Friends of Port Mouton Bay - Respond to Call for Public Input from DFO

In early November 2011, the Department of Fisheries and Oceans announced it was seeking public input on DFO's intention to develop regulations for use of "responsible treatment and control of fish pathogen and pests in aquaculture facilities" website:

http://www.gazette.gc.ca/rp-pr/p1/2011/2011-11-05/html/notice-avis-eng.html#d107

Friends of Port Mouton Bay sent in a response to DFO on behalf of our group. We have expressed our strong concerns about the impact of these "treatments" not only to the farmed fish, but other marine life such as lobsters that share the same waters. You can read it here:
http://www.friendsofportmoutonbay.ca/docs/Friends-Port-Mouton-Bay-Response-Fish-Pathogen-Pest-Treatments-Nov-2011.pdf

In addition, other members of our group, sent in their own individual letters of response.

Below are responses submitted by:
- R. Peter Muttart, Q.C,
- Judith A Pottie
- Robert Ross
- Tom Sherman
- Gloria Gilbert

From: R. Peter Muttart, Q.C

Date: December 3, 2011

Notice of Intent with Respect to Regulations for Fish Pathogens and Pest Treatment

Aquaculture Management Directorate,
Program Policy, Stewardship Unit,
Fisheries and Oceans,
200 Kent Street, 14th floor,
Ottawa, Ontario K1A 0E6

Dear Sir/Mdm.,

I have the advantage of a letter of concern sent to you by the Friends of Port Mouton Bay dated November 25, 2011, which I endorse. I also recommend to you the factual,

science-based information contained on the website of the organization found at http://www.friendsofportmoutonbay.ca/

I have watched multimillion dollar fish farms use, to their advantage and to the disadvantage of other harvesters of ocean products, poisonous chemicals in prohibited proportions. The offenders received – relative to the income they are earning while committing these offenses – fines that amount to slaps on the wrists.

With respect, your department should certainly be monitoring these businesses more closely. Consider how many times they are offside of your regulations before they get caught offside. The public is not blind to this; and the public's faith in the department's ability to protect our oceans is eroding. You have neither the regulations nor the manpower to enforce them; and some believe [because perception is certainly evident] that the constant political commentary professing the safety of fish farming is a conflict of interest that can't be resolved without your department either vacating regulation or vacating promotion.

All Canadians should encourage and be proud of entrepreneurial innovation and spirit. However, when pursuit of the right to make a profit becomes tainted by an attitude of indifference to all others, it becomes an extremely serious matter. The world economy currently stands at a precipice created by just that sort of amoral tainted entrepreneurial spirit. You have that to contend with.

There looms large the question of whether it is at all possible to conduct open net finfish farming in our oceans without the creation of disease or species degradation. You have that to contend with.

There are finfish farms being permitted within closed circulation Bays from which the excrement and chemically tainted leftover fish foods of the fish farms – not to mention its pesticides – are not flushed into the dilution of the greater ocean [assuming they should be in the greater ocean at all]. You have that to contend with.

Regulations for fish pathogens and pest treatment [one wonders why you did not express it as "pesticide regulation" rather than "pest treatment"] are certainly necessary if OpenNet fish farms are to be allowed to continue. Frankly, it would be preferable for all of the above concerns to be addressed first. However, if you must proceed, please proceed in such a manner that your regulations have very conservative margins and that you are able to give assurances that you have the capacity, desire and man-power to enforce them.

R. Peter Muttart, Q.C.

From: Judith A. Pottie

Date: December 4, 2011

Response to Canada Gazette Part 1
A Notice of Intent to Regulate Fish Pathogen and Pest Treatments

I am writing regarding the Department of Fisheries and Oceans proposal to legalize chemicals to be used in marine aquaculture, chemicals which are now illegal under the Fisheries Act. I am writing specifically about my concerns of chemical use in the salmon farms which are becoming heavily concentrated in the coastal waters along the loop that encircles the southern portion of Nova Scotia from the Atlantic coast of Queens and Shelburne counties around the tip of Yarmouth County to Digby County on the Fundy Coast.

Twenty years ago nobody could have predicted the success of the salmon aquaculture industry, and its success is a testament to individual commitment of people in the DFO Aquaculture branch and especially in the Department of Fisheries and Aquaculture in Nova Scotia. They are deservedly proud of their accomplishment.

Millions of Atlantic salmon are now grown in Nova Scotia's inshore and the salmon aquaculture industry has grown exponentially, learning as it goes. But these vast amount of salmon require vast amounts of chemicals to grow quickly and remain palatable. The heavy use of chemicals is also something nobody could have predicted. And since salmon grow well in the inshore of southern Nova Scotia these chemicals now go directly into our bays and coastal waters.

The effects of large amounts of chemicals concentrated in the relatively small but biologically rich marine area are not trivial.

High concentrations of antibiotics, parasiticides, pesticides, metals (copper is toxic), disinfectants, anti-fouling agents, anaethetics, dye and feed additives are some of the chemicals listed in a paper published by DFO's own scientists: CHEMICAL USE IN SALMON AQUACULTURE: A REVIEW OF CURRENT PRACTICES AND POSSIBLE ENVIRONMENTAL EFFECTS (Burridge et al, 2008).

This paper makes two conclusions that cannot be ignored if there is to be any progress in "responsible" and "sustainable" aquaculture that "protects" the Canadian public.

1. Burridge lists eleven gaps in research on the near and far field effects of chemicals in the marine environment. It is clear from these gaps that there is not enough data to support the use of the chemicals currently used, let alone new chemicals.

Salmon are not the only food Canadians eat from these waters. The waters of southern Nova Scotia are rich in shellfish which tend to accumulate toxins.

The approval of any chemicals in these waters without sufficient data violates the right of Canadians to be protected under several acts-the Food Safety Act, Environment as well as the Fisheries Act.

In some cases there is abundant data on the harmful effects of chemicals. We don't need more data on the overuse of antibiotics. Antibiotic resistant bacteria is well documented and the consequences are well known.

Imagine an equivalent C. Difficile in Canada's coastal areas, our fishing zones and in our food supply.

2. Burridge et al also indicate that the geophysical differences (currents, water depth, salinity etc.) between these near-shore salmon aquaculture sites make it difficult develop "standard metrics". For example there can't be standard dosages in chemical treatments when there is high physical variability from site to site.

The Bay of Fundy and Port Mouton Bay are different.

One research gap unintentionally filled is the effects of de-lousing chemicals on marine crustaceans. We have all seen the crates of dead lobster killed by the pesticide Cypermethrin in the Bay of Fundy. As a result even the public understands that chemicals designed to kill crustaceans like sea-lice also kill other crustaceans like lobster, shrimp, crab and krill.

The power of Cypermethrin to kill lobster, a species much larger than the target sea-louse and in the Bay of Fundy, which flushes like no other bay, puts the chemical use in salmon aquaculture under a very powerful public microscope.

Logically not all shellfish are killed by chemicals like Cypermethrine. Most end up on our tables.

In light of this, the application to legalize more chemicals under the Fisheries Act is stark evidence that this industry, as now practiced, is not sustainable or responsible. A sad statement since the innovators who began the practice of salmon aquaculture in Nova Scotia did not intend this.

More chemicals must not be legalized under the pretense that they can then be regulated. These chemicals are poisoning the coastal waters of southern Nova Scotia, and are entering our food chain.

The innovators in the aquaculture branch of the DFO and in the Nova Scotia Department of Fisheries and Aquaculture have every reason to be proud of their success and they should not allow it to become the chemical nightmare it is becoming.

The rapid expansion of salmon farms in the waters of southern Nova Scotia has meant a rapid expansion of harmful chemicals dumped into these waters. No chemicals should

be dumped into our coastal waters. Certainly none should be approved when there is so little ability to gather data on the chemicals currently used.

Sincerely,

Judith A Pottie
Summerville Centre on Port Mouton Bay
Nova Scotia

From: Robert Ross

Date: December 3, 2011

Aquaculture proposed use antibiotics and pesticides

To Aquaculture Management Directorate

With regard to the question of whether marine aquaculture operations should be permitted to use antibiotics and pesticides to control sea lice and other diseases, my position is absolutely no, on the basis of the following reasons:

- From a citizen of Canada perspective, my view of the mandate of the Department of Fisheries and Oceans is that DFO should protect and preserve the sensitive marine environment;
- Introducing foreign substances such as antibiotics and pesticides to help the aquaculture industry tells me there is something wrong with the aquaculture industry if they need these types of substances to manage their industry successfully;
- All of us should know by now that there is no 'free lunch' when it comes to sensitive ecosystems – something negative will result from the use of antibiotics and pesticides in the marine environment – how can it be otherwise?
- On terrestrial based activities, the use of pesticides is significantly controlled and managed, yet DFO is of the opinion that it can be done safely in an aquatic environment;
- The aquaculture industry needs to find another way and another answer than hanging their hat upon pesticide use;
- The application of antibiotics and pesticides on a daily basis in a marine environment cannot be adequately managed by DFO, but instead the practice is left to the operator to self-manage. We have seen time and again, varied operators abuse this practice by using newer and stronger levels of pesticide and antibiotic applications to address the increasing intolerance shown by the fin-fish to these substances; On vary rare occasions, do the aquaculture operators ever get charged by DFO.

- The marine environment is a very sensitive ecosystem – how can a marine biologist from an integrity basis authorize in good conscience and in absence of sound science, the application of toxic substances to the marine environment – it is morally, scientifically and professionally wrong.
- Aquaculture sites are already extremely poorly managed by government jurisdictions in their proper siting. Aquaculture sites are often sited on the basis of convenience to the operators such as being located safely on the lee side of a protected island or close to boat and wharf facilities, rather than sited where daily tidal currents can flush and cleanse a site. With the cumulative use of antibiotics and pesticides, the resultant waste deposits sit at the ocean floor undisturbed except to be absorbed by other marine mammals and obviously negatively affecting their health and well being. I don't for example want to have to stop eating ground-fish like haddock and lobsters because DFO and aquaculture people have had a hand in polluting the sea floor.

When I was a senior land use planner in British Columbia for many years, biologists with DFO were very, very strong and protective of marine environment. Land development of subdivisions et al were severely monitored, regulated and managed. What has happened to DFO's spirit that they would even contemplate the use of pesticide in the ocean water? When will government officials realize that the only way to successfully operate aquaculture is to move towards land based operations?

I am currently a sea kayak guide and instructor. I see first hand the dirty waste matter that results from fish farm pens. It is a dirty, dirty industry and to think that the industry now wants the okay and permission to use chemicals in the form of pesticides and antibiotics in the marine environment is simply wrong – it is not the right thing to do.

Sustainability for our future and for our children's future needs to be evaluated from a comprehensive perspective of environmental, social and economic values. Why is it that industries such as aquaculture only focus on the economic success of their industry without regard to the impacts to the natural environment and to the impacts to local communities? The few low paying jobs that aquaculture purports to provide does not balance out the environmental and social costs.

Do the right thing and protect our marine environments. Introducing foreign substances such as antibiotics and pesticides into the marine environment is not what myself and most other Canadians want to see happen to our oceans. DFO as custodians of the marine environment need to recognize what the right thing is and also say no to the use of pesticides and antibiotics.

Thank you for consideration of my comments.

Robert Ross

From: Tom Sherman

Date: December 1, 2011

Manager, Aquaculture Management Directorate
Program Policy, Stewardship Unit
Fisheries and Oceans
200 Kent Street, 14th floor
Ottawa, Ontario K1A 0E6

To Whom It May Concern:

I am writing to offer my response to Canada Gazette Part 1, A Notice of Intent to Regulate Fish Pathogen and Pest Treatments.

I sincerely hope that any future regulation of fish pathogen and pest treatments recognizes the high risk and restricts chemical and antibiotic treatments that threaten non-target crustaceans which are of ecological and commercial importance in the waters surrounding Nova Scotia.

I live in a community which has been victimized by open pen fin fish salmon and trout aquaculture. Port Mouton Bay has been rendered practically lifeless by high sulfide levels resulting from fifteen years of excess feed and fish excrement. We are also concerned with high levels of copper in our Bay, the result of chemical treatments of fish farm cages by Cooke Aquaculture (site #835).

The last thing we need is a relaxed regulatory environment as the fish farm industry is an environmental disaster in several coastal communities throughout Nova Scotia. Open pen fin fish aquaculture destroyed scores of bays throughout New Brunswick (not to mention the problems in coastal British Columbia) and is progressing with the same results in Nova Scotia. The environmental consequences of this industry are immense and certainly label open pen fin fish aquaculture as an unsustainable industry.

Continued chemical and antibiotic treatments have no place in our bays and ocean. Adult lobster mortalities have been linked to pesticide use, not to mention the implications for larval and juvenile stages. Antibiotic-resistant bacteria have been documented in the vicinity of aquaculture sites and research on the impacts on marine and human health has been insufficient to date.

Beside ecological and health concerns, it is particularly troubling to see government, provincial and federal, aiding this unsustainable industry at the expense of our traditional and extremely important lobster fishing industry. Queens County, Nova Scotia, has taken major hits to its forestry and paper industry and its tourist industry. The lobster fishery remains as a key industry in this county. Any regulatory effort that aids the destruction of this key industry is unacceptable.

I would like to see the Department of Fisheries and Oceans tighten up (increase the legal restrictions on such volatile pollutants) regulations governing the use of chemical and antibiotic treatments in the interest of the environment, our marine and human health and our traditional fishing industries. We also need the DFO to monitor the aquaculture industry through research and surveillance of this industry. Any regulatory environment should facilitate an industry-independent watch-dog, such an Environment Canada, to keep this hugely problematic industry from destroying the health our coastal waters.

Thank you for this opportunity to respond to your regulatory initiative.

Sincerely,

Tom Sherman
resident, Summerville, Queens County, Nova Scotia

From: Gloria Gilbert

Date: December 1, 2011

It is vitally important that jurisdiction over the use of aquaculture chemicals, drugs, antibiotics and pesticides be administered by a knowledgeable and responsible agency. Environment Canada and Health Canada have demonstrated intolerance for illegal practices. Fisheries and Oceans Canada has failed to apply the Fisheries Act on aquaculture sites.

Fisheries and Oceans Canada is simply not eligible for added responsibility due to its commitment to foster aquaculture development. The clear conflict of interest in this situation has already been challenged in BC and the memorandum of understanding that downloads responsibility for aquaculture sites to the provinces has been ruled unconstitutional.

Fin fish aquaculture is a polluting industry. There is no question about that. Unless other users of the marine resource are protected from the fallout of a capitalist venture that displaces traditional fisheries, we can expect serious damages to the marine environment and commercial species such as lobster, scallops, urchins, clams and any other species that spawn in areas used for fish farms.

The history of aquaculture development in other countries should provide a lesson for Canada. As in any intensive farming practice, parasites and diseases are predictable. Controls become less effective as nuisance organisms develop drug-resistance. The salmon aquaculture industry has responded to these conditions not by recognizing the need for capacity studies and respect for other users, but by further intensifying their management practices. More farms, larger farms and higher production rates are the

strategies of an industry on a "get-rich-quick" path. They know that ecosystem breakdown and rising fish mortalities are inevitable. When this happens, the industry looks for new areas of clean water, viz. the move from New Brunswick to Nova Scotia.

Please leave Environment Canada in charge of aquaculture chemicals. Fisheries and Oceans Canada has lost the confidence of the public. When fisheries officers are zealous about policing the lobster fishery, but are instructed to turn a blind eye to problems in aquaculture, there is a serious credibility issue in a country that is supposed to be run on democratic principles.

Gloria Gilbert
a Friend of Port Mouton Bay, NS