

August 22, 2008

The Right Hon. Stephen Harper
Prime Minister of Canada
Conservative Party of Canada
1204-130 Albert Street
Ottawa, Ontario K1P 5G4

The Hon. Ed Byrne
Minister of Mines and Energy
Government of Newfoundland and Labrador
P.O. Box 8700
St. John's, Newfoundland A1B 4J6

The Hon. Gary Lunn
Federal Minister of Natural Resources
Room 207 Confederation
House of Commons
Ottawa, Ontario K1A 0A6

The Hon. Danny Williams
Premier of Newfoundland and Labrador
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St. John's, Newfoundland A1B 4J6

Dear Sirs:

RE: Incorporation of the DFO authored "Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment" into the CNLOPB Geophysical, Geological, Environmental and Geotechnical Program Guidelines.

The CNLOPB recently incorporated the DFO authored "Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment" into the CNLOPB Geophysical, Geological, Environmental and Geotechnical Program Guidelines.

These additional regulations have very far reaching impacts that will further erode the investment climate in Canada's offshore areas, resulting in less or no development of offshore hydrocarbon resources, which is the most important contributor to the provincial

and federal tax base. The apparent intention of the DFO national seismic standards initiative is to explicitly, and prejudicially regulate seismic – not general noise in the marine environment, such that no real benefit will flow to the environment yet great costs and sacrifices will be made. I personally believe if all seismic were banned that **no benefits** would accrue to the marine environment because the primary human impacts (shipping, whale watching, and fishing) are not being addressed to the same extent or to any reasonable extent.

Important input provided from stakeholders to DFO, in particular in Calgary on September 2, 2004 (transcript attached) and concerns sent to Ministers, provincial leaders, and the boards from the Canadian Association of Geophysical Contractors were not fully incorporated into the final document.

The regulations were authored by the agency that has presided over the managed decimation of one commercial marine species after another. Now DFO seeks to “manage” the seismic research industry and it appears that there is a likely chance the result will be the same. Furthermore, many of the decimated fish species serve as the principle diet for many endangered and threatened toothed whales. Now, rather than focusing on what kills marine life (fishing quotas, and practices) regulations are proposed for seismic research. The truth is that now threatened, and endangered species impose far reaching and unfair restrictions and limitations on seismic research because seismic research had no contribution to the decline of these species nor will it impact them in their state of decline.

Seismic research activities offshore Canada generally only occur during a short three to five month season and only a few vessels a year work offshore Canada, which is a very minor contribution to the ocean noise offshore Canada. Activities such as shipping, industrial facilities, fishing, and whale watching all have a much greater total, local, spatial, cumulative, proximate, and temporal noise impact to the marine environment than seismic research. This causes one to ask why the time and effort was directed towards seismic research and not the primary noise sources when not one of the others has even a small fraction of the extent or number of existing regulations, requirements for environmental assessments, or extensive mitigations as are already imposed on seismic research? Unlike shipping, which has a constant sound emission, seismic is intermittent approximately every 10 seconds with a duration of only 10/1000th of a second. I believe the unwarranted regulation is because of the world view and mantra of some that energy is evil. Alternatively, it is a way to drive up costs in an effort to support an environmental service economy that produces nothing. The end result is an attempt to stop energy exploration by stopping the first step which is seismic research. The fallacy of this environmental utopia is obvious to some of us who have travelled to countries or provinces, or cities with poor economic situations, where the environment comes last, little, if any modern pollution measures or technology are employed, toxic waste and untreated sewage are dumped with abandon. The fact is that a strong economy is fuelled by energy and in turn the best environmental measures and practices are employed, this cannot be denied.

Some of the important issues of concern relating to these new regulations are as follows:

1. The inclusion of dolphins and porpoises in the definition of “Cetaceans” as it is used in the regulations. Seismic vessels frequently have dolphins and porpoises ride the bow wave and otherwise swim in close proximity to the seismic research vessel regardless of the noise from the air source arrays used to image the subsurface of the earth (same technology and process as a sonogram to view babies in the womb). Seismic research tries to achieve and utilizes sound that has the highest intensity in the low frequency ranges (< 100 Hz). These low frequency sounds are generally below the hearing range and vocalization range of dolphins and porpoises (300 -1500 Hz), and most if not all other toothed whales. These dolphins and porpoises are included in clauses that will cause significant costs and delays with no benefit to the environment or these species. The problematic clauses they are included in are 5d, 5e, 7a I, 12 a, 12 b.
2. How is it possible to know or reasonably comply with Clause 5? The precautionary principle will be used as a weapon to expand this clause to cover the entire ocean at all times or at the very least to ensure that there is no reasonable timeframe or reasonable location seismic research can be conducted.
3. Clause 11 imposes an untested, currently ineffective technology (passive acoustic monitoring) on seismic researchers which is still being evaluated and developed by seismic contractors. This technology is not imposed on shipping activities which have similar sound emissions and over 20,000 ships traverse the Gulf of St. Lawrence alone, as compared to one or two seismic ships during any given year for a few short months.
4. To make Clause 11 even more impossible, Clause 12 adds additional considerations that will double costs of seismic research with no measurable, logical, or reasonable benefit to the marine environment or any animal in it.
5. Clause 13 provides significant opportunity for DFO to become a regulator rather than an expert advisor to the offshore petroleum boards and NEB. This encroaches upon the right of the Provinces and Territories to manage and regulate their own resources. Furthermore, this clause can and will impose very expensive environmental research and testing (including flawed and biased research as the DFO forced crab testing in Nova Scotia so it can justify more regulation and restrictions see attached) and can allow DFO to intimidate and scare regulators into making a decision to deny approval for projects and submit them for a panel review under the CEAA act. This panel review process requires a seismic contractor to prove a negative, prove that no harm is being done although there is no evidence over 30 years of worldwide surveys that there is any impact. For example how would one prove that your breathing is doing no harm, how many studies and experts could be drawn to this kangaroo court to argue a pointless subject like this? Focused regulations for noise emissions for one or two

seismic ships a year that have similar noise emissions to a large ship (there are about 20,000 a year in the same area of Atlantic Canada) reaches the same level of absurdity. Why does Canada want to engage in these incredibly unproductive debates when Canada has not even reached many standards of “developed” countries such as treating sewage for all coastal cities and towns? Why go to these incredible extremes when so much low hanging fruit exists to make the marine environment better and to actually improve the welfare for all sea life?

It is a known fact that almost all ecosystem and population level damage was and is a result of historic and current fishing quotas, methods and practices, and historic whale hunting.

Other issues such as pollution, fish habitat destruction (bottom dragging fishing gear), whale harassment, and over fishing do not garner the same level of regulation (or in most cases any regulation or any element of the “precautionary principle”) although the impacts to the environment are measurable and known to be severe in many cases (unlike seismic).

Other noise sources are effectively unregulated such as shipping, and whale watching which puts continuous noise (as opposed to seismic which is intermittent) in close proximity to whales and most certainly disrupts critical life processes to a far greater extent than seismic. A reasonable application of the precautionary principle and any logical prioritization seems to be missing.

My recommendations are as follows:

1. Environmental assessments should not be done over and over again for each survey. Rather, only one should be done and updated annually based upon new information.
2. Environmental research and testing should not be imposed on seismic contractors as significant regulatory abuse (costs, delays, and miss-information) has occurred in this area to produce pre-ordained biased conclusions to justify more “study”, more “research” and more regulations.
3. With regard to the Statement of Canadian practice:
 - a) Dolphins and porpoises should be removed from the definitions
 - b) Passive acoustic monitoring (Clause 11 and 12) should be removed from the document as this is unworkable and untested, unproven technology
 - c) Clause 13 should be deleted entirely
 - d) Clause 5 and all sub clauses should be limited to only endangered or threatened species at a minimum due to the lack of any evidence that seismic research causes any impact

- e) Clause 7 a iii is too subjective and should be limited to population level significant adverse affects since otherwise, this standard is unworkable
- f) Clause 8b should be deleted as this is too arbitrary and unworkable
- g) Clause 9 and 10 should be deleted as they add significant operation complexity, human safety risks, with no benefit to the marine environment.

Attached is a letter I significantly contributed to that was sent by the Canadian Association of Geophysical Contractors and the International Association of Geophysical Contractors on November 29, 2004. Additionally, I have enclosed the actual minutes of the meeting with DFO held on September 2, 2004 regarding the entire industry's concern for many of these and other issues contained in the Statement of Canadian Practice with respect tot the Mitigation of Seismic Sound in the Marine Environment.

Please do not hesitate to contact me with any questions or for clarification on any issue as my intent is to ensure the highest standards, a minimum footprint, but a strong energy industry for Canada.

Yours Truly,
Geophysical Service Incorporated

Paul Einarsson
Chairman, C.O.O.

Cc: Max Ruelokke, Chair and CEO, Canada-Newfoundland Labrador Offshore Petroleum Board
Diana Dalton, Chair, Canada-Nova Scotia Offshore Petroleum Board
The Hon. Rodney MacDonald, Premier of Nova Scotia
The Hon. Gordon Campbell, Premier of British Columbia
The Hon. Floyd Roland, Premier of Northwest Territories
The Hon. Richard Neufeld, Minister of Energy, Mines, and Petroleum Resources
The Hon. Richard Hurlbert, Energy Minister, Nova Scotia
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