater, Floating Docks, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004, including tables 1, 2, 3, 4, and 5 (Appendix D) of that document.
- 3.2 All mitigation described within the Environmental Protection Plan (EPP), Harbour Development (Breakwater, Floating Dock and Service Area Construction and Basin Dredging) Tiverton, Digby County, Nova Scotia of the Environmental Screening for Harbour Development (Breakwater, Floating Docks, Dredging and Service Area) at Tiverton, Digby County, Nova Scotia, dated January 2004, submitted February 3, 2004.
- 3.3 All mitigation described in the document entitled FACTSHEET Blasting- Fish and Fish Habitat Protection (See Appendix A).
- 3.4 All work shall be conducted in strict accordance with the conditions of approval in the permits issued under the authority of the Nova Scotia Department of Natural Resources, the Nova Scotia Department of the Environment and Labour, Environment Canada, and any other regulatory authorities.
- 3.5 The Proponent will ensure that all persons involved with the project are aware of the terms and conditions of this Authorization and will comply with them.

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- 3.5.1 The shoreline, and approach slopes, disturbed by any activity associated with the proposed work shall be permanently restored and stabilised as soon as possible following initial disturbance.
- 3.5.2 Provide all measures and / or actions presented in the document, Environmental Protection Plan (EPP) Harbour Development (Breakwater, Floating Dock and Service Area Construction and Basin Dredging) Tiverton, Digby County, Nova Scotia prepared for DFO-SCH by Public Works and Government Services Canada (PWGSC), Halifax, NS, January 2004.
- 3.5.3 The proponent must arrange an onsite pre-construction meeting with Fisheries and Oceans, Habitat Management Division, Area Habitat Chief, Southwest Nova Scotia, to review the conditions of this Authorization, as well as, the requirements of the Nova Scotia Department of Natural Resources, the Nova Scotia Department of Environment and Labour approval, and any other regulatory authority.
- 3.5.4 Any changes identified during the pre-construction meeting, which will alter any of the conditions of this Authorization and/or modifications of supporting documents and plans will require the specific written approval of Fisheries and Oceans, Habitat Management Division, prior to the commencement of any construction onsite.
- 3.5.5 Any modifications required for the blasting activities, which will alter any of the conditions of this Authorization and/or modifications of supporting documents and plans will require the specific review and written approval of Fisheries and Oceans, Habitat Management Division, prior to commencement of any blasting activities.
4. Conditions that relate to the compensation for the loss of twenty thousand four hundred forty five (20,445) square meters of fish habitat.
- 4.1 The proponent shall satisfy the commitment to provide sixty thousand three hundred thirty five (61,335) square meters of fish habitat compensation, as outlined in the letter of intent (Mr. Gary Hubbard DFO-SCH to Ms. Tammy Rose DFO-HMD) dated January 9, 2004.

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- 4.2 The compensation plan must be submitted and approved by Fisheries and Oceans, Habitat Management Division, no later than March 31, 2004. The compensation plan must be developed according to the document entitled Recommended Format for the Fish Habitat Compensation Plan (see Appendix B).
- 4.3 The compensation plan will be reviewed against the *Policy for the Management of Fish Habitat, 1986* "hierarchy of preferences".
- 4.4 All compensation work shall be completed to Fisheries and Oceans, Habitat Management Division's satisfaction by November 1, 2004.
- 4.5 The proponent is required to submit to Fisheries and Oceans, Habitat Management Division, an 'as-built' report within 90 days of implementation of the fish habitat compensation measures. The 'as built' report must confirm the dimensions of the alteration; provide an outline of the construction methodology, summary of the mitigation and monitoring, details on the implementation of the fish habitat compensation measures and provide dated photographs of the completed project and completed compensation project.
- 4.6 The proponent shall submit monitoring reports to Fisheries and Oceans, Habitat Management Division, within 1 year of completion of the compensation project. The monitoring reports should include details on the effectiveness of the fish habitat compensation measures.
- 4.7 All monitoring reports are to be submitted to the Habitat Management Division, Maritimes Region, at the following address:

Habitat Management Division  
Department of Fisheries and Oceans  
P.O. Box 1006  
Dartmouth, NS  
B2Y 4A2

5. Written notification of the commencement of works or undertakings shall be provided to DFO (Area Habitat Chief, Southwest Nova Scotia) seven days prior to the initiation of these works or undertakings.
6. The proponent is required to contact DFO (Area Habitat Chief, Southwest Nova Scotia) 14 days prior to commencing any blasting activities prior to Phase II of this project.



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7. Any deviation from the approved documents and plans, the construction schedule, the mitigation measures or the compensation plans stated above must be discussed and approved in writing by Fisheries and Oceans, Habitat Management Division prior to implementation.

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The holder of this authorization is hereby authorized under the authority of Section 35(2) of the *Fisheries Act*, R.S.C., 1985, c. F. 14, to carry out the work or undertaking described herein. This authorization is valid only with respect to fish habitat and for no other purposes. It does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

Failure to comply with any condition of this authorization may result in charges being laid under the *Fisheries Act*.

This authorization form should be held on-site and work crews should be made familiar with the conditions attached.

Le détenteur de la présente est autorisé en vertu du paragraphe 35(2) de la Loi sur les pêches, L.R.C. 1985, ch. F. 14, à exploiter les ouvrages ou entreprises décrits aux présentes. L'autorisation n'est valide qu'en ce qui concerne l'habitat du poisson et pour aucune autre fin. Elle ne dispense pas le requérant de l'obligation d'obtenir la permission d'autres organismes réglementaires concernés ou de se conformer à leurs exigences.

En vertu de la Loi sur les pêches, des accusations pourront être portées contre ceux qui ne respectent pas les conditions prévues dans la présente autorisation.

Cette autorisation doit être conservée sur les lieux des travaux, et les équipes de travail devraient en connaître les conditions.

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Date of issuance: 6/2/04.Approved by: 

**Mr. Neil A. Bellefontaine**  
**Regional Director-General**  
**Maritimes Region**

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