

SUBMISSION TO THE MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES ON THE DRAFT ENVIRONMENTAL PROTECTION AND MANAGEMENT REGULATION UNDER THE OIL AND GAS ACTIVITIES ACT

December 4, 2009

The Pembina Institute and West Coast Environmental Law are pleased that the Ministry of Energy Mines and Petroleum Resources will establish a new regulation regulating the environmental impacts of oil and gas activities in British Columbia. That being said, we have serious concerns with the Regulation as proposed. We offer the following comments with regard to the November 4, 2009 draft Environmental Protection and Management Regulation under the *Oil and Gas Activities Act* (the “Regulation”).

These comments are divided into three sections – general comments pertaining to the approach taken by the *Oil and Gas Activities Act*, specific issues raised in the consultation draft *Environmental Protection and Management Regulation*, and some section based comments. In addition to these comments, we have reviewed the submission provided by the Canadian Parks and Wilderness Society on this regulation and endorse all of the comments made in their letter to Mike Lambert dated 4 December 2009.

1. GENERAL CONTEXT COMMENTS

In early 2006, West Coast Environmental Law and the then Sierra Legal Defence Fund provided comments on the Oil and Gas Regulatory Improvement Initiative, which may have been the precursor to the *Oil and Gas Activities Act* passed in May 2008. West Coast Environmental Law and the Pembina Institute support the general recommendations made at that time, and provide a brief overview of those comments in order to provide a clearer understanding of the approach that we think would most effectively regulate oil and gas development in British Columbia.

The key concerns identified with respect to the oil and gas regulatory regime included:

- Little or no notice to landowners and affected communities about oil, gas and coalbed methane development;
- Inadequate protection of landowners’ rights (e.g., no right to appeal a decision approving a well or pipeline on private land – the Mediation and Arbitration Board deals only with compensation);
- A consistently poor record of compliance with the environmental requirements around oil and gas development, including poor response and government confusion around emergency situations;
- Inadequate enforcement resources (funding, training, number of staff);
- No mandatory standards or processes for cleaning up spills or for remediating contaminated soils and water when a well site is closed;

- A lack of binding regulations protecting the environment and human health (over-reliance on unenforceable handbooks and other policy documents). BC needs clear, measurable legislated standards protecting surface water, groundwater, air and soil quality that can be audited and enforced.
- No requirement for cumulative impact assessment or long-term planning so that communities can get a sense of what the long-term impacts from the industry will be.

At that time, it was emphasized that there was a need to remedy existing inadequacies before additional streamlining measures were undertaken.

Specific concerns about proposed regulatory directions were also identified, including:

Results-Based Regulation is a serious concern. Results-based approaches are not precautionary and will not provide sufficient safeguards to prevent irreparable harm to the environment and to human health.

Further streamlining the single window approach will not build public confidence in the regulatory regime. Public confidence in the Oil and Gas Commission (OGC) is not strong. The OGC is fully funded by industry fees. This fact, combined with the legislative change in the last few years that makes the Deputy Minister the Chair of the Board of the Oil and Gas Commission means that the independence of the OGC as a regulator is seriously compromised.

The oversight role of the Ministry of the Environment needs to be re-established. The role of the existing environmental regulator – the Ministry of the Environment, needs to be restored and reinforced. Traditionally, it was this agency that had all of the environmental and conservation expertise. It can, and should, function as an effective internal check and balance on the oil and gas regulatory system.

A single permit approach for multiple activities is problematic. In the current regulatory context, landowners and directly affected residents are already challenged in trying to keep track of developments. While a shift to a single permit will reduce the detail in the procedure for authorizing oil and gas activities, it will further diminish the opportunities for accountability and individual oversight of oil and gas activities.

Reliance on industry-funded qualified professionals will not build public confidence. Our concern about this practice is that by contracting out this work to external consultants who will be retained by a company and work for profit, these privately retained professionals may be driven by economics (profit and short-term gain) instead of public trust and protection of health and the environment. It would provide better protection to BC's environment and to the health of its citizens if government staff operating in the public interest conducted this work in-house.

Since that time, the Legislature has enacted the *Oil and Gas Activities Act*. While we are not commenting here on the extent to which this new legislation addresses these concerns, we would note that the streamlined approach of the *Oil and Gas Activities Act* has not fully addressed these earlier concerns.

2. SPECIFIC ENVIRONMENTAL PROTECTION AND MANAGEMENT REGULATION COMMENTS

2.1. The scope of the exemptions is overly broad and does not ensure that the public interest and environment are protected.

We have a deep concern about the exemptions contained in Part 5 of this draft. Under Part 5, various ministers may exempt persons from complying with numerous measures for the protection and

effective management of the environment, “if satisfied that, in the circumstances, it is not reasonably practicable to require the person to comply with the requirement”, either with or without conditions. The requirements that may be the subject of exemptions are measures for the protection and effective management of the environment in relation to designated watersheds (s. 36), aquifers (s. 37), wildlife habitat areas (s. 39), ungulate winter ranges (s. 40), fisheries sensitive watersheds (s. 41), and old-growth management areas (s. 44). Thus, the ministers may exempt persons from compliance with these protective measures simply where it is not practicable. **This is akin to saying that these protections must be respected unless you cannot respect them. It makes for very weak protection indeed.**

In addition, s. 47 of the Regulation allows the OGC to grant an exemption to any of the environmental protection and management requirements set out in Part 2 of the Regulation, again, where the Commission is of the opinion that it is not reasonably practicable for a person to comply. Already, numerous of Part 2’s protections are weak on their faces. For example, they set out that they need not be observed “if there is no other practicable option” than to violate them (see, for example, the prohibition on oil and gas activities, pipelines and oil and gas roads in a riparian zone in s. 7.2; the admonition to, where practicable, “avoid causing a material adverse effect or impact on wildlife and wildlife habitat” in s. 14; and other sections of Part 2). The Regulation creates a “double exemption” in which the very requirements have built-in loopholes to escape compliance where not practicable, which require no special authorization, and then s. 47 allows the OGC to make exemptions to those same weakened regulations where compliance is not practicable. The effect is to render highly uncertain the protection that this Regulation offers.

Everyone understands that some flexibility is desirable to avoid a regulatory straight-jacket, but the difficulty with the Draft Regulation is that it is so sweeping in allowing exemptions and does not provide any countervailing accountability for its exercise. Under the current *Oil and Gas Commission Act*, a form of accountability for decision-making is theoretically available in that it allows any “interested person” may request the OGC or Advisory Committee to reconsider or apply alternative dispute resolution to authorizations under the *Oil and Gas Commission Act*, the *Petroleum and Natural Gas Act*, or the *Pipeline Act* (ss. 8, 9).

Unfortunately, this opportunity was taken away from interested parties under the *Oil and Gas Activities Act*, to the best of our knowledge without any proper public consultation exercise. The ability of interested persons to appeal to the Oil and Gas Appeals Tribunal is one option that could be restored as a counter-balance to approvals such as exemptions to the Regulation. Although it probably would not be exercised frequently, the mere opportunity to do so would signal that exemptions have to be carefully considered and justified by all concerned.

2.2. The Regulation does not even meet the BC government’s own standard for results-based regulations, further questioning its ability to ensure that the public interest and the environment are protected

Since 2001 the province of British Columbia has written many environmental laws and regulations based on a “results-based” approach. The Regulation claims to adopt that established approach.

While both Pembina and West Coast have concerns about effectiveness of resource management legislation based entirely on a results-based approach, we will limit ourselves to noting that this draft Regulation fails to meet the minimum provincially defined requirements for effective results-based legislation, and cannot even meet a results based standard of protection.

In the comparable forestry context, the province has indicated that results based regulations operate where:

Government sets objectives and desired outcomes, and forest companies propose results or strategies that reflect these. The companies are then accountable for the results through a rigorous government compliance and enforcement regime.¹

Thus, effective results-based legislation must have at least two characteristics – it must set objectives and standards, and the government must be able to determine whether these objectives and standards have been achieved. This draft regulation fails on both counts.

2.2.1. The regulation is overly vague and should establish clear objectives and standards

First, the government must set objectives and standards that provide industry with enough detail and specificity to allow industry to develop effective results and strategies. A results-based approach relies upon the ingenuity of industry to ensure that society-valued results are achieved, yet this cannot work if the government does not clearly identify the desired result, or crafts laws that allow industry to be exempted from meeting any results.

The Regulation, as drafted, purports to set both substantive results and standards-based results. The former term refers to results based on the actual environmental value that the industry is required to protect: wildlife, water, fish habitat, etc.

An example of such a result is section 14(1), which relates to wildlife habitat (there are others, however we are focusing on this section in order to make the point):

14(1) A person carrying out an oil and gas activity must, to the extent practicable, avoid causing a material adverse effect or impact on wildlife and wildlife habitat, including:

- (a) Habitat loss;
- (b) Habitat fragmentation;
- (c) Increased predation;
- (d) Increased disturbance of wildlife; and
- (e) Direct mortality of wildlife.

The value being protected by this section is, of course, wildlife and wildlife habitat. However, some level of wildlife and habitat disruption is an inevitable result of oil and gas exploration and development. The regulation could identify a result which defines the acceptable level of disturbance (which would likely require setting species and even site specific objectives). However, the Regulation has chosen to address the uncertainty over what level of disruption is appropriate through vague phrases such as “to the extent practicable” and “increased disturbance” and “material adverse effect”, rather than with specific statements that would enable impacts to be clearly quantified.

For example, the phrase “to the extent practicable” has no generally accepted definition, and will always be a subjective determination based on competing demands, and yet there are no parameters to understand how this determination would be made. A company might claim that it was not practical to

¹ BC Ministry of Forests. Backgrounder: What is Results-based Forest Management? (Victoria, BC: Ministry of Forests, January 2004), available on-line at <http://www.for.gov.bc.ca/code/backgrounders/whatis.pdf>, last accessed November 25, 2009.

undertake better environmental protection for economic reasons.² This is unacceptable, and this phrase should be removed. Rather than requiring industry to exercise its ingenuity to determine how to achieve the result, the Regulation gives industry a *carte blanche* to excuse itself from achieving a socially or environmentally responsible result where, in its opinion, it is “not practicable” to do so.

Similarly, the phrase “increased disturbance” does not define the extent to which increased disturbance of wildlife would be unacceptable. This type of term could easily be quantified,³ but the Regulation fails to do so.

Again, the term “material adverse effect” is vague, undermines enforcement and allows industry to effectively determine what level of disruption is appropriate in the circumstances.⁴ For many of the objectives there is real debate about what types of disruption are really “adverse” and at what levels these disruptions become “material.”⁵

The result is that section 14(1) will only be enforceable in the most egregious circumstances – where no reasonable person could possibly maintain that it was not practicable to avoid what were clearly material adverse effects on wildlife or habitat.

The Regulation tries to address some of this vagueness with section 14(2), which create a series of standards-based results related to wildlife and habitat. However, this subsection, while containing some more specific requirements, also only applies “where practicable”, thereby undermining the specific requirements of the subsection.

Virtually all of the standards-based results suffer from similar discretionary and vague language, stating that these results only apply where “practicable” or where they can be accomplished “efficiently.” “Efficiency”, like practicable, is not defined, and can be understood as exempting the industry from any requirements which carry with them more than a minimal cost. Again, this language entirely undermines the claim that industry will be required to innovate to achieve social results.

By using vague terms in setting results, the Regulation undermines the basis of a true results-based regime. Instead of giving industry meaningful direction on what results it will be expected to achieve, the Regulation effectively turns the job of fine-tuning what the results are over to industry.

² Conversely we would assert that it would frequently not be “practicable” to develop oil and gas resources in sensitive wildlife habitat, given its impacts.

³ There is a difficulty in that the term might need to be defined differently for different areas or wildlife species. However, this is not an insurmountable obstacle.

⁴ It should be noted, that even this vague term is more stringent than the objectives set under the supposedly results-based regulations under the *Forest and Range Practices Act*, S.B.C. 2002, c. 69, which without exception are defined with the requirement that achieving the result not “unduly restrict the supply of Timber...” *Forest Planning and Practices Regulation*, BC Reg 14/2004, ss. 5,7,8,9, 9.1.

⁵ In addition, the emphasis on “material adverse effect” undermines the ability of the Regulation to address the cumulative impacts of oil and gas operations, since two companies may individually cause an “adverse effect” which is not considered “material”, but which becomes “material” in concert. It is for this reason that the common law governing the pollution of water has always recognized that any sensible depreciation of the quality of water may give rise to a cause of action, even if there is no evidence that any harm has actually resulted from the decrease in water quality.

2.2.2. The regulation does not establish a baseline for environmental protection, making it impossible to measure. Baseline data must be measured and established first.

The second element of the government's definition of results-based regulation is that the government must have the ability to assess whether the results have been achieved. This second point has implications both for how government drafts results-based regulations and for how the government monitors and enforces the regulations once implemented. While we have significant questions about the ability of the OGC and other government industries to monitor and enforce a true results-based regulation,⁶ our current focus is our concern with the Regulation as drafted.

An obvious difficulty in enforcing the Regulation is the absence of baseline data against which the results can be evaluated. For example, the requirement not to cause a material adverse effect to an aquifer (s. 6.3) is entirely unenforceable unless there is hydrological data available on the state of the aquifer before the oil and gas activities. The same problem exists for all of the substantive results and for many of the process-based results included in the Regulation.

The question of how to collect baseline data is a very real one. In many cases the industry has been operating without such information for many years now, and a true baseline may be difficult to reconstruct.⁷ Even where a true baseline exists, the cost of gathering the baseline data and post-operation data required to evaluate the result may be significant.

However, without quality baseline data many of the results contained in the Regulation are meaningless. It is true that the government could, and where possible, should collect baseline data. Indeed, Dr. Lorna Medd, in her review of the oil and gas industry in northeast BC from a medical perspective, has recommended that such data be gathered.

To better facilitate subsequent development following oil and gas activities, establish benchmarks by conducting environmental scans of areas planned for oil and gas development to provide baseline water, air, soil and vegetation quality, and potential contaminant pathways.⁸

However, the Regulation could be written to facilitate the gathering of baseline data and focus on baseline data which is easily gathered. For example:

- Require industry to collect and report baseline data. Industry, in order to ensure that it will achieve the required results, should be collecting baseline data. While there is an inherent problem in relying on data collected by a regulated party, the Regulation could easily require such data to be collected by qualified professionals and submitted to the government prior to the commencement of operations.⁹ The Regulation should also make it an offence to falsify such data and government should frequently field-check such data.
- Require funding for baseline testing by affected parties. The Regulation should require the proponent to provide, on demand by the user of a water supply or a government agent, funding for the user/agent to obtain his or her own baseline testing.

⁶ Typically the enforcement of results-based regulations, in order to be effective, requires more fieldwork, more use of expert staff and more independence from industry than many other approaches to environmental legislation. In short, monitoring and enforcement are expensive for results-based approaches.

⁷ We would argue, however, that the results should be evaluated as compared to the natural baseline rather than a baseline as modified by industrial activity. Where the baseline no longer exists remediation would be required.

⁸ L. Medd. *Population Health and Oil and Gas Activities*. (Northern Health), p. 42, Recommendation 8.

⁹ In some cases the baseline data could be double-checked against data received from different operators or other sources of information.

- Require photographs to be taken of the area prior to the commencement of oil and gas operations. Baseline data for the process results, and in some cases circumstantial evidence related to the substantive results, may sometimes be obtained from aerial or other photographs of the site before and after the operations.
- Draft results based upon indicators and other proxies for which baseline data exists. While the selection of appropriate environmental results should not be based solely upon the question of what baseline data is available, the availability of data is a relevant factor to consider in framing and drafting results.

The current Regulation gives no indication as to how baseline data will be obtained, and without that data the results are largely unenforceable. Absent an aggressive strategy describing how the government plans to acquire the necessary baseline data, the Regulation itself should include mechanisms aimed at acquiring such data. Neither of these are in place and it would be inappropriate and ineffective to rely on the approach intended in this Regulation.

2.3. The regulation should expressly recognize that oil and gas development must be balanced with other values at play in a region

Part 4 of the draft regulation allows for the establishment and identification of areas and features. This is a welcome addition as it appears to allow opportunities to identify special protections for species and areas. However, as explained above, the broad nature of the exemption provisions in Part 5 would currently prevail over the special protections intended by Part 4.

The cumulative impacts of multiple industrial activities on landscapes are resulting in more compromised ecosystems and a greater need to protect the important values that remain – be they endangered species and ecosystems, or competing economic values that in many cases will have a potentially less harmful impact on the environment, such as agriculture or fisheries. This regulation must be able to balance these competing interests, and in many cases, enable these values to trump oil and gas development proposals – not vice versa. A strong case in point is the proposal to develop coalbed methane in the Klappan tenure at the headwaters of the Skeena, Nass and Stikine Rivers. This area is the subject of a temporary moratorium, but there is little question the long term value of intact salmon watersheds should prevail over proposals to develop an unconventional gas resource in an area of such special significance to First Nations and British Columbians.

2.4. The regulation should be drafted to be clearly consistent with the federal *Fisheries Act*

We are concerned that this Regulation conflicts with the *Fisheries Act* and perhaps even purports to allow a violation of that Act. For example, section 11 of the Regulation (or the duplicative section 32.8 in the copy provided to us) states that “a person carrying out an oil and gas activity must do so at a time and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat.”

While section 11 is actually one of the stronger results specified in the *Regulation*, even this section of the regulation appears to allow oil and gas activities to be carried out that do in fact harm fish or destroy, damage or fundamentally alter fish habitat. Such harm will be permitted as long as the way in which the activities were carried out is considered unlikely to have harmful effects at the time the activities were undertaken, or if the timing of the activities suggested that harm was unlikely. This type of conflict is even more stark in other sections – such as the requirement, in section 13 that fish habitat only be protected from activities that change the temperature for fish habitat where the streams have been formally designated as temperature sensitive. This is weak protection, and would make harming fish habitat perfectly legal, according to the province.

Further, we are doubtful that the requirements for set-backs from streams, wetlands and other fish habitat, together with the legal protections for those areas, are sufficient to ensure that oil and gas activities will not negatively impact fish habitat.

These provisions also have the potential for conflict with section 35(1) of the *Fisheries Act* which forbids any work or undertaking that results in the “harmful alteration, disruption or destruction of fish habitat”, except under conditions authorized by the Minister of the federal cabinet as set out in s. 35(2).

While it is possible to respect both the provincial and the federal legislation by simply respecting the more strict federal requirement, the provincial regulation permits what the federal law prohibits, and this will be sure to create operational confusion.

Moreover, s. 47 of the Regulation allows the OGC to exempt a person from section 11’s prohibition on activities that are likely to harm fish habitat if the OGC is “satisfied that, in the circumstances, it is not reasonably practicable to require the person to comply with the requirement.” Again, this provision would allow the OGC to expressly permit activities that the *Fisheries Act* forbids, leading to confusion and to the potential for direct conflict between provincial and federal law.

In addition, the Regulation defines only “fish stream” and fails to define “fish habitat.” Section 34(1) of the *Fisheries Act* defines “fish habitat” as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes” (a definition mirrored in the provincial *Fish Protection Act*¹⁰). However, the definition of “fish stream” in s. 1(1) of the Regulation is considerably narrower. Section 32.7(1) of the Regulation requires that a person carrying out an oil and gas activity in or about a stream must ensure that the activity does not “prevent or harmfully impede the movement of fish in a fish stream”. Section 32.7(2) of the Regulation allows the temporary impediment to fish movement under certain circumstances. While the Regulation sets conditions on such temporary impediments to fish movement, these impediments could nevertheless harmfully disrupt fish habitat, contrary to s. 35(1) of the *Fisheries Act*, which prohibits “harmful alteration” of fish habitat. Moreover, by restricting such activities only in relation to “fish streams”, the Regulation may be confusing to industry as the definition of fish habitat in the *Fisheries Act*’s prohibition is much broader. This could result in activities being undertaken so as not to impede “fish streams” under the Regulation that would still have harmful effects on “fish habitat” contrary to the *Fisheries Act*.

All together, these inconsistencies are likely to create unnecessary confusion which could result in activities being undertaken that harm fish habitat, permitted by the Regulation contrary to federal law. In the case of such a conflict, the federal law is likely to trump the provincial regulation. For this reason, it would be more sensible to ensure that the Regulation’s protection of fish habitat is at least as strong as that set out in the *Fisheries Act*, or stronger.

2.5. Acknowledge and address the specific threat to water resources posed by hydraulic fracturing

Recent developments, primarily the unconventional gas plays, require different technology to access the gas. Hydraulic fracturing is a critical case in point, requiring significant quantities of water be injected into the ground to access the resource as well as additional use of toxic chemicals in the process.

It has come to our attention that in some parts of the northeast, treated municipal water is being used by companies for hydraulic fracturing – injected into the ground and contaminated. We understand that when a shale gas well is drilled, each well must be fraced multiple times, with significant water

¹⁰ S.B.C. 1997 at s. 1(1).

contamination and loss. It is also our understanding that there are perhaps 1 or 2 groundwater monitoring wells for the entire northeast BC, and that groundwater patterns in the region is poorly understood.

Specific regulatory requirements should be developed for fracking in particular, including:

- Ensuring companies publicly share information regarding content and quantities of chemicals injected into the ground through hydraulic fracturing;
- Requiring specific baseline studies to be conducted to better understand groundwater and aquifer patterns in advance of hydraulic fracturing taking place. While section 6.3 requires that an activity not cause a material adverse effect on an aquifer, this section suffers from the same failures for results based regulations outlined above - “material adverse effect” is not defined and there is no initial baseline;
- Directly prohibiting the use of treated water for municipal consumption in any gas extraction process;
- Require operators to minimize the use of water; and
- Require operators to conserve water by remediating, treating, and re-using water that returns after each frac.

2.6. Broaden the protection intended for Riparian Areas

The draft Regulation addresses the issue of riparian areas through Riparian Management Areas and Riparian Reserve Zones, yet it fails to define the latter phrase. This must be rectified.

Further, given the critical importance of riparian areas the regulation should stipulate that these areas are NOT eligible for any exemptions (hopefully more carefully prescribed exemption provisions will exist in the final regulation as per our earlier recommendation).

Similarly, either this regulation, or if need be the Drilling and Production Regulation should clearly stipulate that hydraulic fracturing under riparian areas is prohibited given our limited baseline data, our limited scientific understanding of how groundwater influences surface water, and our previously identified concerns with respect to hydraulic fracturing.

Finally, as noted above, the riparian and wetlands protection for fish habitat should be sufficiently stringent that it will ensure that Fish habitat is not harmed in violation of the *Fisheries Act*.

2.7. Draft results that address cumulative impacts of development

Many of the most serious impacts of the oil and gas industry arise not from single activities, but from the cumulative impacts of many activities. While Part 4 of the Regulation seems intended to provide some protection for important ecological features, which may address cumulative impacts to a certain extent, the major requirements of the Regulation are written to address the site-specific impacts of individual activities.

Consider, for example, two gas wells situated in an area of wildlife habitat. It is quite possible that neither well would individually cause a “material adverse effect or impact on wildlife or wildlife habitat”,

but that collectively they would. This may be the case even if the operator has met the requirements of section 14(2) and made efforts to “coordinate the use of and share access to the area”. Since the obligations under section 14(1) of the Regulation applies only to “an oil and gas activity”, it is possible that the subsection would not apply even if a single operator were placing both wells, but it would certainly not apply, as drafted, to multiple operators. The impact of many wells on the wildlife habitat could well be devastating, but is largely unregulated under the Regulation. The Treaty 8 First Nations in northeast BC have direct experience with the issue of cumulative impacts, and have various materials outlining concerns about cumulative impacts to the water, land and environment based upon activities that have occurred on their territories for the past 50 plus years.

Similar problems exist for virtually all of the Results, with the exception of the Requirements related to Wetlands and Old Growth Management Areas that impose limits on the cumulative disruption that the oil and gas industry may cause.

The Regulation could address this problem to some extent by requiring persons carrying on oil and gas activities to consider all previous and proposed activities in determining whether their activities will, in combination with those activities, fail to achieve the result. Moreover, the Regulation should state that, where a result has not been achieved, all persons conducting oil and gas activities in the area are jointly responsible unless a person can demonstrate that their operations, as originally sited and as currently operated, did not contribute to the failure to achieve the required result.

3. SPECIFIC SECTION BASED COMMENTS

Section 6.2

Section 6.2 of the Regulation requires a person carrying out an oil and gas activity to make water available to a person who believes that their water has been adversely affected by oil and gas activities. The impacts of oil and gas activities on drinking water sources is well documented and we agree with the intent of this section.

The section requires a qualified professional to “assess the effect of the oil and gas operation on the [water supply]” and to determine if “on the balance of probabilities” the operation has caused an “adverse effect”.¹¹ On a cursory reading the section appears to contemplate an arrangement where, after a person complains that their water has been impacted, the company will hire a qualified professional to conduct any necessary testing and get to the truth of the matter. A closer reading, however, reveals that the section does not provide this level of protection for water users. The section does not specify what testing or information gathering is required in an assessment. It focuses not on whether the oil and gas company, who have access to considerable information and resources, can demonstrate that they are not the cause of the adverse effect, but rather whether the expert is satisfied, on a balance of probabilities, that the company is the cause of the problems.

Since the company, or an expert hired by the company, has no inherent interest in assembling this evidence, there is a likelihood that in many cases the onus of proving that the impacts on the water supply were caused by the oil and gas activities will fall to the water users, who generally have access to none of the information, expert knowledge or funds necessary to conduct the necessary testing.

¹¹ This section is one of the only sections in the Regulation to require action where there is any adverse effect, rather than only one that is “material”. We approve of this stronger language.

Section 7.1

As noted above, section 7.1 refers to Riparian Reserve Zones – a term which is not defined in the Regulation. A definition of the term should be added. Collectively the requirements surrounding Riparian Reserve and Management Zones should be sufficiently stringent to ensure protection of fish habitat (and therefore compliance with the *Fisheries Act*) and other water features.

Section 17

Section 17 – We strongly oppose any intrusion into Old Growth Management Areas (OGMAs). The forestry regime creating OGMAs has already placed an arbitrary limit on the amount of allowable cut that can be impacted by the creation of OGMAs, and as such there are fewer OGMAs, covering a smaller area, than is ecologically desirable. Where OGMAs are in place, they have been created based on a specific ecological need.

Allowing up to a 5% intrusion of oil and gas activities into OGMAs effectively reduces the area of forest lands that will be available to old growth dependent species by 5%, but even more significantly, there is no recognition that any intrusion into the OGMAs may fragment the OGMA and disrupt its ecological integrity. One can easily envisage a series of seismic lines crossing an OGMA disrupting a relatively small area in terms of land mass, but effectively splitting the OGMA into multiple pieces, undermining its utility as wildlife habitat.

Conclusion

While we welcome the introduction of a regulation intended to regulate the environmental impacts of oil and gas activities, we are deeply disappointed by many of the features of the Regulation as proposed, and do not believe it will provide adequate protection for environmental values. We strongly urge the government to revisit this draft and strengthen the requirements in the Regulation so that it is able to meet its intended goals of environmental protection and management.