

SEP 18 2017

Reg No. 1874

Mr. Bill Bryden
Newfoundland and Labrador Coalition for Aquaculture Reform (NLCAR)
PO Box 63
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Dear Mr. Bryden:

Re: Appeal of Decision on Harbour Breton Fish Meal Plant

I write in reply to your appeal of July 12, 2017 regarding above. The appeal is pursuant to section 107 of the *Environmental Protection Act (EPA)* concerning the release of the project (following registration stage review) from further environmental assessment (EA) on May 30, 2017 subject to the following conditions, listed below. A copy of the release letter, which states all conditions of release, is included for your convenience, see attached.

Please be advised your appeal (31 pages) was sent to several key Provincial government agencies, including the Pollution Prevention Division, Department of Municipal Affairs and Environment, and Fisheries and Aquaculture Branch, Department of Fisheries and Land Resources, and Federal government agencies, including the Department of Fisheries and Oceans Canada and Environment and Climate Change Canada. The public was invited to provide comments on the appeal from July 26 to August 22, 2017 as announced in the Environmental Assessment Bulletins of July 26 and August 15, 2017 (extension). A copy of the appeal was posted on our website: www.ecc.gov.nl.ca/env_assessment/projects/Y2016/1874/index.html. There were no public comments received on the appeal for consideration in my decision.

Please be advised that after carefully considering all of the input from the above review there are no changes to my original decision of May 30, 2017 and the appeal is dismissed. In reply to questions and statements raised in your appeal, I offer the following answers and comments. I trust you will find this information helpful to you and the reasons in forming my decision to release the project subject to conditions.

(1) Project Description and Registration Requirements

Appeal:

The appeal states that registering the rendering facility independently from aquaculture production operations was not appropriate, and references the *Environmental Assessment Regulations*, section 29, applicable to aquaculture.

Reply:

The proponent describes the project as follows:

THE UNDERTAKING:

“The current Atlantic salmon harvest is 20,000 tons and it is anticipated that the harvest will increase to more than 30,000 tons within 3-5 years. Thus, there is a requirement for a practical and value added solution to the > 6,000 tons of salmon by-products and morts. Land filling this volume is not a solution and would create environmental issues. Ensiling is not an end solution- certainly not for this volume. The only solution is a fish meal and oil rendering plant. We propose to build a modern rendering plant right on top of the foundation where the old ground fish rendering plant was located.”

DESCRIPTION OF UNDERTAKING:

“Location - The rendering plant will be located adjacent to the processing plant, as was the case when Harbour Breton had a large ground fish operation, complete with a fish meal plant to accommodate the waste from its ground fish filleting operation. This is the ideal location as we can feed the rendering plant with a smooth and continuous flow of fresh product. This even flow will permit us to right size the equipment vs over sizing. The processing of right off the line byproducts also makes it easier to handle the malodors as the product is not left around to become rancid. The picture below shows the ideal past and present rendering plant location. It also indicates the location and proximity to the ocean. The closest residential building is the Barry Group Company House.”

Stick Water

“The water will be discharged into the flushing zone of the harbor through a HDPE pipe after being treated. (See appendix 1) Appendix 3 shows that our discharge water is far away from even the closest fish farm”

Physical Features / Construction

“the plan is to use an existing 170ft x 104ft building on the Barry Group property that is currently being occupied by Northern Harvest. This is the location of the former fish meal plant with a modern steel building on top of it (Refer to Appendix 2). A new concrete floor would be poured with perimeter drains flowing to the water treatment system. All equipment would be elevated for ease of cleaning. The existing building would be "sealed up". This building is approximately 400ft away from the closest residence. With the exception of a 50ft diameter water treatment holding tank, which would be constructed between this building and the wharf, no other land will be affected. Existing roads, water lines, vegetation, habitat, etc. will not be affected. Refer to Topographical Maps in Appendix 1. Construction on the building would start in April 2017 and be ready to install equipment in the fall of 2017.”

A copy of the registration document (No. 1874 – Harbour Breton Fish Meal Plant) is available on our web site at http://www.mae.gov.nl.ca/env_assessment/projects/Y2016/1874/index.html. The project was registered under the *Environmental Assessment Regulations* section 37(1)(d) which states that “An undertaking that will be engaged in seafood product preparation and packaging, shall be registered.”, and was not registered under Section 29 (Aquaculture). The

Riverhead Fish Meal Plant (Reg. 62), Harbour Breton FPI Fishmeal Plant (Reg. No. 233), and Jackson's Arm Fish Meal Plant (Reg. 561), similar undertakings, were also registered as single undertakings, independent for other processes within the Aquaculture industry and neither required further environmental assessment passed the registration stage review.

Only the fish meal plant was required to be reviewed and not the existing aquaculture industry in Harbour Breton (ie. salmon processing plant and aquaculture marine cage sites). The registration project description clearly identifies this as a new plant to process salmon meal and oil and not the existing processing plant and aquaculture industry in the bay it would be reliant on for raw material to process. The project was defined correctly as a shore based building with an outfall discharging into the harbor. The waste streams coming from the plant were captured and accessed correctly. Your reference to a "hatchery" (page 3, last paragraph of the appeal submission) is not valid as a hatchery is not part of this undertaking.

The definition of Aquaculture used in this appeal relates to the *Aquaculture Act* and not the *EPA*. There is no definition for aquaculture under the *EPA* or the *Environmental Assessment Regulations*. The Department of Fisheries and Land Resources has determined that the facility does not meet the definition of aquaculture as per the following from the *Aquaculture Act*:

"2. *In this Act*

(a) "*aquaculture*" means

(i) *the farming of fish, molluscs, crustaceans, aquatic plants and other aquatic organisms with an intervention in the rearing process to enhance production by activities such as regular stocking, feeding, and protection from predation, and includes following and processes to mitigate environmental degradation and the placement of necessary gear and equipment, and*

(ii) *the stocking of fish by private facilities for the purpose of fishing by customers,"*

The Department of Fisheries and Land Resources is of the position that the undertaking is independent of any aquaculture facility. In the *Aquaculture Act*, an aquaculture facility is defined as:

"(b) "*aquaculture facility*" means

(i) *a site where aquaculture is being carried on, or*

(ii) *a parcel of land with respect to which an application has been made to carry on aquaculture and includes all structures, machinery, equipment and tools on the site or parcel of land,"*

The undertaking will render salmon offal from an existing, operational, and adjacent processing plant in Harbour Breton as an alternative to the current practice of shipping the salmon offal out-of-province to Nova Scotia for processing. There is no additional undertaking that is excluded from the proposal.

The registration was sent to our EA screening committee, which is composed of over 20 scientific and technical experts from provincial and federal departments and agencies, and none of them requested the project proceed to an additional level of EA (i.e. Environmental Preview Report or Environmental Impact Statement). We received four public letters regarding the project, one of which was in support of the project, and the other three raised concerns which were addressed in the registration stage review and subsequent conditions of release.

(2) Plant Effluent Discharge Concerns

Appeal:

The appeal provides arguments that the Minister of Municipal Affairs and Environment erred in releasing the project from further EA based on insufficiency of the proponent's biosecurity safe guards, lack of proposed wild fish monitoring, and abundance of current knowledge on finfish pathogens. It argues that the undertaking will introduce new and potentially devastating sources of finfish pathogens.

Reply:

Appropriate mitigation and monitoring will be done by government agencies for the fish meal plant to control both liquid (effluent, end of pipe) and solid (disposal) waste leaving this secondary processing facility. The government agencies described below have appropriate regulations and monitoring in place to ensure the biosecurity of the bay and the aquaculture industry which the plant will service, and protection to the natural environment including wild fish stocks that live in the bay.

Permitting and regulatory requirements that the rendering facility must be designed to and in compliance with include those from the Pollution Prevention Division (*Environmental Control Water and Sewage Regulations*), Service NL (waste may only be sent to approved waste disposal sites), and the Department of Fisheries and Land Resources, as per their legislated regulations. Additionally conditions of release from EA were requested by the Department of Fisheries and Land Resources to ensure that the requirement for appropriate biosecurity measures were included in the design and operation of the facility to a standard established for fish processing facilities in the Coast of Bays. As conditions of release, these powers will now be adopted. These measures are not new; they apply to the recently upgraded salmon processing facility in Harbour Breton adjacent to the proposed rendering facility. Due to the regulatory classification of a rendering facility versus a fish processing facility or fish farm, it was necessary to use the EA conditions of release as an alternative to the *Fish Inspection Act* and *Aquaculture Act* to ensure these best practices are reflected in the project release from EA.

Rendering further processes, through thermal separation, salmon offal that is already generated at a licensed fish processing facility. Rendering does not result in the creation of new salmon offal. By virtue of its purpose, salmon offal is the rendering facilities feedstock and not waste material. Rendering also deactivates biological pathogens by virtue of high heat cooking. Rendering has been approved by the Canada Food Inspection Agency (CFIA) as a means of deactivating Infectious Salmon Anaemia virus (ISAv) in salmon in Newfoundland and Labrador and has been utilized at other facilities. There is no basis as to how a rendering operation will introduce new and potentially devastating sources of finfish pathogens. Rendering facilities (including those processing fish by-products) must also obtain and operate under a permit issued by the CFIA, and be subject to routine inspection by the CFIA. The end product produced by the plant (meal and oil) is regulated by the CFIA on where it can be sold.

As a condition of release, a precautionary provision related to offal disposal was required that is consistent with fish processing facilities as per the *Fish Inspection Operations Regulations*; however, a circumstance is not foreseen where the rendering facility will seek approval from the

federal Environment Canada and Climate Change to dispose of offal or be able to obtain permission to dispose at sea.

No effluent will be discharged to the bay without first undergoing wastewater treatment which includes disinfection with hypochlorite and subsequent neutralization. As a condition of release, the rendering facility must demonstrate efficacy of wastewater treatment by means of a phage test. A phage test is a validated wastewater treatment method used to yield a log reduction in viral particles, which does not entail mechanical removal of organisms based on size. Standard in rendering, the process includes multiple material recovery stages to recover the largest possible yield of solids to produce fish meal. Activated sludge from the facilities aerobic treatment stage will be serviced via standard sludge disposal services in the province, including special disposal requirements if under the Hazardous Waste Regulations. These service options are in place with the necessary Certificates of Approval.

The appeal references the approval of blood filters and settling ponds. This is incorrect as neither blood filters nor settling ponds were approved in this application.

(3) Persistent Organic Pollutants

Appeal:

The appeal provides arguments that the Minister of Municipal Affairs and Environment did not adequately address the issue of persistent organic pollutants (POPs).

Reply:

POPs are a toxin resulting from a manufacturing process, which remains in the environment and bio-accumulative, meaning they can concentrate in living organisms and accumulate up the food chain. Many POPs were widely used after the industrial boom when thousands of synthetic chemicals were introduced into commercial use. Many of these chemicals were beneficial in pest and disease control, crop production, and industry. These same chemicals, however, have unforeseen effects on human and wildlife health and the environment. Examples include industrial chemicals such as PCBs, pesticides such as DDT and by products or containments such as Dioxins.

The Government of Canada is leading emissions reductions of POPs under the Toxic Substances Management Policy. The federal legislation behind this policy includes the *Canadian Environmental Protection Act*, the *Pest Control Products Act*, the *Fisheries Act*, and the *Hazardous Products Act*. The Canadian Council of Ministers of the Environment (CCME), which includes federal and provincial governments (including NL), has identified the management and reduction of toxic substances as a national priority. The Canada-Wide Standards process is a framework for the CCME to work together in addressing key environmental protection and health risk reduction issues that require common environmental standards across the country. The matters on POPs are a national and global issue that the province participates in through the CCME and national standards used across the country.

There are limits for POP levels in the fish meal (product). Health Canada sets limits for POPs in food supply, and the CFIA inspects food and feed for quality control and assurance, and safety. Health Canada publicly reports that the concentrations of methylmercury and POPs in both farm-

raised and wild salmon are very low to the extent that guidelines do not place limitations on its consumption, as done for some other seafood. Salmon produced in NL meets a high standard of quality for human consumption. The processing of aquaculture byproduct for non-salmon feeds is an established best management practice for utilizing aquaculture waste.

The proponent has verbally indicated the product to be produced from the fish meal plant will be sold to the pet food industry. The product will not be sold to make feed pellets for the salmon industry and thus recycled back into the bay to affect wild salmon, as suggested.

(4) Use of Antioxidants

Appeal:

The appeal raises issue with the use of antioxidants in the stabilizing of fish meal and oil, and references ethoxyquin specifically as not adequately regulated. The appeal also argues that the use of ethoxyquin in meal and oil fed to farmed salmon concentrates the chemical in the flesh.

Reply:

Ethoxyquin is a substance regulated in Canada by the CFIA and Health Canada and in the United States by the Food and Drug Administration (FDA). It is approved for use as an antioxidant to prevent spoilage in fish meal and oil. Requirements and limitations for feed in Canada are set by the *Feed Act* and associated Regulations. As per the Schedule IV of CFIA Regulations, ethoxyquin can not exceed 0.015% of the total diet (equivalent of 150 ppm in complete feed as per the FDA) of an animal. It is understood that ingredients, such as fish oil, are allowed to contain a higher level of antioxidant than the complete feed in which they are contained, as long as the dilution level is within the levels set by Regulations. This prevents spoilage and the associated health risks.

Discussion with the proponent confirmed the use of ethoxyquin under the brand name Santoquin. The proponent is familiar with its use and regulation as a practitioner and owner of other fish meal facilities. The proponent will be responsible to accurately label the fishmeal and oil it produces and the end feed producer will be responsible for ensuring its feed product meets the CFIA regulation for consumption.

(5) Antimicrobial Resistance

Appeal:

The appeal provides arguments that antimicrobial resistance testing or monitoring was not described by the proponent or required.

Reply:

Rendering, by definition, inactivates and kills bacterial pathogens and therefore antimicrobial resistance testing at the rendering phase is not possible. Antimicrobial resistance testing at the fish meal rendering plant is not required. Routine health monitoring of farmed aquatic animals in Newfoundland and Labrador includes antimicrobial resistance testing for any bacterial pathogens detected.

(6) Fish Health Monitoring

Appeal:

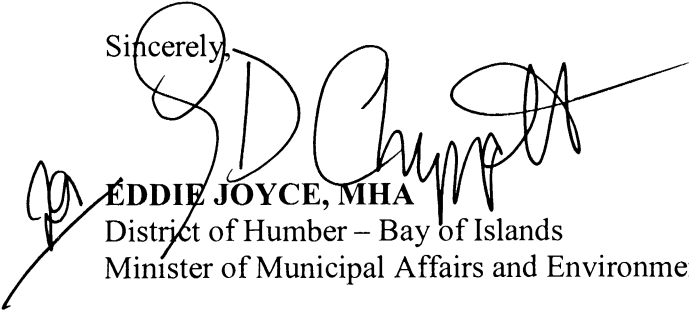
The appeal provides arguments related to fish health monitoring. In particular, suggests that monitoring of wild fish for pathogens and parasites should occur near an effluent outfall.

Reply:

Fish health monitoring is completed throughout the life cycle of farmed aquatic animals. It is not required at the rendering plant as no live fish are part of the rendering process. Rendering, by definition, inactivates and kills bacterial pathogens and has been approved by the CFIA as a means of deactivating Infectious Salmon Anaemia virus (ISAv) in salmon in Newfoundland and Labrador.

If you have any questions concerning this matter, please contact Dr. Susan Squires, Director, Environmental Assessment Division, at (709) 729-0673 or susansquires@gov.nl.ca.

Sincerely,



ÉDDIE JOYCE, MHA
District of Humber – Bay of Islands
Minister of Municipal Affairs and Environment

Attachments

cc: Hon. Gerry Byrne, Minister
Fisheries and Land Resources