

Backgrounder: Genetically Modified Salmon Production in Rollo Bay, PEI

July 26, 2017

In 2013, then-Minister of Environment Leona Aglukkaq posted a notice¹ in the Canada Gazette indicating that the government had conducted a scientific risk assessment of genetically modified Atlantic salmon, known as “AquaAdvantage Salmon”, under section 108 of the *Canadian Environmental Protection Act, 1999* (CEPA). The assessment was conducted without public notification or consultation.

The notice set out a list of activities that are permitted in Canada with respect to this genetically modified salmon.

Before the notice was released, the Canadian Biotechnology Action Network (CBAN) wrote to the government asking whether the assessment was being conducted. The government responded, indicating that the very fact of whether or not an assessment was taking place was confidential.

What is AquaAdvantage Salmon?

AquaAdvantage Salmon is a genetically modified Atlantic salmon organism developed by AquaBounty Technologies (now a majority-owned subsidiary of Intrexon). It contains genetic material transferred from two other species — an ocean pout and Chinook salmon. The GM salmon allegedly grows to adult size more quickly than conventional Atlantic salmon. It is the first genetically modified animal in the world approved for human consumption.

On April 30, 2013 AquaBounty filed a notification under CEPA stating its intent to manufacture GM salmon eggs at an existing research facility near Souris, PEI and to export up to 100,000 of these eggs annually to be grown out in Panama. Experts with Fisheries and Oceans Canada (DFO) conducted a risk assessment on the manufacture in Canada of GM salmon eggs.² The assessment was clear that if these genetically modified fish to be grown to maturity in Canada, a further risk assessment would be needed to ensure protection of the Canadian environment and biodiversity.

As recognized in the 2013 DFO risk assessment, although the GM salmon eggs are produced to be all-female and sterile, up to 5% could be fertile. The DFO’s risk assessment noted that there is no information on the reproductive behavior of female GM salmon — and characterized this knowledge gap as “significant”.

AquaBounty requested and was granted a waiver of information requirements pursuant to section 106(8)(b) of CEPA. Then-Minister Aglukkaq granted a waiver of the requirement to provide data from a test conducted to determine the GM salmon’s toxicity or invasiveness. She granted

¹ See Significant New Activity Notice No. 16528 available online: <http://www.gazette.gc.ca/rp-pr/p1/2013/2013-11-23/html/notice-avis-eng.html>.

² DFO. 2013. Summary of the Environmental and Indirect Human Health Risk Assessment of AquaAdvantage Salmon. DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/023. Available online: <http://waves-vagues.dfo-mpo.gc.ca/Library/361091.pdf>.

this waiver on the basis that the organism would be manufactured and contained at the existing Souris, PEI facility so as to satisfactorily protect the environment.

Legal Challenge

Ecology Action Centre (EAC) and Living Oceans Society (LOS), represented by lawyers from Ecojustice, brought a legal challenge against the November 2013 notice. Although they were not successful on all grounds, the court agreed with EAC and LOS that despite the very broad wording of the 2013 notice, AquaBounty can use and manufacture its GM salmon *only* at its Souris, PEI facility.³ This restriction flows from the waiver of information requirements it was granted. To use or manufacture GM salmon elsewhere, AquaBounty must submit a new notification under CEPA.

Proposed Commercial Production in Rollo Bay, PEI

On June 10, 2016 the PEI government approved AquaBounty's redevelopment of an aquaculture facility in Rollo Bay, PEI, where the company proposed to rear only non-GM Atlantic Salmon broodstock. On April 12, 2017 AquaBounty submitted a proposal to the PEI Communities, Land, and Environment Department for commercial production of GM salmon at this new Rollo Bay facility.⁴ That proposal has now been approved despite concerns raised by a number of local groups.

Media reports indicated that no new federal assessment was needed for this project to proceed.⁵ The Federal Court affirmed that CEPA requires AquaBounty to submit a new notification before using or manufacturing its GM salmon at any facility other than its existing facility near Souris, PEI. That's why a coalition of 12 environmental groups wrote to the Minister of Environment and Climate Change, Minister of Health, and Minister of Fisheries, Oceans and the Canadian Coast Guard asking that they ensure compliance with CEPA by ensuring GM salmon are not used or manufactured outside of the Souris, PEI facility until AquaBounty submits a new notification for the purposes of a scientific risk assessment under section 108 of CEPA.

The groups are also urging the Ministers to ensure there are meaningful opportunities for public consultation as part of any new risk assessment process, given significant interest in this issue on the part of citizens, environmental and civil society groups, and recreational and commercial fishing organizations. To date there has been no consultation with Canadians on the manufacture or production of GM fish in this country.

³ *Ecology Action Centre et al v Canada*, 2015 FC 1412 at paras 67-69, 77. Available online: <https://www.canlii.org/en/ca/fct/doc/2015/2015fc1412/2015fc1412.html?resultIndex=1>.

⁴ For information regarding the proposal, see, e.g. <https://www.princeedwardisland.ca/en/information/communities-land-and-environment/redevelopment-facility-aqua-bounty-canada-ltd-eia>.

⁵ See, e.g. <http://www.gazette.gc.ca/rp-pr/p1/2013/2013-11-23/html/notice-avis-eng.html>.