

PMD 13-P1.11A

File / dossier : 8.01.07
Date: 2013-08-27
Edocs: 4191257

Supplementary Information

Presentation from Fisheries and Oceans Canada

In the Matter of

Ontario Power Generation Inc.

Proposed Environmental Impact Statement
for OPG's Deep Geological Repository
(DGR) Project for Low and Intermediate
Level Waste

Joint Review Panel

September 16 to October 12, 2013

Renseignements supplémentaires

Présentation de Pêches et Océans Canada

À l'égard de

Ontario Power Generation Inc.

Étude proposée pour l'énoncé des incidences
environnementales pour l'Installation de
stockage de déchets radioactifs à faible et
moyenne activité dans des couches géologiques
profondes

Commission d'examen conjoint

Du 16 septembre au 12 octobre 2013



Deep Geologic Repository

Joint Review Panel

Fisheries and Oceans Canada

Fish and Fish Habitat Impact Assessment

Presented by: Julie Dahl - Manager, Regulatory Reviews
Fisheries Protection Program, DFO

Date: October 2013

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Presentation Overview

- Fisheries and Oceans Canada (DFO) Regulatory Role
- Project Interactions with Fish and Fish Habitat
- Ecological Risk Assessment
- Recommendations

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Fisheries & Oceans Canada - Regulatory Responsibilities

The Canadian Constitution provides the federal government with the authority to:

- Manage coastal and inland fisheries (DFO)
- Administer the *Fisheries Act* (shared between DFO and EC)
- Conduct fisheries research (DFO-Science)

- Responsibilities under the *Species at Risk Act* (enacted 2002)

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Canada



Fisheries & Oceans - Regulatory Role

- Broad departmental mandate
 - Marine safety, aquaculture, fisheries management, habitat management, oceans management, aquatic species at risk, federal EA
- Fisheries Protection Program (FPP) departmental regulatory lead in Environmental Assessment processes & authorization processes under the *Fisheries Act*
- FPP coordinates with the Species at Risk Program ⁴

Canada



Fisheries and Oceans Canada *Fisheries Act* Mandate

- Responsible for ensuring that Canada's fisheries resources are managed and protected
 - Conservation and protection of fish habitat
 - Fisheries management, however, fisheries management responsibilities delegated in some jurisdictions
- Applies to all fishing zones, territorial seas and inland waters
- Binding on all Canadians, including all levels of government

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Canada



Federal-Provincial Agreements Re: *Fisheries Act*

- Shared fisheries resource responsibilities with provincial jurisdictions
- Within Ontario, the federal government has delegated the management of fisheries to the Province while maintaining the legislative authority to protect fish habitat and waters frequented by fish.

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Canada



Fisheries and Oceans Canada Mandate The *Fisheries Act*



Defines Fish as including:

“shellfish, crustaceans, marine animals and any parts of fish, shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals”

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Fisheries and Oceans Canada Mandate The *Fisheries Act*

Defines Fish Habitat as:

“spawning grounds and nursery, rearing, food supply, migration and any other areas on which fish depend directly or indirectly in order to carry out their life processes”



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Fisheries and Oceans Canada Mandate The *Fisheries Act*

Harmful Alteration or Disruption, or Destruction of fish habitat, prohibited under subsection 35(1), unless authorized via mechanisms under subsection 35(2).

Killing of fish by any means other than fishing, prohibited under subsection 32(1), unless authorized via mechanisms under subsection 32(2).

Fish Guards or screens may be required under subsection 30(1) to prevent passage of fish into a water intake, ditch, channel or canal in Canada used to conduct water from any Canadian fisheries waters for irrigating, manufacturing,⁹ power generation, domestic or other purposes.



Changes to the *Fisheries Act*

- Amended in two phases: June 29, 2012 and December 14, 2012
- Not all in force
- Significant change will be new section 35 prohibition:

No person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or aboriginal fishery, or to fish that support such a fishery.



Changes to the *Fisheries Act*

- Changes to the *Fisheries Act* are not anticipated to have implications for DFO's review of the DGR proposal.
- Review of the DGR proposal was undertaken pursuant to the current fish and habitat protection provisions stated in the Act
- Provisions: s.35 prohibition of harmful alteration or disruption, or destruction of fish habitat; s. 32 prohibition on killing of fish

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Fisheries and Oceans Canada Mandate *Species at Risk Act*

- Responsible for aquatic species at risk (fish and marine plants) except individuals under the jurisdiction of Parks Canada.
- Act contains prohibitions against:
 - killing, harassing, or collecting individuals species
 - damaging or destroying the residence of a listed species
 - destroying Critical Habitat as defined in recovery plans

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Species at Risk Act (SARA)

- There are no aquatic species at risk to which the SARA would apply on the proposed DGR construction site or adjacent to the site.

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Project Interactions with Fish and Fish Habitat

- Site Preparation
- N-S Railway Ditch crossing
- Stream C and Lake Huron
- On-site Blasting During Construction

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Project Interactions with Fish and Fish Habitat

Site Preparation

- Re-grading and clearing of the construction site will result in a 0.8% reduction of surface water flow to Stream C.
- DFO concludes that this small reduction will not be detectable at Stream C within normal seasonal variation in surface flows.
- No prohibited impacts to fish or fish habitat are anticipated.

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Project Interactions with Fish and Fish Habitat

N-S Railway Ditch

- New culvert crossing will be constructed within the north-south railway ditches. Warm-water bait fish and Burrowing Crayfish noted to occur.
- DFO concludes that by following proposed mitigation measures impacts to fish and fish habitat will be negligible.
- No prohibited impacts to fish or fish habitat anticipated.

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Project Interactions with Fish and Fish Habitat

Stream C and Lake Huron

- Stream C located a minimum of 500 m from edge of DGR construction site. Stream C flows into Lake Huron.
- DFO concludes that no construction activities proposed near Stream C or Lake Huron would disturb fish habitat in these waterbodies.
- No prohibited impacts to fish or fish habitat anticipated.

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Project Interactions with Fish and Fish Habitat

On-Site Blasting during Construction

- Blasting to occur at distances away from water that are greater than those identified in DFO's guidelines for the acceptable use of explosives near water.
- DFO does not anticipate any impacts to fish and fish habitat due to blasting.
- No prohibited impacts to fish or fish habitat anticipated.

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DFO Recommendation

- Mitigation measures for the North-South railway crossing be implemented during construction.
 - Embed culverts below the bed of watercourses
 - Isolate culvert sites during construction
 - Work within in-water construction timing windows. Construction should occur between July 1 and September 30th
 - Re-vegetate banks upon completion of construction
 - Install sediment and erosion control measures during construction

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DFO Conclusions

Impacts to fish and fish habitat from various components of the proposed project including site preparation and construction, and blasting are anticipated to be negligible.

Implementation of proposed mitigation measures for culvert crossings will mitigate impacts to fish and fish habitat. No approvals or authorizations from Fisheries and Oceans Canada will be required.

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