EVALUATION OF BILL 21
ENVIRONMENTAL MANAGEMENT
AMENDMENT ACT, 2016
by
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Preface:

Amendments to the *Environmental Management Act* (EMA) introduced on Feb 29, 2016, (Bill 21) provide the legal foundation to establish a new spill preparedness and response regime to address environmental emergencies in B.C. The proposed regime is intended to ensure effective preparedness, response and recovery measures are in place for oil and hazardous substance spills from any source. The legislation:

1. Establishes new requirements for spill preparedness, response and recovery
2. Creates new offences and penalties
3. Enables the certification of a Preparedness and Response Organization (PRO)
4. Increases transparency, participation and accountability

For more information refer to Ministry of Environment's (MoE) website at: http://ow.ly/YU3yG
MoE's Comment and engagement website is at: http://engage.gov.bc.ca/spillresponse/

The following insights, viewpoints, and opinions are those of Stafford Reid - principal of EnviroEmerg Consulting (EnviroEmerg.ca)

Context:

BC's initiative to establish a world-leading spill response regime under enhanced provincial legislation is an ambitious undertaking - being guided by the BC Ministry of Environment (MoE). Draft legislation (Bill 21) offers a substantive framework to accomplish MoE's Environmental Emergency Program's mission and principles primarily through the establishment of a third-party (private-sector) provincial spills regime. MoE's intentions have been explained over the course of several years in numerous outreach/consultation documents, workshops and meetings with industry, First Nations, and local governments.

Key elements of the new regime, including an initial set of detailed regulations, will come into effect in 2017. Currently, Bill 21 established under *Environmental Management Act* (EMA) provides the framework and policy direction from which comprehensive regulations will then be developed. These regulations could also be further enhanced by standards and guidelines.

The provincial initiative acknowledges that Canada has a marine oil spill response regime establish under the *Canada Shipping Act*. This federal regime was established in 1993 legislation, regulations, and standards that have not been revised since to reflect on lessons-learned over the last 23 years on spill management and response. The federal regime is based on oil spill response planning delivered by a Transport Canada certified Response Organization

(RO). Canada's ROs are private-sector funded and managed, but their preparedness and response are guided by federal law, regulations, and standards. There is only one RO in BC - *Western Canada Marine Response Corporation* (WCMRC). Canada's RO's only respond to oil spills from vessels and oil handling facilities. They do not have a mandate: 1) to prepare and response to hazardous materials, 2) manage the vessel casualty itself to prevent or mitigate a spill of oil cargo/bunker fuels such as: tug rescue firefighting, salvage, or debris/wreckage cleanup), 3) care and rehabilitation of harmed wildlife, and 3) manage oily wastes beyond temporary storage at the beachhead.

BC encourages the federal government and industry to strive for world-leading marine response capabilities. However, there are a vast array of substantive changes and improvements required by the federal government, shipping industry, and ROs. This is proven-out by a recently commissioned report in October 2015 by Nuka Research and Planning Group that assessed current marine spill preparedness and response capabilities for B.C.'s coast. Report title is; *Marine Oil Spill Prevention, Preparedness, Response and Recovery World-Leading Approaches From Select Jurisdictions*, and available at: http://www.env.gov.bc.ca/main/west-coast-spill-response-study/docs/BC-World-Leading-Approaches-for-Select-Jurisdictions-Oct2015.pdf

The scale and scope of work to become world-leading in BC for both marine vessel casualty and oil spills, - as explained in the Nuka reports - far exceeds the level of recommendations put forward by Transport Canada's commissioned Tanker Safety Expert Panel (See Footnote)[1]. As such, the new provincial legislation has the potential to fix may spill preparedness and response deficiencies in marine, freshwater, and inland environments - as well as casualty management - regardless of industrial sector (vessel, railway, vehicle, pipeline, or fixed facility) and product (oils, chemicals, non-dangerous goods such as coal, ores, wood, grain, *etc*.).

The scope of engagement is not a paradigm shift for the province. It has always been BC MoE Emergency Program's position and policy to be engaged if a spill affects provincial interests / jurisdiction - even from federally-regulated industries such as railways, pipelines, and vessels. The intent is not to affect the operations of companies or intrude on federal laws, but to realize that spills for the most-part do not stay within the confines of right-of-ways (pipelines and railways) or of hulls (vessels, vehicles, facilities). The provincial initiative provides opportunities to: 1) remedy response gaps and deficiencies spill preparedness and response; 2) provide additional options for sourcing providers, and 3) expand provincial casualty/spill management and response capacity and capability.

[1] The Tanker Safety Expert Panel's:
Phase I report, "A Review of Canada's Ship-source Oil Spill Preparedness and Response Regime—Setting the Course for the Future," can be found here. Information on the Government's response to the Phase I report and its recommendations can be found here.
Phase II report, "A Review of Canada's Ship-source Spill Preparedness and Response: Setting the Course for the Future, Phase II – Requirements for the Arctic and for Hazardous and Noxious Substances Nationally,"

Summary of Evaluation:

The following summary of the evaluation of the EMA Bill 21 is not to reflect poorly on the substantive work done so far by the Province, and the comprehensiveness of the draft legislation released. Legislation is difficult to interpret with regards to: how, when and to who it will be applied. The third intentions paper - and supporting workshops - provides positive steps towards how the province plans to development and implement the legislation through regulations and standards.[2] The following comments are provided to seek further clarity and comprehensiveness to the provincial regime's legal framework.

Comments on EMA Bill 21:

1) Need to Fully and Explicitly Address the Management of a Casualty:

The legislation is very spill focused and does not capture the importance to directly manage a casualty - whether a vessel, vehicle, railway, pipeline, or fixed facility. In regards to managing the casualty itself, there are critical steps to prevent or mitigate the release of products whether cargo, stored, or transported products, or system fuels (bunkers). These immediate and time-sensitive measures include, but not limited to: undertaking stability analysis to determine structural integrity and damage pressures to the casualty, patching breaches in hulls, pipes, and containers, removing contained products that could spill, and managing the wreckage without doing more harm. These measures generally fall within the category of salvage operations that can also include emergency towing for a vessel or vehicle - as well as firefighting. The legislation should be enabling to address casualty management through regulation. The matter of managing the casualty should be part of the initiative's dialogue.

2) Need to Evaluate and Certify Primary Response Contractors:

The legislation does a good job providing the framework for companies, operators, *etc*. for spill contingency planning and preparedness. The sectors are collectively referred to as "regulated person" for preparedness, whereas the term "responsible person" is used in the legislation for those having control of the product and response to an incident. The latter is essentially the "spiller". However the legislation does not address the readiness and performance of their primary response contractors that would do most of the legwork such as incident management and/or operational tactics. Timeliness and robustness casualty/spill response by a company or a response organization is only as good as their contractors. There are no linkages to make the responsible person accountable for their contractor's performance during an incident. The legislation should go further into third-party contractor/consultant evaluations, and then certification of primary response contractors. The legislation should ensure that both regulated person (company) responsible person (spiller) are ultimately accountable for their hired contractor's performance. The Washington Department of Ecology's oil spill contingency rule has good legislation pertaining to primary response contractor evaluation and certification.

[2] MoE's Third intentions paper: http://engage.gov.bc.ca/spillresponse/files/2016/04/Spill-Preparedness-and-Response-in-BC-Playbook.pdf

3) Need to Refer to Geographic Response Strategies within the Hierarchy of Response Planning:

The legislation does a good job to establish a hierarchy for provincial response planning and preparedness from Area Response Plans (ARPs) to Geographic Response Plans (GRPs), but needs to go down to the more detailed (operational/tactical) levels of Geographic Response Strategies (GRPs). ARPs appear in the legislation to establish the geographic area that a *Provincial Preparedness and Response Organization (*PRO) is responsible for to manage and establishes its business plan. Within the PRO's ARP, there would then be GRPs and GRSs documents that identify social, cultural, ecological and commercial values to be protected. Since these are planning documents and processes, each plan and strategy requires appropriate First Nations, Local Government, Provincial, and Federal representation for endorsements (sign-offs). During an incident, GRSs essentially provide advance approval for industry to take tactical action with minimal collaboration and consultation with a community/jurisdiction. GRSs are well defined and established in the United States, but in BC requires a governance structure - *e.g.,* who is engaged and who endorses. (See item 10 for more discussion)

4) Need to Delineate a Provincial Preparedness and Response Organization to Differentiate it from a Private Spill Contractor Service and Business.

To manage expectations and to provide clarity by industry and public, the definition of a *Provincial Preparedness and Response Organization (*PRO) should be expanded. A concern is that industry and the public may view the PRO as just another privately-contracted services as an extension of industry's corporate governance, rather than that of the Province and those within an ARP/GRP/GRS planning process. It is important to differentiate that the PRO actually has a public good foundation as defined by this legislation, its regulations, planning tools (ARPs, GRPs, and GRSs), along with public and agency oversight arrangements. (See items 9 and 10 for more discussion)

5) Need to Broaden the Mission of Scope of the Legislation than just Focus on Spill Risk and Repairing Environmental Damages.

The legislation takes a "risk" approach to defining want needs to be done for spill planning and preparedness. Industry will take the “risk” equation of probability and consequence functions, and focus on the former. As a result, companies (or collectively as an industry) will not make investments in consequence management - especially capital-intensive ones. This is because a probability of an incident from their operations may be viewed as too low to make a business case for investing in consequence management (*e.g.,* mitigation measures). The legislation should move away from the term “risk”. Instead, the focus of the legislation on casualty/spill preparedness and planning should address and determine: exposures, vulnerability, sensitivity and recoverability to and by the environment, communities and infrastructures. This is inclusive of the social, cultural, ecological, and commercial values that may be threatened or harmed. The legislation should offer more descriptive wording to express its intent rather than just "risk" management.

6) *Need to have Means and Mechanisms Towards Managing and Repairing the Social Damage of a Major Casualty/Spill.*

To be world-leading legislation, the recovery and restoration after a casualty and spill must go beyond just for "environment" but to also have some language pertaining remedying social and cultural impacts to affected communities and human populations. Often the legacy of incident is the angst and torn social fabric of communities from both spill impacts and intrusive response efforts. Industry's simplistic viewpoint is that they will address these social matters by quickly cleaning up the spill and paying compensation. There are other creative solutions to addressing the social impacts, before, during and after an incident. The legislation should provide the framework to build some regulations/standards around mitigating social/cultural impacts, before, during, and after a major incident.

7) Need to Address Mitigation and Compensation According to their Definitions and Principles When Seeking and Applying Compensation (Monetary Award) for Residual Social, Cultural, and Ecological Impacts.

The legislation is not written in accordance with the definitions and principles of mitigation and compensation. It is not logical nor equitable to base the value of a payment (a.k.a. compensation award) after reasonable measures have been applied for spill response (cleanup, wildlife rescue, *etc*.,) on the cost of:

... an amount the director considers equivalent to the amount the responsible person would have been liable to if restoration or complete restoration were reasonably or safely achievable.

Keeping with the principles and definition of mitigation and compensation, a payment as a compensation award is equal to the dollar amount the director considerers equal to the value of residual damages after reasonable measures have been achieved and evaluated. These values include, but not limited to: ecological, social, cultural, and commercial values foregone based on direct monetary evaluations and/or indirect surrogate monetary evaluations.

As compensation is an equity matter, there needs a clause to guide the decision of what options can be used to compensate for residual damages after a casualty/spill response efforts are over. As such, there should be a statement that the director can establish a resource compensation trustee group for the incident in order to: assess residual impacts after reasonable mitigation measures have been applied, to determine the nature of compensation as either off-site mitigation, compensation payment or a combination thereof, and to monitor delivery and outcome of compensation awards/programs. Refer to the California's (Office of Oil Spill Preparedness and Response) model for natural resource damage assessment and trustee oversight.

8) *Need to Expand the Nature and Merits of Geographic Response Plans and to Rationalize Their Boundaries*

Regarding Geographic Response Plans (GRPs), there are other reasons for establishing them than listed in the legislation, such as:

- To identify social, cultural, ecological and commercial values at risk and in need of casualty/spill prevention, preparedness and response;
- To expedite emergency notifications of First Nations and Local Governments with the plan's area;
- To determine areas of concern that require geographic response strategies (which needs to be defined and addressed in the legislation)
- To ensure adequate oversight and governance by First Nations, Local Governments, and Province in the design, content, endorsement and application of a GRP.

It is important to rationalizing a GRP's boundaries with FN territorial interests/resource plans, local government boundaries, *etc*. This helps define who gets engaged in the oversight/governance of the GRP. These should also reflect the types of industries, communities, and ecological/social exposures/vulnerabilities. Another matter is to assess the social, cultural, and commercial viability of a community(s) within the GRP's boundaries with regards to their reliance on and resiliency of the resources if harmed by a worst-case casualty/spill. The latter is also inclusive of intrusive response efforts.

As a general statement on GRPs, it should be clearly understood that GRPs are not just about increased response efficiency and effectiveness. The process of their development is to foster trust and confidence by FN, Local Govt, communities, with industries and regulatory agencies through inclusiveness, collaboration, and transparency, *etc*. This is the single most important goal of provincial regime initiative. Public will accept less than perfect response if they knew the deficiencies and everybody was working together towards solutions. GRPs allow this to happen. Section 5 pertaining to establish advisory committee is along this line.

A role of the proposed *Provincial Response Organization* (PRO) is to actually facilitate the development of GRPs among industry and community representatives. This fosters area awareness/understanding, as well builds the relationships and trust with communities in a GRP's area. GRP development should not be left to regulated persons (*e.g.,* a collection of companies) to come together and undertake. This is not an effective approach. The legislation should reflect this opportunity to use PRO for GRP coordination within their designated area of response (*i.e.,* the Area Response Plan).

9) *Need to Expand and Further Define the Nature and Role of a Provincial Preparedness and Response Organization (PRO)*

The legislation needs to be more clear about the expectations of a PRO compared to a typical private-sector spill/response contactor (Refer to item 4 for more discussion). The priority and main functions of a PRO should be: establishment and application of GRPs/GRSs, undertake rapid situational analysis in the field to determine public and ecological exposures, invoking incident management under the ICS by establishing an Incident Command Post, and facilitating equipment and personnel logistics from staging areas to the actual incident field site. These are

the current weakness in responding to a major casualty/spill. The role of the responsible person (spiller) it to engage in ICS in Unified Command and the Incident management team with the PRO and other responding jurisdictions. The role of the private response contractors is to show-up with the operational equipment and technical specialists - whether on-retainer with the PRO or a regulated person. For the PRO to amass large amount of response equipment and supporting person is duplicating private-contractors and is in competition with them. As the legislation is written now, the PRO role and mandate seems that of any other private response contractor.

An objective of this legislation should be to have the PRO foster and provide economic opportunity to qualified spill response contractors. It should also be made clear that the arrangement with a PRO with a regulated person is only to fund casualty/preparedness and response, such as by paying annual membership retainers. There should only be one fee schedule, and not one negotiated for each regulated person, or for just parts of the PRO service.

The more contentious aspect will be PRO seeking cost-recovery for its services during and after an incident. Here the response fees need to be made transparent and equitable, and should not compete with private-sector contractors.

The most fundamental and critical message in the legislation regarding the nature of a PRO, is that the a PRO is guided by various advisory committees within its the areas encompassed by its Area Response Plan, as well as the Geographic Response Plan and Geographic Response Strategy therein. The PRO is to deliver a public good as defined by the representation in these advisory committees that includes the province, First Nations, local governments. This is a significant paradigm-shift whereby the accountability and directive are from representatives in advisory committees, not that of industry/companies (regulated persons) who are paying for the PRO services - e.g. as an arrangement for preparedness and/or for response services.

The legislation references the requirement to establish incident management by the responsible person (company), but there are four other critical actions that should also be prescribed in the legislation. These are critical functions that a PRO should be providing on behalf of its clients that it has an arrangement with. Besides instigating incident management under the ICS (e.g. establishing and Incident Command Post), the most valued services that a PRO can provide are:
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1. Undertake on-scene documentations and measurements (sampling) the product being released, its trajectory, and exposures (ecological, public, *etc*.).
2. Implementation of Geographic Response Plan elements, if established for the area of spill impact/exposures, that includes, but not limited to: referenced notifications of First Nations and stakeholders; accessing initial resources; referencing resource sensitivity /vulnerability maps.
3. Establish forward-based equipment staging areas and then the logistics of moving resources (people and equipment) to the casualty/spill site and affected areas
4. Undertake tactical delivery of casualty and spill mitigation as prescribed by Geographic Response Strategies, if established

The legislation could still stipulate that a regulated person/responsible person must meet these requirements with prescribed time-lines, whether they have an arrangement with a PRO or not. The "drawing-card" to having an arrangement with a PRO is that there is a higher degree of confidence that the law will be meet. Once these five critical actions are taken - 1) incident management, 2) on-scene situational analysis, 3) implementation of GRPs, 4) logistics established, and 5) initial tactics as per GRSs - then incoming resources from other response contractor, as well as members of Unified Command (prov, feds, local govt, FN, and RP) can be effectively managed.

In summary, the strategic direction of the legislation is not clear as to whether the intention is to legally require a company (regulated person) or spiller (responsible person) to have an arrangement with a PRO and to use it, respectively. This is a stick approach. Alternatively, to draft legislation to make it advantageous have an arrangement with a PRO. This is a carrot approach. The latter could be achieved if the PRO provided the following services - based on law, regulations, and standards - to their clients:

- Facilitate the engagement, delineation and administration of Geographic Response Plans and the Geographic Response Strategies therein;
- Undertake risk assessments - inclusive of resource vulnerabilities and sensitivities - within their Area Response Plan;
- Undertake exercises and test readiness of their clients, as well as their primary response contractors and consultants;
- Track and record trained personnel in incident management, as technical specialists, and as operational/logistics personnel;
- Foster commercial opportunities for private response contractors in casualty/spill preparedness and response, as well as research and development;
- Mitigate social/cultural impacts of a major incident via support to Advisory Committees and engagement in GRP/GRSs development.
- Undertake the five noted critical actions in the event of a major incident.

10) *Need to Provide More Structure and Delineation of Hierarchical Advisory Committees*

The most substantive and positive aspect of the legislation is the use of Advisory Committees to provide governance at various levels (hierarchies) of casualty/spill preparedness in the province. This is particularly important for a PRO and their area of business as defined by an Area Response Plan, than for divergent regulated companies. (Note: For response, governance is established within the Incident Command System and Unified Command protocol therein). The reason is that industry and public may view the PRO as just another privately-contracted services as an extension of industry's corporate governance, rather than that of the Province and of those within ARP/GRP/GRS planning processes. There is a need to differentiate that the PRO actually has a public good foundation, as defined by this legislation, its regulations, planning tools (ARPs, GRPs, and GRSs), and public and agency oversight arrangements.

The hierarchical advisory committee approach in the legislation can foster collaboration, transparency and trust amongst First Nations, Local Governments, communities, industry and regulatory agencies as they strives for better protection of identified social, cultural, ecological and commercial values. That is, these committees can define and ensure the public good.

The legislation could be clearer on naming and defining the nature of these advisory committees, such as:

1. Provincial Advisory Committee: Established by the minister with membership is representative (e.g. co-chair) of each Area Response Plan established. There is only one Provincial Advisory Committee.
2. Area Response Plan Advisory Committee: Established by and for the PRO for its business plan and to identify resources and communities at risk and to delineate areas for Geographic Response Plans therein. There is an Advisory Committee for each ARP.
3. Geographic Response Plans Advisory Committee: Established by Area Response Plan Advisory Committee with support from regulated persons in the ARP so as to identify areas of concern for protection to prepared Geographic Response Strategies. There can be several GRP Advisory committees with an ARP, but memberships can overlap. Variations in a GRP are a function of stakeholders who have interests/jurisdiction/ within a GRP.
4. Geographic Response Strategies Technical Advisory Committee comprised of technical specialists from industry and consultants in tactical operations with representation of stakeholders whose interests are being protected by a GRS. There can be several GRS Technical Advisory Committees depending on the nature of operations: spill response, salvage operations, wildlife rescue, and waste management.

Membership can be on one or more of the above committees based on representation and interests. Alaska has a well-established Advisory Committee structure from regional to operational levels.

Comments that are embedded in annotated pdf document for BILL 21 ENVIRONMENTAL MANAGEMENT AMENDMENT ACT, 2016

Not clear on the difference between an "area response plan" and a "geographic response plan (GRP), and no mention or definition of a "geographic response strategy (GRS)".
The boundaries of ARPs, GRPs and GRSs are important to help delineate who gets engaged as a stakeholder (FN, Local Govt, community), and who actually signs them off. These can be part of the governance model.

No consideration to certify the response contractors that supports a *Provincial Preparedness and Response Organization (*PRO), as *per* Washington's DoE's approach. Spill incident management and operations of a company or its PRO is really only as good as the response contractors they hired. One can tap into the industry certifications to get buy in.

To manage expectations and to provide clarity with industry and the public, the definition of a PRO could be expanded. A concern is that industry and public may view the PRO as just another privately-contracted services as an extension of industry's corporate governance, rather than that of the Province and of those within ARP/GRP/GRS planning processes. There is a need to differentiate that the PRO actually has a public good foundation, as defined by this legislation, its regulations, planning tools (ARPs, GRPs, and GRSs), and public and agency oversight arrangements.

A weak element in the legislation is addressing the need to manage a casualty regarding the physical damage to a vessel, vehicle, pipeline, facility, not just the spill consequences. This includes for vessels, vehicles, pipelines etc. having a plan that addresses towing, salvage, places of refuge, hull/tank/pipe repairs in order to prevent or mitigate the release of cargo and contents, as well as to manage any wreckage and debris.

The legislation takes a "risk" approach to defining want needs to be done for spill planning and preparedness. Industry often takes the “risk” equation of probability and consequence functions, and only focus on the former, whereby they will not make investments in consequence management - especially capital intensive ones. For expense mitigation measures - such as dedicated rescue tugs, salvage, - a probability of an incident from their operations is too low to make a business case for such expenditures. The legislation should move away from the term “risk” and to address the need to determine the exposures, vulnerability, sensitivity and recoverability to and by the environment, communities and infrastructures, that include: social, cultural, ecological, and commercial values that may be threatened or harmed.

A planning and preparedness expectation by a regulated person (company, operators, *etc*.,) that is not explicitly stated is to ensure that they address the logistical needs of access, transport, and deployment of emergency resources to prescribed timelines. One can't be world-leading if you can get to the casualty/spill site on time. This is where their primary response contractors tend to fail. There should be an explicit statement about logistics planning linked to timelines and performance that includes getting resources to the actual field (operational/tactical) location, not to just a staging area.

An assumption in the legislation is that the province will not be seeking a broad industrial-sector submission of contingency plans, but will target individual companies (*i.e.,* regulated person). If

asking for an industrial sector - such as all recycling facilities - to submit C. Plans, the Ministry of Environment's emergency program will be overloaded with work reviewing them. Consideration should be given in this that that a risk assessment at the area response plan and/or geographic response plan levels can lead to delineating the regulated persons required to submit a C. Plan.

The legislation may want to consider how C. Plans are submitted in that the director can specify the means and format. Details can be in regulation/standard. This leads to C. Plans being submitted a pdf files, with some structure that enables them to be managed by a database and be electronically searchable.

There is no mention of a regulated person (company) having the opportunity to submit an "umbrella" C. Plan when they own and operate many vessels, vehicles, railways, facilities of similar type and cargos. They can then submit one generic plan that addresses common elements, then appendices that are specific to the exposures/risks, and other geographically relevant factors such as those defined by ARPs and GRPs.

The legislation states the director can ask the responsible person to test the efficacy of the plan, but does not add the proviso that this can include no-notice exercise at the incident management (site) level, operational (field) level, or both. This is where one tests the responsible person's primary response contractors. On that note, the legislation needs to state the responsible person is responsible for all third party contractors for their performance as stipulated in their C. Plan. This avoids the RP from passing performance accountability as a result of their third party contractor deficiencies.

The legislation should make it a legal requirement to the responsible person to apply the Incident Command System for the management of the incident, not leaving to this to be an uncertainty. The ICS is very well established and internationally recognized. It is an explicit requirement in State of Washington in their oil spill contingency plan rule. I would also require the responsible person to ensure the its C. Plans are found on the ICS's structure and processes.

The legislation misses the point that a spill is just one aspect in managing an incident. It does not address the casualty (wreckage) itself whether a train, vessel, vehicle, pipeline etc.. There is a salvage matter to repair the rupture and to have a plan to do no further harm with a wreckage when towing and removing. The term "stabilize" may be apply here to capture these factors, but is too abstract to achieve a paradigm shift in world-leading to actually manage the casualty, not just a spill.

The "risk and impacts" terms to guide the evaluation of a spill incident are a too vague. The expectation of the responsible person should be to identify and demarcate exposures, vulnerabilities and sensitivities to social, cultural, ecological, and commercial values threatened or affected.

A missing item for defining response measures to be achieved is to have a temporary and final waste disposal process and plan that includes spilled materials, and any casualty wreckage/debris.

To be world-leading legislation, the recovery and restoration must go beyond just for "environment" but to have some language pertaining remedying social and cultural impacts of affect communities and human populations. Often the legacy of incident is the angst and torn social fabric of communities from both spill impacts and response efforts. Industry's simplistic viewpoint is that they will address these social matters by quickly cleaning up the spill and paying compensation. There are other creative solutions to addressing the social impacts, before, during and after an incident. The legislation should provide the framework to build some regulations/standards around mitigating social/cultural impacts, before, during, and after a major incident.

It is not clear if the recovery plan after a spill from the responsible person includes addressing social/cultural impacts to communities and the human population. Affected people will want an outlet and voice on how the spill and response intruded on their daily lives and livelihoods. It is not all about ecological restoration of environmental losses.

On the matter of when restoration is not reasonably achievable, the term "reasonably achievable" infers that the cost of repair (mitigation) exceeds the benefits derived - whether direct monetary (private/commercial damages) or intangible values (natural resources, subsistence fisheries). This is an economic efficiency position. The optimal goal is where mitigation's marginal costs equal the marginal benefits - that is for every dollar spent, one gets a dollar's value back. The outcome of pursuing economic efficiency (i.e. reasonable costs/achievable) is often a residual loss of the goods and services that the environment (coastal habitats/ecology's) confer to people or they rely on and enjoy. Payment for this loss is an equity issue - that is, it is it fair to have industry as part of doing their business, and despite mitigation efforts - be allowed to "write-off" residual impacts. If no, then compensation as a "cash award" equal to the residual lose is awarded to those so suffered harm as well as resource trustees (Min. of Environment, Environment Canada, DFO) - even for intangible benefits. This is the core principle of mitigation and compensation for resource losses, and the foundation of natural resource damage assessments.

Item A is too narrow in scope regarding when further mitigation (e.g. restoration) is not required. Item A could be expanded to state: A) damages to the environment and the social, cultural, ecological, and commercial values it confers prior to being damaged. There also needs another Item c) damage to substance fisheries

If seeking off-site mitigation measures to compensate for damages because reasonable measures could not be achieved after a casualty/spill, then there needs a proviso in this clause that states: **Under the direction or resource agencies and affected First Nations, and communities**, *mitigation measures, to be taken elsewhere, that compensate, or partially compensate, for the type of damage caused by the spill, or* The "or" should be changed to "and/or" to leave a blended option open.

The next option for remedying residual damages after reasonable measures have been applied in not in accordance with the principles and definitions of mitigation and compensation. It was already defined in the previous section that mitigation/restoration efforts that are too expensive, unsafe, or that will do more harm, needn't be done. As such, to base the value of a payment (a.k.a. a compensation award) based on the cost of *... an amount the director considers equivalent to the amount the responsible person would have been liable to if*

restoration or complete restoration were reasonably or safely achievable. is not logical nor equitable. Keeping with the principles and definition of mitigation and compensation, a payment as a compensation award is equal to the dollar amount the director considerers equal to the value of residual damages after reasonable measures have been achieved and evaluated. These values include, but not limited to: ecological, social, cultural, and commercial values foregone based on direct monetary evaluations and/or indirect surrogate monetary evaluations.

As compensation is an equity matter, there needs a clause to guide the decision of what options can be used to compensate for residual damages after a casualty/spill response efforts are over. As such, there should be a statement that the director can establish a resource compensation trustee group for the incident in order to: assess residual impacts after reasonable measures have been applied, to determine the nature of compensation as either off-site mitigation, compensation payment or combinations thereof, and to monitor the delivery and outcome of compensation awards/programs. It should not be left to a single person to make these decisions. Refer to the California model for natural resource damage assessment and trustee oversight.

Section 2 under "When restoration not reasonably achievable, 91.21" is not clear on what the intent is here. It is better to use this section to establish a framework for a resource compensation trustee group with some basic structure and principles of their role to ensure the programs and funds are being used equitably and effectively.

Regarding the clause pertaining of a Certificate of Recovery (91.3), it is a bit awkward to differentiate whether the “recovery plan” pertains to the mitigation efforts at the spill/casualty site (e.g. direct response/cleanup efforts) or pertains to a recovery plan to compensate for residual damages? It would be better to add this section after Responsible persons – spill response 91.2. whereby a recovery plan just pertains to the mitigation efforts at the spill/casualty site (e.g. direct response/cleanup efforts). As part of this recovery plan, the responsible person much document, rationalize where and why mitigation may be unachievable and then address the anticipated residual impacts, including durations. This approach leads into the next section of the legislation pertaining to what is required when restoration not reasonably achievable 91.2. This approach gives the director something to work with.

Regarding Geographic Response Plans, there are other reasons for establishing geographic response plans than listed in 91.31 as follows:
- to identify social, cultural, ecological and commercial values at risk and in need of casualty/spill prevention, preparedness and response
- to expedite emergency notifications of First Nations and Local Governments with the plan area
- to determine areas of concern that require geographic response strategies (which needs to be defined and addressed in the legislation)
- to ensure adequate oversight and governance by First Nations, Local Governments, and Province in the design, content, endorsement and application of a GRP.

As a general comment, the current language of this legislation is too generalized and does not provide clarity on what the objectives are.

GRP boundaries should not be straight lines/boxes. On designating the boundaries of a GRP, it is important the minister has some criteria to work from, such as rationalizing the boundaries with

FN territorial interests/resource plans, local govt boundaries, etc. This helps define who gets engaged in the oversight/governance of the GRP. These should also reflect the types of industries, communities, and ecological/social exposures/vulnerabilities.

For the developing the terms of reference for the geographic response plan, there is more to than identifying whether a resource is "sensitive". An area (resource) of concern can be a cove, stream, cultural site, *etc*. that is a factor of being: sensitive, vulnerable, subject to impact exposure, and of poor recovery potential if harmed. There should be some legal language that captures these inter-relationships/factors. Note an: area of concern is where one wants a Geographic Response Strategy developed. Another matter to concern for a ToR of a GRP is to assess the social, cultural, and commercial viability of a community(s) within the GRP's with regards to their reliance on and resiliency of the resources if harmed by a worst-case casualty/spill. The latter is also inclusive of response efforts.

As a general statement on GRPs, it should be clearly understood that GRPs are not just about efficiency. The process of their development is to foster trust and confidence by FN, Local Govt, communities, with industries and regulatory agencies via engagement, collaboration, transparency, etc. This is the single most important goal of this legislative initiative. Public will accept less than perfect response if they knew the deficiencies and everybody was working together towards solutions. GRPs allow this to happen. Section 5 pertaining to establish advisory committee is along this line. The Section should go before detailing what goes into the plan (section 4), as the governance/oversight is more important in guiding the process of content of GRPs, than the listing of contents.

With regards to the list of what could go into a GRP, in order to address tactics (operations) one first determines “areas of concern” as priorities for protection by the application of operational tactics as defined by Geographic Response Strategies….which needs to be defined in this legislation. For GRPs, the list needs to include emergency notifications. The content and structure of a GPR could be defined by the order, regulation, and/or standard

The Section on establishing an advisory committee for GRP development could go before listing what goes into a GRP (section 4), and then reference that advisory committee directs to a large extent what specifically goes into the GRP - but not necessarily the structure of a GRP.

It is very important that the Geographic Response Plan’s boundaries are rationalized around FN’s territorial interests, local government boundaries, and other jurisdictional boundaries so as to better and more effectively determine who should participate in a GRP advisory committee. There should also be clarity that the GRP members are “representatives” of their group, not just “participants”. There is a difference in that representative are appointed by their mayor, council, *etc*., to make decisions on what gets protected and how, and takes GRP products to their executive for sign-offs.

A major role of the proposed Provincial Response Organization (PRO) is to actually facilitate the development of GRPs among industry and community representatives. This fosters area awareness/understanding, as well builds the relationships and trust with communities within a GRP area. The legislation should reflect this opportunity. GRP development should not be left to regulated persons (a collection of companies) to come together and undertake - not an effective approach.

A fourth bullet is required regarding when and why government may carry out spill response is if another jurisdiction (such as a Fire Department, Federal govt, FN) requested provincial assistance.

An additional cost recovery item for the Province is to undertake natural resource and social-economic damage assessments for post-incident (spill) compensation as replacement in kind, monetary awards, or combinations thereof.

For the purpose of cost recovery by the provincial government, if the spill incident results from a major (convention) vessel, the federal court will rule against provincial cost recovery under the Canada Shipping Act as there are prescribed mechanisms and restrictions in place by international compensation regimes that Canada subscribes to.

For explaining the expectations of a provincial preparedness and response organization (PRO), it has to be able to manage the casualty via mainly by salvage operations. Other important factors also include undertake immediate situational analysis by air, water, and/or land to determine the extent and nature of exposures to people, property, and the environment. This requires special analytical equipment and specialists. The legislation also needs to stipulate the PRO must also be able to invoke and support incident management under the ICS with the responsible person and other agencies, inclusive of First Nations.

To manage expectations of a PRO, the legislation should provide what are its priority functions, such as: application of GRPs/GRSs. situational analysis to determine exposures/incident management by establishing and Incident Command Post/ field logistics to get staged equipment to the operational area. The tactical resources come from primary response contractors with supporting technical specialists. For the PRO to amass operational equipment and deploy it in competition and duplicating private response contractors.

With regards to a prospective PRO's submitting its business plan to apply for a certificate, this is the first reference to an “area response plan” (ARP). There is no clear delineation of how an ARP differs from a Geographic Response Plan. The legislation is weak here. It should be explained that somewhere in the legislation that an ARP is regional in-scope, whereby it may have several Geographic Response Plans established within, as per sections above. The business plan is to determine if the PRO will establish a means within the ARP(s) to facilitate casualty/spill planning and response delivery, such as establishing a regional office(s). Essentially, the ARP becomes the PRO"s area of responsibility to manage and protect, and it also determine who its clients will be.

With regard to PRO fees, the biggest complaint will probably not be from the responsible person, but other spill response contractors that the PRO could be in competition with. An objective of this legislation should be to have the PRO foster and provide economic opportunity to qualified spill response contractors. It should be made clear that the arrangement with a PRO with a regulated person is only to fund casualty/preparedness and response, such as by paying annual membership retainers. There should only be one fee schedule, and not one negotiated for each regulated person, or for just parts of the PRO service. The more contentious aspect will be PRO seeking cost-recovery for its services during an incident. Here the response fees

need to be made transparent and equitable, and should not compete with private-sector contractors.

If the PRO hires a private response contractor for services, then these fees have to be supportable. The issue then becomes who is accountable for cost/services disputes with by the responsible person - the PRO or the hired response contractor? No PRO will take on the liability of a third-party response contractor. The legislation needs much more clarity and expansion to address these issues.

Regarding complaint to minister respecting fees: the legislation needs to separate costs as:

> 1) Fees through membership retainer with a PRO for its planning, preparedness - inclusive of administration and public/FN out-reach and engagement as for GRP development
>
> 2) Response costs for services rendered directly by the PRO to a responsible person for whom it had an arrangement with
>
> 3) Response costs for services rendered, but hired by a PRO by third-party response contractors. Note: Need to reduce the liability here for a PRO. A third-party response contractor charges and what services are used are not always under a PRO's control - but that of Unified Command and assignments made. Hence the importance of having the legislation to at least provide some evaluation/certification of a Primary (third-party) Response Contractor to ensure good value for their services, and no surprises when used.

Regarding area response plans and what it entails… the deliverable is both a business and response plan for the area designated for a PRO to prepare and manage for its conditional PRO certificate. The ARP also captures the responsible persons who the PRO could (will) make an arrangement with for services, and the communities, jurisdictions, and FN for engagement and collaboration. It also should show where offices and facilities would be located.

As regards to Advisory committee for the Area Response Plan - as with a Geographic Response Plan's boundaries, the ARP's boundaries need to be rationalized with jurisdictional borders and FN's territorial interests. This helps define who would be members of the ARP advisory committee. It should be recognized that the composition of an advisory committee for an ARP, GRP, and GRS would be slightly different for each one. Some will have the same representative members, other not. A good model to follow for advisory committee/oversight composition is that of Alaska. Further to the governance model for a PRO, the fundamental difference between what is modeled under BCEMA compared to a marine oil spill response organization under the Canada Shipping Act, is the PRO is directed and accountable to the advisory committee, not to the regulated person(s) - e.g. industry that is paying and using them. This fundamental shift better reflects that a PRO is to delivery a public good based on inclusiveness and transparency with affected stakeholders.

Regarding Minister's advisory committee respecting spill response, membership should be representation from a PRO's Area Response Plan so as to ensure continuity and awareness of the issues. The legislation has a hierarchy of advisory committees that has positive governance

merits for delivery of a public good. However, the legislation should be more clearer on naming and nature of these committees, such as:

1. Provincial Advisory Committee: Established by the minister with membership is representative (e.g. co-chair) of each Area Response Plan established. There is only one Provincial Advisory Committee.
2. Area Response Plan Advisory Committee: Established by and for the PRO for its business plan and to identify resources and communities at risk and measures for casualty/spill prevention, preparedness and response, as well as to delineate areas for Geographic Response Plans therein. There is an Advisory Committee for each ARP. (NOTE: the number of ARPs for B.C. should be in the range of 6 to 8 only)
3. Geographic Response Plans Advisory Committee: Established by Area Response Plan Advisory Committee, regulated persons (industries/companies in the ARP) so as to identify areas of concern for protection so as to prepared Geographic Response Strategies. There can be several GRP Advisory committees with an ARP, but memberships can overlap. Variations in a GRP are a function of stakeholders have interests/jurisdiction/ in a GRP.
4. Geographic Response Strategies, Technical Advisory Committee comprised of technical specialists from industry and consultants in tactical operations with representation of stakeholders whose interests are being protected by a GRS. There can be several GRS Technical Advisory Committees depending on the nature of operations: spill response, salvage operations, wildlife rescue, waste management.

Membership can be on one or more of the above committees based on representation and interests.

Regarding a company (industry, trade, business) having to provide information about their substance(s) that could potentially be spilled, the information should also include what measures are in place to mitigate a spill within/at their facility or area of operation. This can include physical structures such as retaining dykes, spill response equipment, incident management capacity, and contracted services. The information sought should provide a clear picture of their active preparedness and passive mitigation measures.

WITHIN THE EXPLANATORY NOTES

It is important that the legislation is more explicit and prescriptive about the responsible person having to use the provincial and international Incident Command System for emergency planning and management. For example, Item A should be more prescriptive stating: *requiring that emergency management to be done under the Incident Command System is established within a specific time after the spill.* It is not sufficient just to state "an incident command system" be established as there are various types of systems out there.

For Item B. the correct term is “operational guidelines” not standards. Furthermore, Item B should state: *establishing operational guidelines consistent with the Incident Command System to guide, but not limited to, ICS implementation, the use of technical specialists, and operational /tactical aspects for casualty/spill response.*

This section specifically references the requirement to establish incident management by the responsible person (company)**, but there are four other critical actions that should also be prescribed in the legislation:

1. Undertake on-scene documentations and measurements (sampling) the product being released, its trajectory, and exposures (ecological, public, *etc*.).
2. Implement Geographic Response Plan elements, if established for the area of spill impact/exposures, that includes, but not limited to, referenced notifications of First Nations and other stakeholders, accessing initial resources, evacuations measures, sensitivity/vulnerability analysis.
3. Establish forward-based equipment staging areas and then the logistics of moving resources (people and equipment) to the casualty/spill site and affected areas
4. Undertake initial tactics for casualty and spill mitigation as prescribed by Geographic Response Strategies, if established

** These are critical functions that a PRO can provide, rather than leaving it to government or responsible person's (company's) response contractor to undertake - always too late and poorly done. Once incident management has been establish - as well as the other listed 4 action's - the remainder of the resources can be forthcoming by private-sector response contractors, as well as members within Unified Command (e.g. Province, Local Govt, First Nations). These are the most valued services that a PRO can provide on behalf of its clients and the province.