

Public Engagement Summary 2016

Land Based Spill Preparedness and Response in British Columbia

B.C. Spill Response Regime Project

Environmental Protection Division

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Introduction

The Ministry of Environment is enhancing spill preparedness and response in British Columbia (B.C.). In June, 2015, the ministry announced plans to proceed with developing and implementing a world-leading Spill Response Regime (Regime). Enhanced government oversight and the addition of new rules and requirements are intended to confirm industry's and government's ability to respond quickly and effectively to spills anywhere in B.C.

Consultation with those potentially impacted by a spill – industry, response contractors, other industry regulators, First Nations, local governments, environmental non-governmental organizations (ENGOS), and citizens – is a critical and continuous process throughout the development of the Regime. Policy intentions papers from 2012 to today are available online under the Environmental Emergency Program.

In April 2016, the Ministry of Environment released a third Intentions Paper – *Spill Preparedness and Response in BC: Proposed Amendments to the Environmental Management Act (EMA) and Proposed Regulations*. For reference, a summary of the key topic areas in the third Intentions Paper is provided in Appendix One. With this release, a five-phase public engagement process began (see Figure 1) to gather public input through: an online public input forum; a two-day Symposium; seven regional First Nations workshops; and three technical working groups.

Figure 1: Overview of the B.C. Spill Response Regime Project 2016 Public Engagement Phases



In May 2016, the amendments proposed to EMA passed in the Legislative Assembly unchanged and received Royal Assent. Next, regulations will be developed to enact the new legislation. All input from the five-phase engagement process will be used to inform the development of these new regulations.

This report, the fifth phase of the engagement process, provides a high level summary of the comments received during the other engagement phases and highlights the ministry's newest approach for building the new regulatory environment. Summaries are qualitative, not quantitative. An overview of key emerging themes is presented in Table 1. More detailed summary reports for most engagement events are also available online and are referenced in the relevant section introductions.

Table 1: Key Emerging Input Themes

Symposium	2a. Online Forum: Individual Citizen	2b. Online Forum: Organization Submissions	All First Nations Workshops	Technical Working Group
<ul style="list-style-type: none"> • Alignment with other regulators • Barriers to compliance acknowledged • Clearer definitions • Collaborative planning • Competitiveness maintained • Costs minimized • Enforcement defined • First Nations included • Local communities included • PRO configuration clarified • Public vs private spill response plans • Shared access to information 	<ul style="list-style-type: none"> • Barriers to compliance acknowledged • Collaborative oversight of the PRO • Compensation for loss of public use or cultural loss • Costs minimized • Enforcement defined • Funded stakeholder participation • Protected environmental, human and wildlife health • Quality control through government oversight • Shared access to information 	<ul style="list-style-type: none"> • Alignment with other regulators • Built on existing capacity • Clearer definitions • Collaborative oversight • Collaborative planning • Descriptive vs prescriptive • Enhanced response training • Exemptions and variations • Funded recovery costs • Funded First Nation and local government participation • Planning for orphan spills • Protected environmental, human and wildlife health • Public vs private spill response plans • Shared access to information 	<ul style="list-style-type: none"> • Collaborative oversight • Effective communication • Funded First Nations and local government participation • Government to government relations • GRP pilot project • “Local, prepared, ready” • Protected environmental, human and wildlife health • Risk-bringer accountability • Timely spill alerts and notifications 	<ul style="list-style-type: none"> • Alignment with other regulators • Barriers to compliance acknowledged • Clearer definitions • Collaborative planning • Competitiveness maintained • Costs minimized • Descriptive vs prescriptive • Enforcement defined • Enhanced response training • Exemptions and variations • Phased in implementation • Plans for the most probable spills • Public vs private spill response plans • Protected environmental human and wildlife health • Shared access to information • Quality control through government oversight • Timely alerting and notification

Symposium on the Third Intentions Paper

In April 2016, a two-day symposium was held that was designed to clarify some of the intentions on the proposed legislation summarized in the third Intentions Paper, to seek input on the development of new regulations and to identify participants for technical working groups. Over 275 participants from industry, First Nations, local governments, federal regulators, other provincial ministries, professional associations and non-governmental organizations¹ attended the conference. Ministry staff offered presentations on the topics below and then facilitated small group discussions. The comments below are from a collective review of all discussion groups on each topic. Two detailed summary reports on the Symposium are available online².

Symposium Key Input Themes

- [Alignment with other regulators](#)
- [Barriers to compliance acknowledged](#)
- [Clearer definitions](#)
- [Collaborative planning](#)
- [Competitiveness maintained](#)
- [Costs minimized](#)
- [Enforcement defined](#)
- [First Nations included](#)
- [Local communities included](#)
- [PRO configuration clarified](#)
- [Public vs private spill response plans](#)
- [Shared access to information](#)

Preparedness

Who is a Regulated Person?

This ministry presentation provided a summary of the approach being considered for identifying regulated persons – those people who would be required to demonstrate preparedness. At this point, the ministry was considering a list of 140 liquid substances and three classes of regulated person (one for trucks and rail, another for pipelines, and a third for fixed facilities). During the discussion period, participants questioned if the list would evolve to include gas, solids, other substances and other factors, what methodology would be used to update the list, how the substances would be reported and by whom, and which parties might be either included or exempt. Financial, liability and insurance implications were expressed as a concern, including the compatibility of definitions across jurisdictions (Alberta and the United States), and the transfer of operations.

Spill Contingency Plans

The spill contingency plan presentation focused on why the plans are necessary, who will be required to produce them, the process for aligning with other plans in other jurisdictions to avoid unnecessary duplication, and suggestions for plan content and timing. Participants emphasized the importance of filling in gaps while avoiding unnecessary duplication between jurisdictions, properly defining worst case scenarios and risk assessments, and determining the right amount and type of content for the plans. Participants requested clear communication about how the plans will be developed, standardized,

¹ Preliminary Summary Report April 27, 2016, Symposium on Land Based Spill Preparedness and Response in British Columbia, Ministry of Environment

² Feedback Report May 2016, Symposium on Land Based Spill Preparedness and Response in British Columbia, Ministry of Environment.

implemented, updated, published and shared. Participants recognized the value of the plans in ensuring public trust, compliance and protection of the public interest and the parallel need to protect private or sensitive information.

Drills, Exercises and Substance Reporting

In this two-part presentation, the ministry first reviewed the content areas within the proposed drills and exercises legislation including what types, frequencies, evaluation methods, coordination and scheduling might be required. Participants primarily discussed whether every three years was often enough, who should evaluate the drills (government or industry), whether local government has the capacity to participate in multiple drills, and whether the frequency of drills should be related to poor spill response performances.

Next, the proposed reporting requirements for substance type, amount and routes were introduced and discussed. Participants highlighted several challenges: routes and amounts change frequently; some of this information is proprietary; and non-BC companies travelling through BC need to be held to the same standard. Participants suggested that the ministry should clearly set out who will receive what information, how it will flow and be used, and why each item is important for assisting in effective spill planning and preparedness.

Geographic Response Plans

The presentation for this topic outlined what Geographic Response Plans (GRPs) are, why they are important, how they might be developed along a set timeline, and who should be involved. Questions were raised around who would be responsible for the GRPs (government, industry or an advisory committee), how to minimize the cost of GRPs for all involved, how to include pre-existing information and not duplicate standards required by other regulators, how often to update the plans, how the GRPs would relate to overlapping Area Response Plans and lastly, how and what information would be shared with whom.

Response

In this session, participants learned that the ministry intends to require more fulsome reporting from spillers, specific response actions within a certain timeframe after the spill occurs, and sampling and monitoring reports. Participants showed concern about these requirements being too prescriptive due to the variables responders face and suggested defining a response process instead. Sampling and monitoring concerns focused on clarifying their purpose (i.e., Are they to inform response or recovery?), defining who are qualified professionals, determining how to avoid duplication across responders and jurisdictions, outlining where to store the information, and being specific about how details will be shared with the public.

Recovery

This presentation provided an overview of recovery in other jurisdictions, concepts, definitions and the proposed recovery process. Participants were most interested in how recovery would be enforced, how First Nations would be consulted, how endpoints would be established and across what timelines, and whether or not the Natural Resource Damage Assessment (NRDA) would be an effective model.

PRO: Preparedness and Response Organization

This plenary presentation was followed by participants dividing into smaller groups for facilitated discussions. The PRO was presented as a provincially-certified, industry-funded organization with the capacity to respond to any spill anywhere in B.C. A number of potential roles for a PRO were presented as well as the concept that a PRO would be a connector or hub for coordination, communication and collaboration across sectors. Primary response from participants suggested that the development of a PRO should include strong government oversight and accountability, should establish First Nations and local governments participation in the development of ARPS as a primary function, should outline clear roles and responsibilities for the PRO during a spill, should consider a tiered model for responding to different types of spills to keep costs down, should ensure plans and information remain in the hands of government, and should outline clear membership requirements.

First Nations Engagement: First Nations Fisheries Council

In early May 2016, the BC First Nations Fisheries Council, contracted by the ministry, hosted six B.C. Spill Response Regime regional workshops for First Nations. Ninety two people attended the regional workshops representing 45 First Nations, including five First Nation organizations and five tribal council organizations. Workshops were not considered Crown consultation for any specific project. A summary report of the workshops is available on the Engagement Materials webpage of the Environmental Emergency Program.³

Vision

A key vision statement from the workshops called for *“building spill management systems with First Nations that are local, prepared and ready.”* To make this happen, participants requested collaborative, government to government relationships and investments to support First Nations spill management training and ownership in spill management businesses, including the Preparedness and Response Organization (PRO).

Six First Nation Workshops: Key Input Themes

- Effective communication
- Funded First Nations and local government participation
- Government to government relations
- “Local, prepared, ready”
- Protected environmental, human and wildlife health
- Risk-bringer accountability
- Timely spill alerts and notifications

³ SUMMARY REPORT - BC Spill Response Initiative: First Nations Regional Engagement Sessions

Engagement Expectations

The participants outlined their expectations for successful engagement, their primary concerns, and recommendations for the Spill Response Regime. The First Nations participants expected equal, transparent, open processes that account for First Nations unique rights and interests. They expect capacity resources and investments and that risk-bringing industries and companies are held accountable at all stages, including addressing impacts to First Nations unique rights and interests.

Engagement Concerns

First Nations participants were primarily concerned that there was too little engagement with First Nations too late in the process and without the proper funding support. Related to current spill response, First Nations participants expressed concern that they are not currently notified in a timely manner, that government is not properly overseeing spill management and therefore, spills are not cleaned up to an acceptable level. For the future state, First Nations participants were concerned that the program would not be transparent, communicate well, provide First Nations with spill management investments, conduct long-term monitoring or hold polluters accountable.

Engagement Recommendations

Workshop participants recommended the following:

- An Interim First Nations Advisory Group should be developed.
- First Nations technical working groups or committees (based on representative regions) should be created that include a range of First Nations experts in spill management.
- Communication tools such as online videos, explaining the spill management initiative, legislation, history, future state, etc., should be created to help inform First Nations.
- Further workshops should be held for First Nations governments to build the understanding of how spill management can be collaboratively improved between B.C., First Nations, industry and Canada.
- B.C. and First Nations Leadership Council should seek support from Canada, and advocate for support from industry, to invest more in First Nations spill management in B.C.

First Nations Engagement: Coastal First Nations – Great Bear Initiative

A seventh First Nations engagement workshop was held in Vancouver in June 2016, led by the Coastal First Nations - Great Bear Initiative on behalf of the ministry. Fifteen First Nations participants involved in the Marine Planning Partnership (MaPP) attended as well as a number of Ministry of Environment staff. A more fulsome summary report of the workshop is available online on the Environmental Emergency Program website⁴.

Engagement and Participation

Government to government relations

Discussions led to mutual agreement that there will need to be tripartite discussions (Federal, Provincial, First Nations) to ensure a seamless Regime across B.C. that acknowledges existing Aboriginal rights and titles – including the right to make decisions about lands and resources.

Seventh First Nation Workshop: Key Input Themes

- [Funded First Nations participation](#)
- [Government to government relations](#)
- [GRP pilot project](#)
- [Collaborative oversight](#)

Collaborative oversight

Concerns about the structure and accountability of the PRO focused on whether industry should manage and evaluate its own response activities and whether First Nations could have a role in the process of certifying a PRO. As a next step, the Province indicated it will seek funding to support First Nations participation in technical working groups. Also, Coastal First Nations will develop a detailed proposal for the north coast geographic response plan pilot project for the Province to review.

Online Forum

The online public discussion site⁵ was open to receive input for approximately three months between April 5 and June 30, 2016 on the third Intentions Paper. Citizens could review a summary document of the primary topic areas in the third Intentions Paper (Appendix One) or download the complete Intentions Paper. Citizens were invited to respond to the questions below and were also given the option to read and respond to the posts of other citizens:

Discussion 1: What are your comments on the proposed planning and preparedness requirements discussed in the intentions paper?

Discussion 2: What are your comments on the proposed response requirements discussed in the intentions paper?

Discussion 3: What are your comments on the proposed recovery and restoration requirements discussed in the intentions paper?

⁴ Collaborative planning for BC's spill response initiative: MaPP partner First Nations and BC Ministry of Environment

⁵ <http://engage.gov.bc.ca/spillresponse/>

Discussion 4: After reviewing the full suite of proposed legislation, regulation and policy in the intentions paper, do you have any positive comments or gaps, or comments about what could be done differently and why?

While open to the public, the website was visited 1,943 times and the third Intentions Paper was downloaded 837 times. The ministry received 45 comments from 24 individuals and 57 submissions from organizations. A list of the organizations that provided submissions can be found in Appendix Two with links to the submissions themselves.

The summary of comments below is arranged by the three pillars of spill response under the ministry's mandate: spill preparedness, response and recovery; the preparedness and response organization (PRO) is also reviewed. Comments are collected into two sections – those from individual citizens and those from organizations.

Online Forum: Individual Citizen Comments

Most comments from individual citizens offered detailed suggestions related to the preparedness, response and recovery requirements. Though out of scope for the third Intentions Paper, several people also discussed prevention – the fourth pillar of spill management – wanting to ban or reduce the transport of products that had no proven spill response and recovery processes. The oil sands, bitumen and dilbit were named specifically. Verbatim responses are provided in Appendix Three.

Preparedness

Under spill preparedness, some citizens agreed with broadening the scope of preparedness requirements to include private, industrial and agricultural practices (i.e., whomever is using the hazardous substances). Some citizens showed appreciation for the three layers of planning proposed: spill contingency plans, geographic response plans and area response plans.

It was suggested that all plans should be made public and that First Nations should be financially supported to be involved in the planning and all cycles of spill management. Other citizens warned that the preparedness costs may be too high for small facilities and cautioned that unannounced drills could be dangerous.

Online Forum: Individual Citizen Key Input Themes

- [Barriers to compliance acknowledged](#)
- [Collaborative oversight of the PRO](#)
- [Compensation for loss of public use or cultural loss](#)
- [Costs minimized](#)
- [Enforcement defined](#)
- [Funded stakeholder participation](#)
- [Protected environmental, human and wildlife health](#)
- [Quality control through government oversight](#)
- [Shared access to information](#)

Response

Under spill response, citizens emphasized that quick spill response was critical, that health authorities should be involved and that responder qualifications and autonomy should be maximized. Concern was expressed that the costs of sampling and monitoring for all spills might be expensive and lead to non-compliance and that response times should consider geographic challenges.

Recovery

Most comments focused on spill recovery and on the Preparedness and Response Organization (PRO). Related to the spill recovery phase, support was offered for fines, penalties and restoration payment to affected parties based on the long-term negative impacts, if spill clean-up was not effective; it was also stated that compensation should be provided for loss of recreational use and for impacts to First Nations cultural areas. Citizens suggested financial compensation should be high enough to trigger prevention and preparedness work and not so low that they could be absorbed as the “cost of doing business”.

One citizen supported the concept of aiming for a “net environmental benefit” at a spill site to ensure that clean up didn’t do more damage than good. The idea that mitigation measures could be required at another location was also well received. Another citizen suggested that a provincial fund dedicated to spill response would help to ensure provincially managed spill response was effective. To ensure effective spill recovery, several citizens supported requiring environmental baseline assessments along transport corridors and other potential spill areas, including First Nations and local communities in setting local recovery standards, and ensuring better communication and transparency around clean up strategies and lessons learned. The Natural Resource Damage Assessment process was cited as one way to avoid lengthy court battles on determining the end point and total costs of the clean-up process.

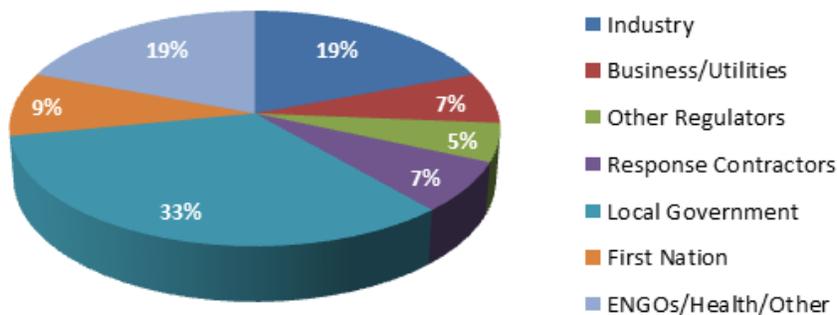
PRO: Preparedness and Response Organization

Citizens showed both support and concern about the PRO. It was seen as positive that the PRO could work to integrate existing spill response providers using mutual aid and assistance agreements, could work with federal regulators to fill in spill preparedness and response gaps, and could possibly be expanded to provide environmental consulting services: impact assessment, remediation and closure reports. Citizens agreed that the PRO costs should be borne by industry but expressed strong resistance to industry managing more than the daily operations of the PRO. Rather, it was thought that the PRO should be government-administered and decentralized to ensure trained responders across B.C. Several citizens stated that a citizens Advisory Committee (i.e. similar to that in Alaska) that includes First Nations, local government and citizens should set, monitor and ensure compliance of a PRO’s direction.

Online Forum: Submissions from Organizations

A list of the 57 organizations that offered submissions is provided in Appendix Two along with links to the submissions. A breakdown of the types of organizations they represent is shown in Figure 2. The First Nations Health Authority and First Nations Emergency Services Society were each filed as a health authority and response organization, respectively.

Figure 2: Percentage of the 57 submissions by types of stakeholder or government



In their comments, several organizations expressed appreciation for the numerous engagement opportunities available during the Regime development process. Many acknowledged the importance of striving for the “highest standards of protection for human health and safety and the environment”, “identifying and accessing specific regulatory gaps and facilitating efficient delivery of actual spills response through communication and coordination and managing expectations” and “promoting greater awareness of existing spill prevention preparedness and response systems”.

Regime Design Principles and Context

From the first to the third Intentions Papers, the ministry design principles for the Regime have remained the same: polluter pays; risk-based requirements; avoiding unnecessary duplication; fair and transparent process; opportunities for First Nations and communities; strong government oversight and continuous improvement.

Clearer definitions

Concern was expressed by several respondents that some design principles descriptions were “weaker” in the third Intentions Paper than the first and second; requests were made to provide specific definitions. One organization called for a risk assessment process to determine what “risk-based” means. Others called for clear governance and accountability mechanisms for First Nations authority. Others suggested that strong government oversight should be defined as “active management by the Province” over the Regime as a whole and over the Preparedness and Response Organization (PRO).

Others related “fair and transparent” with public accountability and requested further certainty on how local government would be involved.

Numerous organizations showed concern that the ‘world leading’ descriptor for the Regime did not appear in the third Intentions Paper as it had in the first and second. Several of these organizations referenced this phrase from ministry’s 2012 report⁶ that outlined five conditions necessary to consider support for heavy oil pipelines, including:

- World-leading marine oil spill response, prevention and recovery systems for B.C.’s coastline and ocean to manage and mitigate the risks and costs of heavy oil pipelines and shipments; and,
- World-leading practices for land oil spill prevention, response and recovery systems to manage and mitigate the risks and costs of heavy oil pipelines.

These organizations suggest that the term “world-leading” should be defined for land-based spills and the B.C. regime should be evaluated against other spill regimes around the world, not just neighbouring programs. Another called for adopting international standards for oiled wildlife. A couple of organizations requested confirmation that the Regime would not be deemed world-leading until all components were implemented, including the completion of Geographic Response Plans and demonstrated effective response to heavy oil spills.

Preparedness

Regulated Persons

Clearer definitions

Organizations requested more specifics be added to the substance and volume definitions to clarify who would be deemed a regulated person and who would not. One organization asked if the volume threshold would be determined by actual or potential capacity. Others wondered if two substances added together could meet the thresholds and how mixed substance percentages would be determined. Still others requested greater information on the criteria used for this first list and on how new substances might be added to the list in the future.

Alignment with other regulators

Aligning with lists under the Ministry of Environment’s Contaminated Sites Regulation, Transport Canada’s Transportation of Dangerous Goods, and Environment and Climate Change Canada’s E2 Regulations

Online Forum: Organization Submission Key Input Themes

- [Alignment with other regulators](#)
- [Built on existing capacity](#)
- [Clearer definitions](#)
- [Collaborative oversight](#)
- [Collaborative planning](#)
- [Descriptive vs prescriptive](#)
- [Enhanced response training](#)
- [Exemptions and variations](#)
- [Funded recovery costs](#)
- [Funded First Nation and local government participation](#)
- [Planning for orphan spills](#)
- [Protected environmental, human and wildlife health](#)
- [Public vs private response plans](#)
- [Shared access to information](#)

⁶ Technical Analysis: Requirements for British Columbia to Consider Support for Heavy Oil Pipelines

were encouraged. Defining risk-based or setting other criteria was proposed as alternative to the idea of having a set list of substances.

There were questions about the phrase “but may apply to others” in the third Intentions Paper sentence where it states: “*Generally speaking, this definition will apply to persons that transport, use or store the prescribed substances at the prescribed quantities, but may apply to others*”.

Exemptions and variations

Several organizations thought too many fixed facilities would be captured using the proposed thresholds, including small rural businesses, farmers or municipalities. Others sought exemptions or a slower implementation process, suggesting that the owners of businesses contracted to transport substances be exempt or that requirements for fixed facilities be phased in later since transport industries pose a greater risk.

In contrast and in the name of fairness, one organization suggested there should be no exemptions made. Some organizations showed concern that planning for small spills wouldn't be captured under these definitions and that the list should include solids and gases as well. Others felt the list should be expanded to consider impacts to human health, such as chlorinated or waste water, and not just environmental damage. Finally, questions arose about how the requirements would be enforced and what funding model would accommodate such a wide variety of regulated persons.

Three Plan Levels

The intentions paper described the ministry's proposal to require three types of response planning for B.C. – spill contingency plans, geographic response plans and area response plans – each covering a greater response area.

Built on existing capacity

Most respondents acknowledged the importance of planning but suggested first recognizing and building on what plans already exist – either voluntarily or through regulation. Respondents' comments focused on determining the right type and level of information in the plans, on including the right people in the plan development and on choosing effective plan verification methods.

Alignment with other regulators

Numerous respondents requested harmonization of spill contingency plans with existing plans to avoid duplication. The Environment and Climate Change Canada Environmental Emergency Regulation (E2) was mentioned specifically. Other respondents raised concerns over the scale and complexity of the planning requirements but six others suggested additions to the proposal: cumulative effects assessments should be conducted for the area prior to emergency planning; planning should account for the diverse and complex geography in B.C.; and, the plans should identify sensitive wildlife resources.

Respondents commented that the planning process should be flexible enough to set different requirements for large and small spills and be scalable enough to account for increased volumes or types of hazardous goods stored or transported in a region. Some concern was expressed around how to require planning for effective response to small spills if the requirements are only triggered by larger volume thresholds.

Collaborative planning

Respondents also highlighted a range of stakeholders who should be consulted during plan development: health authorities; local government; First Nations; and, the general public. To ensure high quality planning, seven respondents called for provincial government oversight of the planning process and the establishment of scientifically-based standards for evaluating the plans. Multi-level government collaboration and the integration of geospatial planning processes were also suggested.

Spill Contingency Plans

Related to Spill Contingency Plans (SCPs), specifically, respondents suggested aligning with the Environment and Climate Change Canada E2s as well as Transport Canada Emergency Response Assistance Plans (ERAPs) and other agency requirements through equivalency agreements or memorandums of understanding.

Descriptive vs prescriptive

Respondents thought these plans should include baseline data, human health considerations, oiled wildlife response tactics and public notification and response processes. They added that the plans should be developed with input from WorkSafe BC, chemical professionals, other expert consultants and mandatory engagement with First Nations first responders. Again, flexibility was a theme, with one respondent suggesting plan requirements should be guidelines only and not prescriptive; another suggested having different planning requirements for fixed facilities.

Though some concern was expressed about the administrative burden of reviewing the spill contingency plans of so many regulated persons, others felt the plans should be reviewed regularly, with supplemental reviews when significant changes were made such as staff or resource changes. Proposed review schedules ranged from annually to every five or ten years.

Geographic Response Plans

Respondents emphasized that Geographic Response Plans (GRPs) should define sites of particular ecological, cultural, economic and community significance, identify sub-regional capacities and logistical considerations (e.g., staging grounds, incident management and support facilities, workforce accommodations, medical support) and establish emergency response notifications and other emergency preparedness requirements. One respondent noted that collecting baseline data in advance could inform the prioritization of GRP areas. Another recommended that GRPs focus on areas with unique needs where spill planners and first responders had not yet focused their planning efforts.

Respondent comments about GRPs reinforced the call for plan harmonization and alignment with other existing processes such as those in Alaska and Washington.

As for content, respondents suggested that the GRPs should include baseline data, traditional ecological and other local knowledge, air modelling based on geographic locations, wildlife management areas and oiled wildlife response procedures and resources that are vetted by wildlife response personnel. Several respondents advised that GRPs should plan beyond the first 48 - 72 hours after a spill and include additional information to support emergency response such as roles, responsibilities, and logistics.

Collaborative planning

For quality assurance, numerous respondents advocated that the ministry lead GRP development either independently or in collaboration with First Nations and other levels of government, industry, and stakeholders. Other respondents felt that local governments and First Nations communities at risk of spills must be adequately resourced to support GRP development, training, and implementation.

The value of input from local government first responders and medical and public health officers was also noted. Several respondents felt a Regional Citizens' Advisory Council, again with remuneration for members, could obtain and streamline public and stakeholder input. It was recommended that a formal plan verification process be developed by the ministry though one respondent advocated for third party plan audits. Several respondents felt the plans should be made available to the public.

A few respondents requested clarity on the GRP process and how it would integrate with the federal system, how GRP areas will be determined, how feedback will be incorporated into the process and how long it will take to implement GRPs.

Area Response Plans

Similar to comments received on GRPs, respondents advised the Area Response Plan (ARP) process should align with other existing area planning processes such as the Ministry of Forests, Lands and Natural Resource Operation Land and Response Plans and the federal government's ARP initiative in the Lower Mainland. It was thought the ARPs should include everything listed in the GRP description above as well as First Nations response capacity, and municipal and regional district electoral boundaries.

Collaborative planning

Many respondents advocated that ARP development be led and paid for by government and not the industry-led Preparedness and Response Organization. Support was offered again for an ARP Stakeholder Advisory Committee that does not include industry. One respondent stated that GRPs and ARPs are beyond the scope of industry; another stakeholder questioned the value or need for GRPs and ARPs at all. One respondent suggested the GRP and ARP processes be piloted before broad implementation was required. Clarity was requested on how ARPs would be developed in the case of multiple PROs.

Plan transparency vs proprietary privacy

Several respondents promoted the public disclosure of contingency plans and drills and exercise reports to promote public trust through transparency; however, others cautioned against publishing the location of storage tanks and hazardous substance transportation routes in the name of security and safety. Another resisted the distribution of proprietary information as it might compromise the competitive business environment in B.C.

Shared access to information

Still other respondents offered a compromise of ensuring access to local governments, First Nations, first responders, fire chiefs and other parties with a legitimate interest and need for the information. Local and First Nations governments affirmed their interest in knowing what hazardous materials were being transported through their communities and in having a say in determining whether or not response plans were deemed effective or not.

Several respondents offered ideas for information sharing systems such as a password protected web portal, complying with the Freedom of Information and Protection of Privacy Act and creating a data management plan to identify how and when data will be shared. The AskRail™ App and the guiding principles being finalized by the Canadian Energy Pipeline Association were offered as examples.

Drills and Exercises

Alignment with other regulators

Numerous respondents expressed support for the new drills and exercises requirements. Harmonization was promoted, once again, with the several existing systems mentioned specifically: Environment and Climate Action Change Canada's E2; the Canadian Shipping Act for Marine Oil Handling Facilities; Transport Canada's Transportation of Dangerous Goods or Hazardous Waste Regulations; the BC Emergency Management Regulation; and, other requirements through the National Energy Board and the BC Oil and Gas Commission.

Protected environmental, human and wildlife health

Again, human and environmental health and wildlife response were listed as priorities for consideration. As with the spill contingency plan requirements, several respondents showed concern for the administrative costs of drills and exercises for regulated persons. Other respondents disagreed with the introduction of unannounced drills and one respondent suggested leveraging existing training to enhance responder capacity instead.

Funded First Nation and local community participation

Several local governments called for participation of local governments, First Nations and first responders in testing plans, with financial support to do so. In terms of quality control, these local governments also called for government or third party oversight of the evaluation of drills and exercises

rather than self-evaluation by industry. Related to frequency, a few respondents stated that response to actual spills should not count towards the drill exercise requirements.

Responder Training

Enhanced response training

Numerous respondents expressed support for first responder training. A couple emphasized the need for advanced training for First Nations and for specialized training in oiled wildlife recovery. Programs offered through the Oiled Wildlife Society of BC, International Bird Rescue and the Oiled Wildlife Care Network were recommended. The Canadian Emergency Response Contractors Association (CERCA) training programs were also put forward as a positive model. Some respondents expressed their support for the use of the Incident Command System (ICS). A few respondents stated that training costs should be covered by the ministry and several respondents cautioned that training should be risk-based and appropriate to the employee's working environment.

Response

Comments collected related to the spill response pillar of emergency management focused on response times, spill reporting, and responder training. The latter was presented as a future element of the Regime in the third Intentions Paper. The third Intentions Paper stated that new requirements for spill response would apply to any party that has a spill, regardless of substance, location or source. The spiller is referred to as the responsible person.

Planning for orphan spills

Related to this definition, though, several respondents alluded to spills where the spiller is unwilling, unable or unavailable to respond (i.e., orphan spills); they emphasized that the ministry must maintain oversight in these cases in order that the spill response is managed properly.

Response Times

Descriptive vs prescriptive

Several respondents called for greater government oversight of spill response times and spill response standards. It was noted that prescriptive response times would dictate where equipment would need to be placed and that was supported by some respondents who called for prescriptive placement of equipment caches. Requirements for more permanent oiled wildlife facilities and collaboration with WorkSafe BC to determine safe spill response cleanup chemicals were also requested.

Numerous respondents preferred planning standards and a less prescriptive approach to monitoring response times to account for variations in weather, geographies, spill size, or responder safety concerns. Respondents questioned how prescriptive response times would be enforced. Numerous respondents suggested that if prescriptive response times were used, they would need to vary according to risk, high priority zoning, project, area, industry, or mode of transportation and that each response

milestone would also need to be considered separately. Still, several possible milestones that could be used for monitoring spill response times were mentioned, including: spill reporting; initial assessments; Incident Command System activation; containment activity initiation; and, wildlife response. Alignment with Emergency Response Assistance Plans was recommended.

Spill Reporting

Respondents suggested the following information should also be collected: total volume spilled; whether the spill was on public or private land; human safety and environmental impact assessments; ambient air concentrations of Chemicals of Potential Concern (COPCs); and affected or threatened populations. To expedite information gathering, it was suggested that it is important to gather both qualitative and quantitative information from a variety of sources – eye witnesses, first responders, employees. Respondents requested additional capacity support for First Nations to participate in reporting. Several respondents provided ideas for improving reporting efficiencies, calling for a web-based, flexible, intuitive, and user-friendly reporting system.

Alignment with other regulators

Quite a few responders emphasized the importance of harmonizing the response reporting requirements with other regulators and referenced the Transportation of Dangerous Goods Regulation, the BC Oil and Gas Commission one-window approach, Environment and Climate Change Canada rules, the Canadian Energy and Pipeline Association Toxic Substances PCB (polychlorinated biphenyl) Regulations and US Environmental Protection Agency (EPA) requirements for air quality control.

Exemptions and variations

Respondents recommended having different reporting requirements for different spilled substances, volumes or levels of risk to public safety and the environment. Remote communication issues, weather variations, safety concerns and other information gathering and verification challenges were cited as reasons to consider extending the six-hour mark for the second report.

Shared access to information

Once collected, respondents focused on how the information would be shared and with whom. Requests were made for instant stakeholder notifications and public alerts, in particular for First Nations and local governments impacted by the spill. One respondent stated that this should be done by the responsible person. Another suggested that a ministry communications phone line for public questions would be valuable to support and extend the Incident Command System. Questions were also asked about how the spill response reporting systems would transition into recovery reports such as those for long-term monitoring.

Recovery and Restoration

Legislative recovery and restoration components in the third Intentions Paper described requiring responsible parties to prepare plans, implements plans by qualified individuals and *allow for mitigation measures or payment when the impacts of a spill cannot be restored or completely restored*. Several respondents expressed explicit support for this approach.

Alignment with other regulators

Alignment with other existing regulatory requirements was promoted, with respondents listing the *Oil and Gas Activities Act*, *Environmental Management Act* and Contaminated Sites Regulation. For pipelines, the *National Energy Board Act and Pipeline Safety Act* were also noted as relevant standards that could be captured with equivalency agreements between agencies such as the BC Oil and Gas Commission and the National Energy Board.

Collaborative planning

Numerous organizations stated that recovery plans should not be determined by the responsible person in isolation but should be developed as a collaborative process that could include local governments, First Nations, qualified professional chemists and insurance underwriters. Some respondents felt that recovery plans should be substance, location and time-of-year specific. Others mentioned the recovery plans should include baseline data, net environmental benefit analysis, and consider human health, social and cultural impacts.

Funded recovery costs

A couple of respondents stated that the responsible person should pay the full cost of recovery. Four others expressed interest in a Provincial spill fund. To determine compensation amounts, seven respondents showed support for the Natural Resource Damage Assessment. One respondent dismissed the use of a formula model. Still others requested further information around how the recovery “end point” (completion of the site recovery process) would be determined, how it would be integrated into the Contaminated Sites Regime, what offsetting mechanisms might be used if complete restoration is not deemed possible and if an appeal process would exist.

PRO: Preparedness and Response Organization

Respondents primarily offered recommendations on the functions the PRO should serve, how the PRO should be governed, who should be involved in the governance structure and on the development process for the PRO. Several respondents felt the PRO should focus on communications, coordination and data management. One respondent thought the PRO should address both preparedness and response functions equally. A second thought the PRO could be contracted by the Province to respond to orphan spills where the responsible person was not fulfilling their duties. Two stated that oiled wildlife response should be offered by the PRO and another felt the PRO could offer training and capacity building for local First Nations. Another felt it was important to delineate the role of the PRO from that of government and another still said the PRO should not take on environmental restoration.

Industry PRO Discussion Paper

In some of the organization submissions, responders referenced a concept paper written by an industry coalition⁷ that outlines a framework for an industry-driven and multi-stakeholder PRO. The co-authors of the document were the Canadian Association of Petroleum Producers, Canadian Energy Pipeline Association, Chemical Industry Association of Canada, Canadian Fuels Association and the Railway Association of Canada. The ministry provided a review⁸ of the concept paper and PRO Bottom Line⁹ clarifying document. Each is available on the ministry website. A follow-up concept paper is expected from industry before the end of 2016.

Technical Working Group Sector Meeting Summary

It is the ministry's intention to complete priority regulations before the launch of the Regime in early 2017. Other regulations may take years to develop and implement. Some, but not all regulation development will require the support of a technical working group. The first three topics to receive input from technical working groups were regulated persons¹⁰, spill contingency plans¹¹, and response times¹².

The final reports for each of these groups are available online under the Environmental Emergency Program. Participants shared their thoughts on the three core topic areas as well as the Preparedness and Response Organization.

Regime Development Process

Phased in implementation

Regarding the development process of the Regime, in general, numerous respondents recommended using a phase-in process to allow for more research and consultation in order to identify gaps that need to be filled and ensure success.

Technical Working Group Key Input Themes

- Alignment with other regulators
- Barriers to compliance acknowledged
- Clearer definitions
- Collaborative planning
- Competitiveness maintained
- Costs minimized
- Descriptive vs prescriptive
- Enforcement defined
- Enhanced response training
- Exemptions and variations
- Improved alerting and notification
- Phased in implementation
- Planning to most probable spill
- Plan transparency vs proprietary privacy
- Protected human, environmental and wildlife health
- Shared access to information
- Strong government oversight

⁷ Provincial Response Organization Concept for land based spill response in British Columbia

⁸ Ministry Review of the Industry PRO Concept paper – December 23, 2015

⁹ PRO Bottom Line

¹⁰ Spill Contingency Technical Working Group Final Report

¹¹ Regulated Person Technical Working Group Final Report

¹² Response Times Technical Working Group Final Report

Alignment with other regulators

From spill reporting to spill recovery, alignment and even integration with the following existing systems, standards and programs and personnel was suggested:

- Environmental Emergency Plans (E2), Environment Emergency Regulations, Environment and Climate Change Canada
- Emergency Response Assistance Canada (ERAC)
- Canada Border Services Agency
- Transportation of Dangerous Goods Regulations, Transport Canada
- Canadian Emergency Response Contractors' Alliance (CERCA)
- Emergency Response Assistance Plans (ERAP), Transport Canada
- Material Safety Data Sheets, Workplace Hazardous Materials Information System, Health Canada
- Canadian Transport Emergency Centre (CANUTEC)
- National Safety Code
- Fire plans
- Canada Standards Association standards and management systems (quality and environmental) such as the ISO 14000
- Transportation Emergency Assistance Program (TEAP III), Chemical Industry Association of Canada
- Transportation Community Awareness and Emergency Response (TRANSCAER), Chemical Industry Association of Canada (CIAC) and the Railway Association of Canada (RAC)
- Emergency Management BC Call centre for spill reporting, Ministry of Transportation and Infrastructure
- Code of Conduct, Responsible Distribution Association
- Codes of Ethics of Responsible Care, Chemical Industry Association of Canada
- Association of Professional Chemists for spill response support
- AskRail mobile app, Railway Association of Canada
- A one window access point for provincial wildlife management permits
- Request for a Provincial spill contingency fund, like the U.S. Coast Guard model and Alberta

One participant encouraged the use of mutual aid agreements and memorandums of understanding to make formal linkages between programs.

Enhanced response training

Related to preparedness, generally, several participants emphasized that first responder training was a critical component in effective spill response and that enforceable training standards should be in place. One participant cited the example of high staff turnovers and the importance of ensuring new staff are also trained. Another expressed concern that local governments should not be burdened with the cost of clean-up or training personnel. Programs in Washington and New Zealand were recommended for wildlife management training, the Justice Institute of B.C. for first responders, and Transport Canada's

Transport of Dangerous Goods program for transporters. Several participants expressed interest in engaging in shared spill response exercises but one cautioned against the high cost of these activities.

Improved alerts and notifications

After a spill, quick wildlife management and initial site assessments were deemed critical. Others expressed support for improving notification systems, including the importance of informing local governments potentially impacted by the spill. One participant requested clear definitions for spill response end points in regulation and requiring multi-stakeholder incident assessments to determine lessons learned.

Preparedness

Regulated Persons

Initial feedback on the list of 140 substances proposed in the third Intentions Paper is that it may require significant revisions. Suggestions and alternative approaches were provided:

- Ask product experts to review the list and remove any substances they do not recognize should be removed. Participants suggested that experts could include product suppliers, manufacturers and associations for paints, coatings or other formulas.
- Add to the list so that it includes food oil, wet gas, produced water, hazardous waste mixes, mining concentrates, water soluble asphalt products, gas, chlorinated water and a clearly defined range of petroleum and fuel derived products.
- Use United Nations (UN) numbers rather than Canadian Standards Association classifications to identify the substances, in alignment with Transport Canada's ERAP system.
- Adopt prioritized risk-based criteria that consider impacts to the environment but also to human health and the community and provide clear explanations for the environmental criteria. The B.C. Emergency Response Management System was provided as an example. The Toxic Inhalation Factor (THF) was recommended as a health risk-assessment tool.

There was general recognition that any spill of any substance can be a threat to the environment, depending where it is spilled. Concern was expressed that local governments might be left to respond to all non-regulated spills and that greater response capacity, in general, is needed to support the Regime. It was thought that spill trends and data would be useful.

Clearer definitions

Several participants wondered how the 10,000 Litre volume thresholds would be applied and questioned whether or not the owners of underground storage tanks of gas stations, yard storage tanks, locomotives, wet gas wells and temporary storage tanks would be captured as regulated persons. One participant showed concern that organizations might keep substance volumes intentionally just under the threshold to avoid regulations.

Alignment with other regulators

Alignment with existing regulations was a key theme throughout engagement. Related to chain of custody in the transportation of regulated substances, participants recommended aligning with Transport Canada's Environmental Response Assistance Plan (ERAP) rules in which the importer/ owner is required to prepare for spills of certain types of substances, as opposed to placing requirements on a trucking company. In this example, owners are responsible for the plan and when a spill occurs, truck drivers have limited responsibilities immediately following the spills.

Several participants showed support for aligning thresholds with Environmental Emergency Regulation for fixed facilities; CSA 2462 was presented as a positive model. Other participants requested recognition of the current industry standard planning practices, one related to the oil and gas industry and a second in support of fixed facilities. One participant noted the positive example under the Transportation of Dangerous Goods of secondary containment expectations (berms, ponds, tanks, treatment systems) that stop spills from migrating off site.

Competitiveness maintained

Participants emphasized that alignment would ensure a level playing field for provincial and non-provincial companies since the rules would be the same for all. If alignment is not achieved, participants requested further clarification on when "control of the substance" and therefore responsible persons status transfers from transporter to receiver during transport and delivery.

Phased in implementation

Related to developing the Regime, participants expressed support for phasing in certain substances starting with hydrocarbons, for example, or higher risk sectors than fixed facilities. Others elaborated that setting planning standards across all sectors at once was too difficult and that it would also be too difficult for the preparedness and response organization (PRO) to be ready to respond to all.

Costs minimized

Several participants expressed concern about the financial implications of becoming a Regulated Person. Other participants discussed having to weigh the costs of high insurance levels coupled with higher preparedness planning costs with the potential costs of spill response. Concern was expressed that spill response costs can sometimes be exacerbated by too many resources arriving at the spill because of poor communication from the spill site about what is actually required.

Spill Contingency Plans

Overall, after providing a few general first impressions on the spill contingency plan proposal in the third intentions paper, discussions focused on whether or not spill contingency plans should be published for public review.

Descriptive vs prescriptive

In general, participants felt that much of the spill contingency plan proposal was too prescriptive and that there was too much information requested such that the resulting plans would confuse first responders. Numerous participants felt that the plans were redundant to information the company already held in other locations and were concerned about the added administrative and financial burden of completing the suggested plans.

Exemptions and variations

Some participants felt the requested information was not relevant to all industries and that, for example, exemptions should be made for fixed facilities. Others cited the challenge of planning for the trucking industry since routes are not always known ahead of time.

Some participants thought that regulated persons should complete spill contingency plans but that the Preparedness and Response Organization (PRO) should complete both the Geographic Response Plans (GRP) and Area Response Plans (ARP). Some participants showed support for GRPs, but suggested they should be based on one substance at a time to avoid confusion. The other expressed concern about being able to meet diverse stakeholders' goals in the ARP planning process and suggested the GRP and ARP process be piloted first.

Alignment with other regulators

Again, alignment with other plans was encouraged. Plans required under the National Energy Board, Transport Canada and Environment and Climate Change Canada were referenced as a way to facilitate a one window reporting system. One participant liked the transparency guidelines under the National Energy Board. Another suggested aligning with the BC Oil and Gas Commission systems. Integration with the B.C. Emergency Response Management System was suggested to properly prioritize the protection of the environment below other human and community health concerns. In another example, participants showed support for declarations, as aligned with the Environmental Emergencies Regulation. Several participants mentioned avoiding duplication by allowing the use of Canadian Emergency Response Contractors Alliance pre-existing plans for certain substances and sectors. Links across the provincial programs, from prevention through to the Contaminated Sites Regulations were also suggested.

Plan transparency vs proprietary privacy

Numerous participants expressed concern about requiring a fully transparent planning process. Participants felt that sharing resource and equipment cache locations could lead to terrorism, vandalism, theft or other security issues and explained that sharing proprietary information could create a non-competitive business environment and impact privacy rights. Other participants were concerned about plagiarism and liability issues.

Several participants provided alternatives to publishing plans including:

- Building an awareness campaign based on general spill preparedness information like Transport Canada does for the Emergency Response Assistance Plan system;
- Rating and publishing the effectiveness of a plan on a scale of green, yellow and red, for example, to represent good, satisfactory and insufficient;
- Only publishing response strategies and training details;
- Only publishing an outline of the plan;
- Having the PRO audit the plans; and,
- Having government verify all plans through drills and exercises every 3 or 4 years.

Shared access to information

Several participants expressed a willingness to share their spill contingency plans with First Nations and local government first responders. Others agreed this would be fine if a formal request was made to provide safety-specific information to response personnel involved in a spill. Some showed support for sharing maps and locations of substances with first responders when there is an identified issue.

Planning to most probable spill

In discussing planning for what might constitute a “worst case” scenario, several participants were supportive of planning for a most probable spill rather than a largest volume spill. Other participants preferred planning for scale-able preparedness scenarios. One also asked that single umbrella plans be allowed to meet the requirements of several similar locations or situations.

Protected environmental, human and wildlife health

Some participants advocated for including human and community health and safety impacts in the worst case definition. Another suggested including the international wildlife management policies. A couple of participants stated that government and not industry should be doing the plan risk assessments.

Response

Response Times

In this section, participants identified a few possible milestones for framing the regulations on response times but also highlighted a list of barriers to completing each of those milestones within set timeframes. Participants offered alternatives to setting specific response time regulations, including setting planning standards that align with several other regulatory systems.

Several participants provided suggestions on possible response time milestones that help to determine if a response is progressing appropriately. These included wildlife management stages (initial assessment, deterrents, field stabilization, rehabilitation, release), Incident Command System stages (establishing Incident Command, establishing an Incident Command Post), and general spill response stages (notification, initial assessment, mobilization of equipment and trained personnel, on site arrival

of equipment and trained personnel, controlling the source, initial containment, initiation of monitoring, recovery and restoration). Other participants emphasized the need for trained and qualified wildlife management personnel on site quickly. A few participants linked milestones with example timeframes:

- Have trained response personnel onsite within two hours after the initial site assessment.
- Conduct an initial wildlife management assessment in the first 12 to 24 hrs.
- Mobilize response officers within six minutes for individuals and 12 minutes for a team.
- Require trained response personnel onsite within 30 to 45 minutes throughout the 24 period for local zones and within twelve or more hours for remote zones.

Enforcement defined

A few participants expressed support for using risk-based response times enforced by fines and penalties to incent the strategic placement of greater numbers of equipment caches. Other participants expressed concern about the cost of placing and updating remote equipment caches and explained that since remote equipment caches might get vandalized or stolen, it is a best practice for first responders to bring their own.

Barriers to compliance acknowledged

Several participants expressed resistance to setting enforceable response times in regulation due to any number of variables beyond the control of the first responders that might impact their progress. Participants listed weather, remote access, limitations in remote communications/ internet and satellite, traffic, power outages, lack of available staff after work hours, and distance of qualified staff from the spill site as variables that could impact response times. Other participants clarified that they felt response times would not be relevant to fixed facilities so exemptions should be made.

Descriptive vs prescriptive

Several organizations stated that if the purpose of setting response times is to get people there faster, they are not necessary since all industries are motivated to deliver trained personnel to a spill site as quickly as possible to avoid lengthy service disruptions. Also, one participant emphasized that setting a generic response times to apply to all sectors would be meaningless given the variables within each scenario. Another noted that not all the milestones will be relevant to each spill since some are smaller and do not require an incident command post, for example.

Rather than formal response times, many participants showed support for planning standards or guidelines, several suggested a tiered system to build in flexibility and to better reflect what is likely to happen on the ground, and a couple participants suggested that certain industries be exempt from response times regulations altogether.

Alignment with other regulators

Referencing existing systems, participants mentioned Washington's shared resources guidelines, the Transport Canada Emergency Response Assistance Plan (ERAP) guidelines for products and the Canadian Energy Pipeline Association standards.

PRO: Preparedness and Response Organization

Several participants viewed the PRO as duplicative to services already provided by several sectors. A couple of participants explained that, due to the uniqueness of their industry, it was unlikely that the PRO could provide the specialized spill response training and equipment required. Concerns around lack of competitiveness and how to ensure functionality were presented, given that there might be only one PRO. Support for phasing in the regulations was expressed as a means to give the PRO time to develop and increase capacity.

Strong government oversight

Other participants expressed support for industry funding the Environmental Emergency Program and requested assurance that the PRO would not replace local or provincial government oversight of spill management in B.C.

Next Steps

Engagement on the B.C. Spill Response Regime began in 2012 and continues today. The ultimate goal of the B.C. Spill Response Regime Project is to ensure greater protection of the environment through improved spill management of all substances across all sectors operating throughout B.C.

In response to the key emerging input themes in this summary (see Table 1), the ministry is considering the following approach for the ongoing development of the Regime:

- Establish a long-term plan for reaching the original vision for the B.C. Spill Response Regime;
- Identify a subset of priority regulations for the Regime launch in early 2017;
- Move to a phased approach for bringing in operations that would have to comply with new preparedness requirements, starting with petroleum products being transported by pipeline, rail and truck;
- Build in realistic regulation activation timeframes that allow regulated persons time to increase their capacity to meet the new requirements;
- Allow time for deeper public and stakeholder engagement on challenging topics;
- Pursue a deeper understanding of other relevant regulatory systems and current changes;
- Review the changing regulatory landscape and identify opportunities for alignment; and,
- Extend the timeline for the development of the preparedness and response organization (PRO) to accommodate industry and other stakeholder input.

Appendix One – Third Intentions Paper (IP3) Summary

The following are the categories of content that can be found in the third Intentions Paper – *Spill Preparedness and Response in BC: Proposed Amendments to the Environmental Management Act (EMA) and Proposed Regulations*.

Spill Reporting: the ministry intends to standardize the information required in a spill report and require additional reports during the different stages of a spill incident.

Response Times: The ministry intends to establish prescribed response times which will require specific technical feedback from experts in the field as numerous considerations must be addressed before the times can be set.

Sampling and Monitoring: The ministry intends to require responsible parties to perform sampling and monitoring actions following a spill to ensure there is information about the impacts of a spill and success of the response efforts. The ministry is evaluating options to prescribe sampling and monitoring actions.

Regulated Persons: The proposed legislation established a definition of a regulated person who would have to meet specific preparedness and response requirements. It is intended that the regulations would set thresholds of substances and quantities to determine which industries, trades or businesses would be included in that definition. The ministry's first proposal of these thresholds for prescribed

Spill Contingency Plans: One of the requirements of regulated persons proposed by the ministry would be to have spill contingency plans created, reviewed and updated according to a frequency set in regulation.

Geographic Response Plans: Legislation would allow the Minister to order a Geographic Response Plan (GRP) to be prepared collectively by any regulated persons operating within the designated area, as well as make other requirements around GRPs. The ministry's intent is to propose regulations around content, publication, engagement and accessibility of GRPs.

Area Response Plans: Legislation would require a Preparedness and Response Organization (PRO) to complete an Area Response Plan to receive full certification. The ministry's intent is to propose regulations around content, publication, engagement and accessibility of ARPs.

Testing Spill Contingency Plans: Through the proposed legislation and regulations the ministry intends to set requirements for the testing of contingency plans, through planned tabletop and deployment drills and exercises, as well as unannounced drills and exercises.

Preparedness Record Keeping: Proposed legislation and regulations would require regulated persons to determine the risk posed by their business or operation and maintain records about planning and preparedness activities.

Preparedness and Response Organization: The mechanisms for certifying and regulating a Preparedness and Response Organization (PRO) are enabled in the proposed legislation. Future regulations could set out more details of a PRO; though would not weigh into the specific day-to-day operations or structure of a PRO. A PRO could function as an integrator ensuring preparedness and response activities meet the requirements in law through arrangements with contractors, industry, local governments, First Nations, and other regulators. A PRO would not aim to replace or duplicate functions that exist today in the field, but augment, coordinate and fill gaps in existing resources.

Recovery: The proposed legislation would enable the ministry to require protection and restoration of the environment following a spill. Various recovery planning, assessment and action requirements are being contemplated in future regulations. Should restoration of the damage caused by a spill not be possible, the legislation allows for other forms of compensation to take place.

Fines and Penalties: The proposed legislation extends penalty provisions that exist today into new aspects of the regime.

Report to the Legislative Assembly: The proposed legislation would require the Minister to report to the legislature on the effectiveness of the regime.

Responder Training: The ministry intends to require that responders have appropriate skills and expertise that would be set out in a future regulation.

Advisory Committees: Proposed legislation introduces the concept of three advisory committees that would include opportunities for involvement of First Nations, community members or others with knowledge that could assist in spill planning.



Appendix Two – Online Forum: Organization IP3 Submissions

Between April 5 and June 30, 2016, the ministry received written submissions from the 57 organizations listed below representing over 400 pages of comments. The written submissions are available online at <http://engage.gov.bc.ca/spillresponse/stakeholdersubmissions/> until approximately March 2017 and then will be moved to the Engagement Materials¹³ webpage under the Environmental Emergency Program.

Applied Science Technologists and Technicians of BC
 Arcadis North America
 Association of Chemical Profession of British Columbia
 British Columbia Real Estate Association
 BC Business Council
 BC Hydro
 BC Trucking Association
 Canadian Association of Petroleum Producers
 Canadian Energy Pipeline Association
 Canadian Fuels Association
 Chemical Industry Association of Canada
 City Of Abbotsford
 City of Burnaby
 City of Campbell River
 City of Coquitlam
 City of Port Moody
 City of Richmond
 City of Surrey
 City of Vancouver
 Coastal First Nations
 COFI-PPEF-CEPA
 Columbia Shuswap Regional District
 Corporation of Delta
 District of Kitimat
 District of Squamish
 District of Ucluelet
 First Nations Health Authority
 First Nations Responders
 Focus Wildlife
 Fraser Health Authority
 Fraser Valley Regional District
 Georgia Strait Alliance
 ICBC
 Kitselas
 Koseq Netherlands
 Lower Fraser Fisheries Alliance
 Mayne Island Conservancy Society
 Metro Vancouver
 National Energy Board
 Natural Resources Canada
 Northern Health
 North Shore Energy Management
 NorthWest Response
 Peace River Regional District

¹³ <http://www2.gov.bc.ca/gov/content/environment/air-land-water/spills-environmental-emergencies/spill-preparedness-and-response-bc/spill-response-engagement/engagement-materials>

PipeUp Network
Railway Association Of Canada
Responsible Distribution Canada
Suncor
S'ólh Téméxw Stewardship Alliance and Stó:lō Tribal Council and communities
Tsleil-Waututh Nation
Union of BC Municipalities
Vancouver Coastal Health
Village of Anmore
Water Supply Association of British Columbia
West Coast Environmental Law
Wildlife Rescue Association

Template Letters

West Coast Environmental Law (5 received as of June 28, 2016)
Georgia Strait Alliance (185 received as of June 28, 2016)

Other

Environment and Climate Change Canada

Appendix Three – Online Forum: Individual IP3 Comments

<p>This is NOT going in the direction of reducing Canada's Carbon foot print. Renewable energies (solar, marine, geothermal) do not spill. http://www.thinkaffordablesolar.com/solar-energy-spill/</p>
<p>be careful with unannounced drills or exercises as I have seen people act out of fear and panic when they believe a loved one or what they are responsible are in jeopardy</p>
<p>Good day all. As a matter of context I am employed by a Oil producer, and also have been involved with WCSS spill response Co-op since 1993. Also my comments are mine alone and in no way represent either my employer or the WCSS Regulated Person / Considering the training required to demonstrate compliance will need to be varied to the , substance, quantity and geographic parameters. It would require a considerable upgrade to the available accreditation. Spill Contingency Plans / Although not easy by any means, static facilities whether municipal or rural should have plans in place for spills regardless of the commodity. Pipeline owners must consider their routing and be prepared for an event at any point in the operation. However transport companies ie. rail, truck or marine shipping all have a moving risk. This will be difficult to tailor to all situations. Geographic Response Plans / This will be a effective tool to ensure corporations identify available resources and the specific conditions related to seasonal issues, wildlife, recreation, and First Nations use of the land in question. Area Response Plans / I would find it interesting to see how a response company could staff a major incident with trained personnel in a timely matter. Testing Spill Contingency Plans / Our Industry has competent regulators and the tools required to meet these goals as we do on Emergency Response Plans that are required now. I agree a emphasis is required on spill response training. A requirement in which all operations staff attend an effective spill response course , of course this must be applicable to a variety of products and may need to be specific to individual industries. Record Keeping</p>
<p>Pretty limited bit of info above but, I hope these proposed regulations around content, publications, engagement and accessibility of ARP's will be to promote transparency. If the aim is to limit the accessibility of this information we are looking at yet another sweet provincial failure. Also, while I believe First Nations absolutely need to involved in such a grand Provincial/Federal plan, and I do support their overall actions, they have displayed misjudgment in the past. They demanded control provincial forest regions to protect them from excessive logging, only to turn around and log areas for their own profits. Along the same lines, our provincial government is incapable of making unbiased decisions, we do not have to look far into the past to uncover botched provincial projects that were pushed through even though solid information was provided supporting their obvious potentials for failure. The Port Mann Bridge was a good one, lets run support cables over traffic in a region where it can snow, freeze, rain and thaw all in the same day. I suppose the most obvious was the Fast Cats, intake propulsion in waterways that contain the highest level of debris with substantial tidal fluctuations. My point is this, First Nations involvement, yes obviously mandatory, government involvement, again obviously, don't get Christie to involved or she will just sell the coast off to foreign investment and wash her hands with the area. But there had better be full transparency to the public with equal participation on there behalf. Now I have most likely hurt a lot of feelings and angered others but suck it up little campers! We can't afford to fail at this one, we are responsible for maintaining one of the most precious areas on this planet!</p>
<p>spills with an impact to human health or the health of a community would need Health Authority or a Medical Health Officer involvement to assess the health risks associated with a spill.</p>

I think that truly world-leading spill response plans would include several elements: 1. Exceeding the best practices noted elsewhere after having done a comprehensive study of world-wide policies (not just neighbouring jurisdictions). I find it hard to believe that there are not more stringent systems in Europe. Sounds like Saskatchewan already has lower spill thresholds than what is proposed. 2. Materials covered in spill response would include solids and gases as well as liquids. 3. Meaningful penalties for spills to encourage spending on prevention over clean up. 4. Penalties to include more than just actual costs but also factors for environmental damage (for example release of GHGs in gas spill). 5. Serious focus on prevention which means looking at reducing frequency and volume of materials transported in a systemic fashion. Aside from that, I have grave concerns over the reliance on a PRO for spill response. The MOE is very short staffed as it is. I have seen examples where there was reliance on the actions of a third party organization to meet their obligations under the Recycling Regulation and it has been very hard for the MOE to enforce it and the first example required changes to the regulation to allow enforcement. The consequences were not large in the big scheme of things and learning occurred but the consequences of such shortfalls if a major spill would occur (such as a PRO not having adequate capacity and no longer having any provincial systems in place, a PRO arguing over who is actually responsible while the spill is occurring with ensuring legal issues, the PRO unable to ensure staff during a spill if hazardous, etc.) could be catastrophic. I believe that 100% of the costs should be borne by industry but it should not be organized or administered by anyone other than the provincial government (or a designated crown organization specific to the task to ensure that adequate funding is provided). In addition, several smaller companies that live across BC attended the consultation. If one large PRO were to be the result, it could negatively impact these small companies and have the net result of fewer trained responders actually on the ground (possibly being in a large centre distant from potential spill sites instead). There will also be problems with a monopoly if there is one large PRO so issues around fee setting and other ones between the PRO and their customers should be considered. I also am worried about only looking at volumes of individual prescribed substances instead of total volume. The possibility of increased hazard with combinations of substances must be factored in. The volume of the container, not the amount inside needs to be the deciding factor and is far easier for transporters to gauge and for enforcement. I also think there needs to be closer work with the federal government to make sure there are no gaps in regulation of responses (ships, ships in port, other combinations that may fall through the cracks).

This proposal is glaringly incomplete, does NOT serve the citizens, including the First Nations and the waterways, air and lands of British Columbians. This proposal does virtually NOTHING to safeguard against horrifically destructive and toxic "accidents" and is blatantly ineffective and extremely deficient in both prevention and management of what are obviously "guaranteed" environmental disasters if left in the incompetent, bottom line and vested-interests of the companies responsible for these inevitable disasters. Either demand that the provincial and national Environmental Ministers take a solid stand against this nonsense and implement REAL protection and prevention of such inevitable environmental disasters controlled and approved by the citizens of Canada OR dismiss themselves from office to make way for individuals who do NOT serve planetary destruction for Profit!

The proposed framework offers nothing to protect us from tar sands spills. What is wrong with this picture here? Currently, the BC government is not proposing an accountable, effective spill preparedness and response framework that instills public confidence.

Leaving spill planning and preparedness to industry-led organizations is abdicating the government's responsibility to protect the health and safety of British Columbians and our environment. The provincial government must lead in spill response planning and engage with all stakeholders before creating its own area response plans. Industry-led organizations have consistently proven to be neglectful and ill-prepared for spills.

Nothing but prevention can stop the devastation of a bitumen spill. There is no known method to clean up bitumen from the ocean floor. "Preparedness" gives a sense of false security. Bitumen (dilbit) should never go near an ocean, sea or river. Who builds tankers? What are the special specifications for bitumen? Who controls the tanker? Who controls the route? Who controls weather! Climate Change effects and earthquakes cannot be predicted.

Second Comment! Let's begin to conduct ourselves as SANE and RESPONSIBLE citizens and to DEMAND the SAME from our governmental representatives and just make a flat out decision to completely VETO even the possibility of pushing ahead such a completely dangerous, irresponsible and environmentally disastrous project. First of all the TAR SANDS is an abomination from which massive tracts of land in Alberta will NEVER recover! Secondly, the pathetically minimal amount of \$\$ to be secured by the sale of such deadly and toxic bitumen that is impossible to clean up AFTER the inevitable spills happen. The inevitable environmental devastation is certain and , as such, Harper should be charged (along with the Oil and Gas companies CEOs)) for ignoring the extreme dangers and environmental impact of the Tar Sands and the inevitable Bitumen spills in BC's Coastal waters (hey did they not even realize that water does not stay in one spot???) that will never be cleaned up effectively!!! They should also be held responsible for the reparation of the Tar Sands devastation even though the . NO ONE, NO CORPORATION and certainly NO GOVERNMENTAL OFFICIAL has the right to continually ignore the demands of millions of Canadian citizens to stop this environmentally catastrophic stupidity. And stupidity it most certainly IS- with such an environmentally destructive and incredibly toxic product which will sell for mere pennies on the \$. Who will benefit from this absurd and disastrous project IF the Canada's government is foolish and irresponsible enough to stubbornly push it forward inspite of the overwhelming demands of Canada's citizens. Think of the planet and if that is NOT enough reason to drop Harper's disaster project, DO think of your children and make the only decision possible. ALL of the evidence of previous disasters is staring them and YOU in the face, so wake up, regain your ability to calculate the inevitable and STOP THIS DOOMED BEFORE IT BEGAN PROJECT!!

With all due respect, I don't believe that BC should be a "doormat" and receive Alberta's toxic UNREFINED diluted bitumen. There will be leaks/spills, it is inevitable. The impact to human health and that of creatures, to our environment and our economy is too important. I oppose Trans Mountain Kinder Morgan's proposed pipeline expansion and shipping tarsands oil by pipeline or tanker. Enlightened reads are "Sound Truth and Corporate Myths - The Legacy of the Exxon Valdez Oil Spill" and "Enough! Paying for the Legacy of the Exxon Valdez Oil Spill (2007)" by Dr. Riki Ott. She was a commercial fisherman, and has a master's degree in marine biology and oil pollution (University of South Carolina) and a doctorate in fisheries and marine toxicology (Univ. of Washington).

There are concerns over the definition of a regulated person. If a small facility falls under this definition the amount of time and resources to develop the spill contingency plans and test them as prescribed by the regulation are quite extensive. While we do agree that facilities should have spill contingency plans, the manner in which they are to be developed and tested per this regulation may be too extensive for a smaller facility to handle especially given the magnitude of the risks and consequences of the spill itself.

I believe that changes being made to ensure adequate preparedness planning be regulated and guidelines developed to help responsible parties or the 'regulated person' whom handle Dangerous Goods will be a helpful addition. In combination GRP and ARP will be helpful to mitigate damage that would potentially occur in the event of a release or event, however they will only be useful if their content be well outlined within specific guidelines. Additionally, should the ARP cover an area that includes a local authority or First Nation's community, it should be explicitly required that consultation and involvement in both the development of the plans but also exercising of the plans. I am encouraged to see that this involvement is being considered, including responsibility to accommodate capacity (financial support) for meaningful attendance and engagement, however this should be a commitment that is full-cycle throughout the process. I.e. a responsibility that continues from development, through routine scheduled exercise and maintenance phases of the standard emergency management planning and preparedness cycles. Kind Regards

Spill Reporting/ All good ideas, reporting in timely fashion is the key to ensure all parties are updated with pertinent information. Response Times/ As stated in document response times to certain portions of our province will be challenging, however the spill response training and preparedness, should identify the geographic challenges in a response plan, preparations and time required for them will be considered in these plans. Sample and Monitoring/ This is a must on any product release, it may become a expensive undertaking for the residential people around oil heating tanks, fuel tank leaks (may lead to not reporting).

Volume and toxicity need to measures of reporting triggers as a small volume spill outside the spill reporting requirements could be very toxic and have detrimental effects on the environment and human health.

<p>In my own experience with spill response I've seen many spills where the response to the spill creates more environmental impact than the spill itself. Whether this is removing log jams where oil might be trapped, or cutting down vegetation sprayed by hydrocarbon. The regulations need to allow freedom to not clean "every drop spilled" where the clean up will cause adverse effects. This is not to say the responsible party should be left off the hook. This regulation could follow the Fisheries Act example and allow an enhancement project in another area when it is not environmentally feasible to remediate all impacts of in stream work (or in this case impacts of a spill).</p>
<p>There needs to be a statement on equipment and availability; also more detail on qualifications of personnel. A statement such as: 'equipment location relative to anticipated spill areas; time readiness of qualified personnel for equipment use.'</p>
<p>Large gaps exist in these response requirements in that those responsible for cleanup are not required to show they can be effective. This particularly applies to the transportation of diluted bitumen. A study last year from the U.S. National Academy of Sciences found that there is no known way to clean up the substance when it sinks into the water column. It is unacceptable that under the new requirements, shippers could transport a product with no way of being able to clean up a spill.</p>
<p>As I said before, Bitumen is a different Beast! There is no known way to clean a spill. I suggest that no Bitumen is ever transported</p>
<p>It is great to be prepared, to update, to organize, to oversee etc. but prevention takes precedence! There are many substances that are carried by tankers, some much more hazardous than others, eg Dilbit, which should NOT be transported, the risks outweighing anything else! The tankers themselves, fuelled by Bunker C, are dangerous even when there is no cargo! Our oceans are in serious trouble, and all that lives therein, so at what point do we stop this risky tanker traffic? There certainly should not be any increase in traffic allowed.....how can the Spill Response Plans ever keep up? Remoteness and distance are huge factors in response.....so such routes should be abandoned by tanker traffic. Where the weather and channels can be difficult to navigate, tanker bans should be made. Also where there are environmentally sensitive areas, tanker traffic should be banned. Noise is also pollution to marine species! CARE FOF THE COAST!</p>
<p>The requirement to have three reports all within the space of 48 hours is quite cumbersome especially in the case of minor reportable spills. There was also not much clarity on the consequences of missing one of the reporting timelines.</p>
<p>I believe definition and initiation of the preparedness and response organization (PRO) certification process to ensure a minimum standard of competency is a positive step in the right direction. The government and existing and future industry PROs would have to work together to ensure geographic coverage is available across the province as there may not always be existing business case to ensure minimum response times would necessarily be met. The emergency response industry already has a network that when required is collaborative in meeting the needs of large events, however the PRO certification process should ease the integration of the various industry service providers in establishing mutual assistance or aid agreements as it were to ensure that in times of need all responding capacity province wide is efficiently and effectively utilized by the lead responding agency and responsible party in effectively mitigating the effects of the event. It is my opinion that the BC government department (MOE) responsible certifying the PRO should also provide guidance and help manage cooperation in meeting the immediate needs of the regulated person (i.e. responsible party), especially by connecting those without an existing agreement with a PRO to provide services. It is also important to ensure guidelines provide clear guidance on what, if any changes there may be to spill response as it relates to the existing contaminated sites regulation. The equivalent PRO pre-qualification for environmental consulting services for environmental impact assessment, environmental monitoring during remediation and closure reporting should also be considered. Kind Regards,</p>

In the very comprehensive, peer-reviewed publication of 2016 from the National Academy of Science entitled "Spills of Diluted Bitumen from Pipelines" (found at <http://www.nap.edu/catalog/21834/spills-of-diluted-bitumen-from-pipelines-a-comparative-study-of>) the authors conclude that compared to conventional crude oils, spills of diluted bitumen raise unique concerns for response for the following reasons: 1. Weathering (due to combined effects of wind, waves, temperature and sunlight) converts a spill of diluted bitumen in a very tight time-window to a product with exceptionally high density, viscosity, and adhesive properties, 2. Volatile compounds in diluted bitumen evaporate quickly leading to a dense, viscous material whose residue can adhere and cling to sediments and surfaces and in some cases submerge, remain in suspension or sink to the bottom of the water body, 3. Once submerged, weathered diluted bitumen poses serious problems for detection, containment and subsequent recovery, 4. Existing regulations do not take the unique properties of diluted bitumen into account, nor does effective planning exist for spills of the many (named) diluted bitumen products whose properties are specific to the type of spilled diluted bitumen (eg, Cold Lake Blend, etc) In other words, all diluted bitumen products are NOT alike, and a specific response must be tailored to the characteristics of each spill type, 5. A spill of diluted bitumen must be considered to be a non-floating oil after evaporation of the diluents has occurred. These concerns would be valid whether the spill of diluted bitumen were to occur in a fresh-water stream, river, or lake or a marine body of water. Very special care, awareness, speed and attention would be required for these spills, and the technology just does NOT EXIST to cope with all but the smallest spill of diluted bitumen. Often the cleanup efforts make the situation worse, as happened in the Kalamazoo spill, and so-called "world-class" recovery so far has an abysmal success rate.

Restoration/ It is quite apparent that a very comprehensive area impact plan be established with any project, to establish plant density, , wildlife numbers, recreation usage and First Nations impact. This should be done early in the project if not first. I see issues related to long term effects , for example run off into lakes from agriculture operations, or domestic waste from poor storage systems. Ownership changes would only confuse the issue. Fine and Penalties/ No doubt the requirement for penalties is a must. Restoration to affected parties is a given.

Returning an environment to the conditions prior to the spill would require baseline data pre-spill, I would expect that sensitive areas would be mapped and some baseline sampling would be required on transportation corridors.

Recovery needs to be pursued to the highest level. Not only will this be a bigger deterrent to a spill; it also assures British Columbians that environmental damage is taken seriously and will be repaired to the highest level possible. It should also be recognized that in most cases, the environment cannot be restored to its previous state and so very high penalties should be assessed for all damage. However, to know what damage has been done, it is necessary to know what the baseline was so industry should also fund baseline studies (done through the province or designated crown corporation) for all ecosystems that are at risk from a spill before transport occurs. In addition, the province should take steps to safeguard us against companies that set up temporary or shell corporations to minimize liability so that in the case of a spill, the shell company goes bankrupt while the parent company continues to profit (see examples of mines). There may need to be significant security deposits put in place to avoid the province (and thus tax payers) ending up paying for large spills. Fines/penalties -should be 100% costs plus fines severe enough to make prevention a key focus of all companies. Often fines are low and seen as a costs of doing business rather than a deterrent.

There must be a determination of long-term impact (e.g., impact on food webs of commercial species) and financial compensation for loss of income for those using the species (or area).

Bitumen sinks as illustrated by the Kalamazoo River spill. BC's coast is mountainous and the shorelines drop off very quickly. Cleaning up the bottom of Burrard Inlet at 30 to 134 feet of water is not likely to be easy or efficient. In the Strait of Georgia or along the northern coastline probably not likely at all. Also I would recommend that any operation be thoroughly monitored by stakeholders. Local citizens and environmental groups and perhaps a local fisherman. Commercial enterprises are concerned about profit and will cut corners at every opportunity. There is no profit in a oil spill. For example Corexit kills. It's banned in the UK. Almost all the volunteers of the Exxon Valdez spill are dead. <http://www.businessinsider.com/warning-to-gulf-cleanup-workers-almost-every-crew-member-from-the-1989-exxon-valdez-disaster-is-now-dead-2010-6> So I doubt that Industry really cares about the community or other industries like fishing. The strength of democracy is it's checks and balances. Please keep those checks and balances.

<p>I am still in shock by the news that a successful clean up of a spill is 8-10% Not good enough in my books!</p>
<p>A Spill on Land....fields and forests,mountains and valleys,lakes and rivers,cities and towns,,the cause would be due pipeline or pump station rupture,train or truck accident. A Spill in the oceans or seas,due to tanker traffic,and all the hazards of this transport method,involves tremendous responsibility to prevent,respond,clean up, and have industry pay.. Are corporation reliable? Do they have the expertise? Do they carry enough insurance I think not. Federal and Provincial Goernments must safeguard the environment and the public interest by controlling every aspect of Spill prevention , preparedness, response and recovery . There will be project proposals that simply are too risky,and must be turned down,for the greater good of planet and people!</p>
<p>Industry does care about the environment, we are constantly innovating to improve our equipment to remove oilspills in a fast and efficient way in order to protect the environment that we live in. We need our governments to support that and luckilly many do</p>
<p>It is very important to ensure that the mechanism for First Nations, local authorities, the public and other stakeholders to be involved in determining recovery actions and reviewing plan be implemented. Notably the expertise required to conduct a environmental impact assessment, risk assessment, remedial options assessment or other similar evaluations require expertise and those stakeholders seeking involvement should be afforded an understanding for why the strategy being proposed is the most responsible and appropriate one. In the event full recovery of the spilt materials are not feasible or impacts resulting from the event are irreversible, it is imperative that the responsible party be held accountable and provide suitable offsetting environmental habitat projects, education projects and implement mitigation to continued operations to ensure such an event does not repeat itself. That includes sharing lessons learned widely and transparently as well as taking steps to be show corporate social responsibility for actions and business operations which appropriately value the environment in comparison to business drivers and ultimately profit motive. Kind Regards,</p>
<p>We should be looking more at prevention, specifically at what materials are allowed to be shipped through the pipelines. If we look at lessons learned in other jurisdictions, such as the aftermath of the 2010 Kalamazoo River oil spill, we know that all shipping products are not equal in terms of spill cleanup and recovery. The heavier components of the diluted bitumen sank to the bottom of the water column, this is a demonstrated fact during the Kalamazoo cleanup efforts. The cleanup and recovery was ongoing for years after the original spill, and the full effects are likely still not even fully known. In 2013, the EPA recommended to the US State Department that pipelines that carry dilbit should no longer be treated like pipelines that carry other oil. We should be considering this in our planning and approvals, and impose heavy risk based tariffs on products that present a greater risk of environmental contamination, if not an all out ban.</p>
<p>After reviewing the Paper. it becomes very clear that as a industrial user of the province you must review all impacts of your operations and identify the risk associated to them. As a landowner you must review your own compliance, and ensure that the specifics related to your property/commercial value be established in a consultation with other area users to protect your assets.</p>
<p>Excellent comment. I suspect this document will go a long way to assisting in this regard. A corporation will have to consider the impact of the product they are handling. It is important to note that this relates to all activities in the province private, industrial or agricultural we all have a part to play.</p>
<p>Quick response to a spill is key in reducing environmental impacts. In many spills work within a stream, interfering with wildlife or burning a spill may be appropriate responses, but they are also illegal without approval. The delays involved in getting approvals likely would see significant worsening of any environmental impacts. The regulation changes should allow for qualified responders to make appropriate response decisions without having the necessary approval in hand.</p>
<p>Prevention should be the key aspect. Minimizing transport of hazardous materials should be the first step. Developing spill response plans should not be seen as a way to facilitate increased transport of problematic materials.</p>

The proposed legislation does not adequately address the details to of spill response. Although the intent is to broadly cover a wide variety of problems, the proposed legislation will be open to legal adjudication with loss of legislation intent and loss of habitat.

The proposed legislation does not adequately address the details of spill response. Although the intent is to broadly cover a wide variety of problems, the proposed legislation will be open to legal adjudication with loss of legislation intent and loss of habitat.

Recovery AFTER THE FACT is impossible! Wake up, examine the previous spill disasters and multiply that by 100! That will be your legacy to British Columbia, all living creatures in the Coastal waters and Canadian Citizens!!! In spite of all sanity and logic to immediately end any possibility of transporting Canada's filthy Bitumen through BC's Coastal waters, what is wrong with the legislators who are promoting the continued use of fossil fuels while our world is teetering on the brink of irreversible climate change???! Shame on you all and for ONCE stand up for what is right for the future our world and our children!

Industry is not to be trusted. Oil spills take away from their profits and I suspect their will be a strong temptation to cut corners. Any cleanup should be watched by the stakeholders such as local citizens environmental groups and concerned scientists as well as the government. <http://www.businessinsider.com/warning-to-gulf-cleanup-workers-almost-every-crew-member-from-the-1989-exxon-valdez-disaster-is-now-dead-2010-6> Bitumen sinks as illustrated by the kalamazoo river spill. BC's coast being Mountainous means that the shoreline drops off quickly. I doubt if a spill could be cleaned up at any distance from the shore. Also we don't know the long term effects of Bitumen on the environment. I oppose tanker traffic with bitumen on our coast.

After reviewing the discussion papers some of my key concerns are as follows: First and foremost the notion of World Class response as a benchmark to meet is confusing. As a BC resident the benchmark that I feel we need to meet is our ability to effectively clean up a spill and to restore the environment. From much that I have read and understand there does not appear to be an effective method to clean up the oil sands bitumen if a spill were to occur in our marine habitat. Until such time as we have confidence in our ability to clean up and restore the marine environment after a bitumen spill it seems incomprehensible and irresponsible that we would allow an increase in tanker traffic carrying this heavy oil. am deeply concerned that the Province is planning to hand over so much of the responsibility and even oversight of spill response to industry. We have seen many examples of when Government cuts back on monitoring that industry does not have incentive to maintain standards

BC communities are at risk from toxic spills of hazardous materials that criss-cross our province by road, rail and ship every day. Our current spill response framework is spotty, unplanned, under-resourced, poorly trained and rarely drilled. The move by the BC Government to improve the framework is therefore both overdue and welcome. A strong spill preparedness and response framework is critically important to protecting public safety and environmental health. My recommendations: The location and content for Area Response Plans and Geographic Response Plans should be decided through a collaborative process, led by government û Provincial, local and First Nations û and with full input from stakeholders and communities at all stages (via a Citizens Advisory Committee, discussed below). The PRO should be involved as a key participant and resource, but not act as the plan leader. Government-led planning is standard in other jurisdictions such as Washington and Alaska. The PRO must be governed in a manner that is accountable to First Nations, local government and the public û particularly if the government disregards the above recommendation and pursues its current intention to have the PRO lead in areas such as planning, training and coordination. We propose a policy board with a majority membership of First Nations, local governments and community stakeholders, which would set overall direction for a PRO but leave daily operational matters to the industry professionals managing the PRO. The framework should require the immediate creation of a Citizens Advisory Committee whose role and funding is formal, ongoing and set out in regulations, in order to facilitate informed input from the public during all planning stages, as well as act as a citizenÆs watchdog to monitor implementation of the framework and industry compliance. This model has been successfully operating in Alaska for over 25 years, since it was mandated by the US Oil Pollution Act in the wake of the Exxon Valdez oil spill. [8] BC also once had a committee with some of those responsibilities. The British Columbia Citizens Advisory Committee on Oil Spill Prevention and Response was established in 1991 to advise the provincial government of public concerns over oil spill prevention, preparedness, and response. The Committee also monitored provincial and joint provincial/western USA initiatives in the area. The scope of Geographic Response

Plans should be expanded to include more detailed information on roles, logistics and sensitivities during an emergency, and should plan beyond the first 48-72 hours. Housing this information within company-led contingency plans is not sufficient. Local advisory committees should play an active role in creating GRPs. All levels of plans and reports should routinely be made public (including Spill Contingency Plans, Area and Geographic Response Plans, drill and exercise reports, incident reports, substances transported reports, etc.). The proper mechanisms for accountability to First Nations will emerge through discussion with First Nations themselves, but some options include: a process to allow First Nations to certify or vet the spill preparedness and response plans of companies or a PRO operating in their territories; direct reporting to First Nations by a responsible company and/or PRO in the event of a spill; and requirements for meaningful involvement of First Nations in post-spill recovery, restoration and, where necessary, restitution. Clean-up and recovery end points should be determined through a collaborative process that includes all levels of government and community stakeholders. Where circumstances warrant, there should be provisions for the Province to appoint a Trustee group to oversee damage assessment and compensation in order to: assess residual impacts; determine who needs to be compensated and what form compensation should take; and monitor the delivery and outcomes of compensation awards. California offers a model of natural resource damage assessment and trustee oversight. Such a model helps avoid lengthy court battles that can add significantly to the financial and social damage of a spill. Provisions for alternative restitution and compensation should require consideration of impacts to a full range of cultural and other non-market values. A dedicated provincial spill fund should be established, to fund government-led spill prevention and planning, provide immediate funding for response as well as longer-term recovery activities, and top-up other liability and compensation funds if they are exceeded. The government needs to play a more prescriptive role in defining the type and location of equipment that must be available for spill response, ensuring that equipment that is actually capable of recovering spilled product is in fact available on a timely basis. The government must set standards for effective spill response, establishing firm guidance for what is required in terms of both response and recovery to fully deal with the adverse effects of a spill on the environment or human health. Assessing whether these standards can be met should form part of the process for determining whether a given product should be allowed to be transported in BC.