Second Intentions Paper – Land Based Spill Preparedness and Response in B.C.

Compilation of individual submissions from those who requested them to be posted

The Second Intentions Paper - Summary of Public Comment 2014 lists examples of comments received using anonymous excerpts from the consultation submissions. While the summary contains only anonymous comments, a number of respondents have asked for ways to share their entire submission publicly. The Ministry offered all respondents the opportunity to post their responses separately.

This document compiles those submissions.

To read an individual submission, click on the name in the following list.

List of Respondents

Business Council of British Columbia

Canadian Association of Petroleum Producers

Canadian Energy Pipeline Association

Canadian Fuels Association

City of Richmond

Daniel James Sinclair

David G McRae

DonMar Consulting Ltd.

Georgia Straight Alliance

Islands Trust Council

Living Oceans

Lois Eaton

Lucy McRae

Mayrid Consulting Ltd.

Northern Health Authority

Northwest Fuels Ltd.

Railway Association of Canada

Regional District of Bulkley Nechako

Rocky Mountain Environment Ltd.

The Association of Professional Engineers and Geoscientists of British Columbia

Western Canada Spill Services Ltd.

Wet'suwet'en First Nation



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July 25, 2014

Via Email: cindybertram@shaw.ca (Original to follow by mail)

Ms. Cindy Bertram
C. Rankin & Associates
PO Box 28159 Westshore RPO
Victoria BC V9B 6K8

RE: Land-Based Spill Preparedness and Response in British Columbia

The Business Council of British Columbia is pleased to provide comments on the second Policy Intentions Paper on "Land-Based Spill Preparedness and Response in British Columbia." Our views are informed by and supportive of the advice offered by several other industry associations which have also submitted comments to the Ministry of Environment.

Overall, and depending on the final approach taken by the province, we believe the current proposal has the potential to have a positive impact by filling gaps in the regulatory regime. However, there is also a risk that the province will re-invent what already exists and, in doing so, add unnecessary costs (time and money). Most of the major industry sectors with an interest in spills (pipelines, upstream oil and gas, rail, chemicals, ports, refineries, and trucking) are already subject to regulatory oversight. It is not clear what needs to be changed in order for BC to have a "world leading preparedness and response regime for land based spills and other hazardous materials" – apart, perhaps, from taking steps to ensure additional coordination (e.g., incident command) and communication.

Having said that, the Business Council generally agrees with the principles articulated on page four of the Intentions Paper, although we suggest that risk assessment be treated as an overarching framework rather than a discrete principle. Unfortunately, it has proven difficult in BC to have a sensible dialogue on the whole issue of risk in the public policy context. With the natural human inclination to overestimate the probabilities of rare and unlikely events, there is a tendency to gravitate toward a "zero risk tolerance" approach. Yet in most domains of human activity, zero risk is neither realistic nor practical.

A sophisticated, rigorously analytical and transparent risk assessment framework, that takes into account the magnitude and probability of an event/loss/impact and incorporates cost-effective management options in determining risk acceptability, would be a substantial step forward. The process and outcomes would support planning and prevention – if we know the level of risk, mitigation can be more easily identified. It is a logical role for government to determine where to focus limited resources to manage risk and how best to provide appropriate oversight. Smart risk policy can help to avoid duplication and make clear the relevant accountabilities by identifying the responsibility for action and facilitating continuous improvement.



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The Intentions Paper notes that the Ministry receives about 3500 spill reports per year, with very few of these related to pipelines and rail incidents. Yet the current proposal appears to be focused on those two areas, no doubt owing to public concern over the movement of oil through BC to other markets. It would be a useful exercise to assess the type, sector, consequence and post-incident responses completed (rather than just frequency by sector and region) in order to pinpoint any real gaps in regulatory oversight and determine what additional resources may be needed. Overall, the Business Council believes an effort should be made to adapt the existing 2012 Risk Management Guidelines for the BC Public Sector to enable their use within the spills management framework.

In terms of the proposed provincial preparedness and response organization (PRO), we have serious reservations about the scope, reach and the costs of such an entity, especially in light of current oversight by both the federal and provincial government. The Ministry correctly points out that more dialogue is needed to work out what a new PRO would do and how it might be structured and funded. If a decision is made to proceed with a PRO, our preference would be to transform an existing body (e.g., Western Canada Response Organization or Western Canada Spills Services) to take advantage of local expertise, benefit from economies of scale, and avoid duplication and unnecessary costs.

With respect to the suggestion for an enhanced Environmental Emergency Program (EEP), we are concerned with the apparent assumption that this should also be funded by industry. Spills are but one of many types of environmental emergencies (e.g., floods, forest fires, etc.). Companies in sectors that are currently regulated are already required to have preparedness and response plans and programs in place. It may be better to explore how the EEP can better coordinate with these sector-oriented regulatory bodies on planning and managing spill events rather than expanding capacity in the EEP.

On the question of industry funding for community and First Nations responses through the PRO, the Business Council does not support the proposal as outlined in the Intentions Paper. Communities are currently required to have an emergency plan and to maintain an emergency management organization. The addition of a spills chapter in an overall emergency response plan should not pose a significant incremental administrative burden, particularly if it is based on a proper risk assessment. In terms of paying for additional direct costs from participation in response and recovery activities, translating these from largely volunteer to paid activities is problematic.

Similarly, we re-iterate a point made in the Business Council's submission on the first Intentions Paper that restoration should be to pre-spill conditions rather than "better than" before, while understanding that compensation for lost opportunities is a legitimate area for further discussion.



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Below we provide brief comments on a few additional issues arising from the latest Intentions Paper:

- Response Time: Legislating response times may have negative unintended consequences, particularly on compliance. In our view, it would be better to focus on planning and the delineation of responsibilities with a robust audit function.
- Incident Command: We support the need for a coordinated incident command, which will not only benefit industry but also local communities and First Nations. Having coherent and well thought out geographic response plans will be critical.
- Evaluating the Capability of Companies: We suggest that this can be addressed by using a
 market mechanism such as bonding rather than by building capacity within government to
 review and reach conclusions on the capacity of individual companies.
- Thresholds: This is an important foundation piece of work that needs to be done with care.

Thank you for the opportunity to provide input on the Intentions Paper.

Please feel free to contact our office if you have any questions or require additional information.

Yours sincerely,

Original signed by Jock Finlayson

Jock Finlayson
Executive Vice President and Chief Policy Officer

DD/vjc



Canada's Oil and Natural Gas Producers

July 25, 2014

Cindy Bertram
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PO Box 28159 Westshore RPO
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Dear Ms. Bertram:

Re: Canadian Association of Petroleum Producers Response to the Land Based Spill Preparedness and Response in British Columbia Policy Intentions Paper for Consultation (April 2014)

The Canadian Association of Petroleum Producers (CAPP) supports the subject review of Land Based Spill Preparedness and Response in British Columbia (B.C.) and appreciates the opportunity to participate in this stakeholder consultation process.

The review is aligned with our industry's commitment to enhance Canada's prosperity by enabling responsible growth of Canada's upstream oil and gas industry. This is enabled by continuous improvement in our collective performance and by comparison to world-class benchmarks.

CAPP staff and our members have been actively engaged in the Ministry-led working groups and advisory group to inform the improvement opportunities for a land-based spill preparedness and response regime in British Columbia. We acknowledge the initiative of the Ministry of Environment (MoE) and the B.C. Oil and Gas Commission (OGC) in undertaking this important work to provide assurance that B.C. maintains a world-class land based spill preparedness and response regime.

CAPP strongly supports a robust land-based spill prevention, response and recovery system for the upstream oil and gas industry in B.C. In our view, the key elements of such a regime are already in place for our sector and any necessary enhancements can be made through modifications within the existing system. On the former point, the Oil and Gas Commission (OGC), through the *Oil and Gas Commission Act* and *Oil and Gas Activities Act*, has the responsibility to oversee oil and gas operations in B.C. including exploration, development, pipeline transportation and reclamation activities. Broadly, these are summarized in *B.C. Oil and Gas Commission Emergency Response Plan Requirements* (OGC-OD-C&E-2700). The OGC emergency response regulations require companies have a plan in place to address a release of any liquid product onto land or water from a well, pipeline, or facility. Furthermore, a company that is not a member of an oil spill cooperative must either join the cooperative or submit its own spill response contingency plan and obtain

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separate approval from the OGC. As provided in existing regulations, the polluter pays for costs associated with spill response and recovery operations. CAPP is broadly supportive of these regulations and of the existing implementation framework.

Given the provisions of the current regulatory framework, the MoE's Second Intentions Paper has not demonstrated that there are inconsistent levels of preparedness and response for major industry sectors, nor has it been shown that there are substantive gaps in the current matrix of regulatory regimes that warrant the creation of an incremental industry-funded provincial preparedness and response organization. The recommendations in the MoE paper appear to pre-suppose a case for broad change that does not align with the supporting analysis. Accordingly, CAPP is concerned that this proposal will create redundancies and / or conflicting requirements, resulting in unnecessary cost burden for our industry and creating operational uncertainty as it pertains to spill preparedness and response.

As noted above, CAPP is of the view that world-class spill response for the upstream oil and gas sector, largely exists within the current regime and that enhancements can be made through modifications within the existing system. To support this view, CAPP has conducted its own regulatory gap analysis that builds upon the review previously undertaken by the Ministry (see attached). As part of this analysis, CAPP has identified specific opportunities for improvement within the current regulatory framework. We encourage the government to consider these improvement opportunities on a go-forward basis.

Given the comprehensive policy and regulatory oversight that currently exists for our sector and for other industry sectors, the primary gap identified in our analysis is the lack of effective coordination across industry sectors which are regulated under their own respective individual frameworks. Rather than create an incremental industry-funded provincial preparedness and response organization for industry sectors with well-established regulatory oversight and capability in this regard, the focus of MoE's role should be on ensuring effective coordination and collaboration across industry sectors. The MoE is in a unique position to facilitate coordination and collaboration across multiple industry sectors (via their operational regulators) with local authorities and with First Nations. To support this function it would be reasonable to focus on the development of risk based Geographical Response Plans (GRPs) for the prevention, preparedness, response and recovery of land-based spills. The upstream oil and gas industry is supportive of a pilot project in this regard, under the guidance and leadership of the MoE. Further, and of significant importance, industry has a strong history of collaboration with government and other stakeholders through existing committees focused on land based spill preparedness and response. It will be critical to ensure that this work is leveraged as GRPs are developed and piloted. We propose that such a project for development of a GRP be undertaken NE BC for all hazardous waste and across all modes of transportation. This initiative would support and enhance the current Environmental Emergencies Program, demonstrate capability and capacity in a world leading land-based spill preparedness and response regime and

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improve communication and collaboration across stakeholder groups. For clarity, CAPP is of the view that MoE (not industry) should take the lead in coordination across sectors and with stakeholders.

Our industry is committed to ensuring spill response is efficient and effective, and supports a riskbased approach to environmental performance including spill preparedness and response. The development of GRPs will enable industry and government to build upon the current system and deliver improved outcomes, while mitigating the impact on industry competitiveness.

In summary, CAPP has substantive concerns regarding the direction outlined in the Second Intentions Paper and encourages further dialogue with industry prior to proceeding with these recommendations. CAPP looks forward to continued work with the MoE and the OGC on this important initiative.

Sincerely

Dave Collyer President & CEO

/attachments cc's (letter only)

Hon. Minister Polak, Ministry of Environment cc:

Hon. Minister Coleman, Ministry of Natural Gas Development

Wes Shoemaker, Deputy Minister of Environment

Steve Carr, Deputy Minister of Natural Gas Development



Executive Summary of Regulatory Analysis

Scope of Regulatory Review

In April 2014, the British Columbia (BC) Ministry of Environment (MoE) released the "Land Based Spill Preparedness and Response in British Columbia Intentions Paper for Consultation" (the Paper) inviting stakeholder comments on the proposed regulatory standards designed to protect BC's environment from land based spills of oil and other hazardous materials. The Canadian Association of Petroleum Producers (CAPP) has thoroughly reviewed the Paper and respectfully provides comments utilizing the foundational regulatory gap analysis table the MoE provided through the Land Based Spill Preparedness and Response: Advisory Committee on March 6, 2014. The intent of this detailed regulatory review was to identify: Where current and/or similar regulations exist; Opportunities for modification to regulations; and /or Creation of a new regulation to address the proposed regulatory standards.

The attached regulatory review clearly demonstrates that there are several proposed regulatory standards where the OGC has robust regulations already in place. The OGC, through the Oil and Gas Commissions Act / Oil and Gas Activities Act, has the responsibility to oversee oil and gas operations in BC, including exploration, development, pipeline transportation and reclamation activities. The OGC's emergency response requirements are similar in nature and intent to those of the neighboring AER and share similarities and / or are complementary to emergency response requirements under Transport Canada and Environment Canada's jurisdiction. Such similarities are beneficial when jurisdictional agencies geographically overlap, as they provide consistency in response expectations and actions thereby enabling an effective response within an area regardless of jurisdictional responsibilities (i.e., a NEB regulated pipeline spill versus an OGC spill at a well site).

There are also opportunities for modifications to the existing applicable OGC regulatory standards to provide for clarity in regulatory application to spill response actions. The attached analysis demonstrates that the development of a new regulatory regime towards oil spill response will present a duplication of regulations which is in contravention of one of the Paper's key principles: the avoidance of unnecessary duplication (page 4 of the Paper). Further, and of critical importance, while the scope of the Second Intentions Paper is focused upon oil transportation, it would also capture the province's upstream natural gas industry. Most natural gas wells produce liquids (water and hydrocarbons) and the industry uses inputs covered under regulation as hazardous goods. The incremental cost burden from a duplicative regime stands to impact the competitiveness of B.C.'s upstream petroleum resources and its ability to support growth required for the emerging Liquefied Natural Gas (LNG) export industry.

Methodology

To assist the MoE in its evaluation of the attached regulatory review content; CAPP organized the proposed MoE regulatory standards in accordance with the three specific areas of feedback requested within the Paper and MoE-CAPP correspondence:

- Intention 1: Spill Preparedness, Response and Restoration Standards
- Intention 2: Establishment of Provincial Preparedness and Response Organization
- Intention 3: Funding for an Enhanced Provincial Environmental Emergency Program.

CAPP recommendations / comments for MoE consideration have also been included along with a summary table.

Analysis

Intention 1: Spill Preparedness, Response and Restoration Standards

As demonstrated in the regulatory gap analysis table, the majority of the proposed regulatory standards are aligned with Intention 1. Upon review of the stated MoE's regulatory standards for preparedness response and restoration activities, a number of proposed regulatory standards are addressed through the OGC under regulatory authority of the Oil and Gas Activities Act. There is opportunity for modification of the OGC regulation, to ensure a clearer line of sight between the emergency response plan (ERP) requirements and spill response plans and activities. The emergency response plan requirements and emergency response activities highlight operations containing hydrogen sulphide (H₂S). Through modification of existing regulations, the H₂S focused emergency response requirements could be broadened to include oil spill response actions.

The following key theme areas, vis-à-vis the above intention area, emerged from the gap analysis:

1. Efficient and Effective Regulator for the Upstream Industry

British Columbia has an effective single-window regulator in the B.C. Oil and Gas Commission (OGC). This is the existing model for development in B.C. and throughout Western Canada. The proposed requirements to support an additional provincial response organization would be moving away from this standard and effective model. Through the emergency and spill response regulatory requirements of the OGC, the upstream petroleum industry has an established and efficient response system. Having the upstream petroleum industry captured within a new regime represents a shift away from the existing results-based system and single-window regulator model, introducing duplicative processes and additional cost burden without improved environmental performance. It is our understanding that, to date, there have been no substantive gaps identified by the government in the current regime that warrant the inclusion of the upstream petroleum industry. Nor have any past examples of incidents brought forward demonstrated how this new system provides additional value to the preparedness and capability of spill response for the upstream petroleum industry. Similar arguments can be made for the rail and pipeline transportation industries.

2. Reporting & Disclosure

CAPP acknowledges and supports the government's objective of achieving an effective and timely response to spills. CAPP also strongly agrees with the intentions papers view that "BC's regulations should provide for a consistent, province-wide level of preparedness and response across industry sectors while avoiding unnecessary duplication among regulators". In achieving this goal CAPP believes a first rational step would be to examine spill data to determine scope, magnitude and root cause of the issue to be addressed in B.C. The second step should be a review to identify if there are existing gaps in regulations, regimes and regulators in place currently which govern the production and transportation of hydrocarbon products and hazardous materials within and across B.C. via pipeline, rail and road.

The Second Intentions Paper indicates there are 3,500 spills per year reported in British Columbia. While not cited in the paper, supplementary documents indicate that the data are from *BC's Spill Reporting Line* maintained by the *Provincial Emergency Program* as set out in the *Environmental Management Act's Spill Reporting Regulation* and reported in the weekly incidents summaries². These statistics show that total reported spills, inland and marine are, on average approximately 3,500; inland reported spills are approximately 2,600 annually³. The data includes all reported spills of all hazardous materials listed in the regulation. The data does not include volumes of individual spills. Government analysis indicates the geographic distribution of spills coincides with regions of higher population density, with the vast majority (57%) of these incidents occurring in the Lower Mainland and Vancouver Island⁴. The Peace Region, where the upstream oil and gas industry operates, accounts for 14% of reported spills, while those attributed to the oil and gas industry account for 11%. The oil and gas industry must report spills to the regulator, and as a result, the OGC and NEB have comprehensive data of actual spills which should be examined by the Ministry to inform any gap analysis the government may undertake to determine industries contribution and performance. To date, it is not evident that this work has been completed.

Intention 2: Establishment of Provincial Preparedness and Response Organization

Upon evaluation of the MoE Intention 2, the Establishment of Provincial Preparedness and Response Organization (PRO), there is one proposed regulatory standard provided that meets this intention. This is "Funding to support government costs (staff and operational activities)", where the MoE indicates the intention is "providing funding to support prevention and preparation activities regulatory agencies need to undertake – and provide capacity to be involved in major spill if required".

¹ http://www.env.gov.bc.ca/epd/codes/spr_eep/pdf/spill_response_ip_2.pdf page 4

http://embc.gov.bc.ca/em/incidents/index-2012.html

³ http://embc.gov.bc.ca/em/operations/ecc-stats/DGIR_Data_Chart_FY-13-14.pdf

⁴ http://www.env.gov.bc.ca/eemp/symposium/pdf/bc spill reports characterization.pdf

Current regulations in BC and Alberta require a licensee to develop an oil spill response plan or alternatively to belong to an oil spill cooperative. The Western Canadian Spill Services (WCSS) response organization is established as the oil spill cooperative for the petroleum industry and operates in Alberta, the western portions of Saskatchewan and the Northeastern portion of BC. WCSS is the preparedness and response organization for member companies, with equipment and resources staged within a geographic area, available for deployment if and when a spill incident occurs. Through the WCSS, spill contingency manual requirements are detailed, equipment staging and area mapping are required, responder training requirements and certifications are listed and reporting requirements with agency contact information are provided. All of these items are found within the MoE draft regulatory standards. The mandate, charter and response procedures of the WCSS are also aligned with the proposed PRO intention as detailed by the MoE within the paper. As such, it can be interpreted that the WCSS is a PRO already established within the province.

More broadly, the following key theme areas, vis-à-vis the above intention area, emerged from the gap analysis:

1. Strength of Current Regulatory Framework

The intention paper appears to presuppose the need for an industry-funded PRO prior to demonstrating the need or benefit of such an organization. The current case put forward by government has not demonstrated that there are inconsistent levels of preparedness and response across major industries nor has it been shown that there are gaps in the current matrix of regulatory regimes to rationalize the creation of an incremental industry-funded provincial preparedness and response organization.

As noted, standards and requirements for spill preparedness, response, reclamation, and reporting, for the upstream oil and gas industry are in place through existing regulation and the robust oversight by the B.C. independent oil and gas regulator, the OGC. This regulator and regime are mentioned in the Second Intentions Paper. However information provided in this regard is insufficient to adequately inform readers unfamiliar with the existing robust regulatory regime for upstream oil and gas. Similarly, the regulatory regimes for industries such as pipeline, and rail are inadequately described in the paper.

The attached regulatory review clearly demonstrates that there are several proposed regulatory standards where the OGC has robust regulations already in place. The OGC, through the *Oil and Gas Commission Act* and *Oil and Gas Activities Act*, has the responsibility to oversee oil and gas operations in B.C. including exploration, development, pipeline transportation and reclamation activities. Broadly, these are outlined in *B.C. Oil and Gas Commission Emergency Response Plan Requirements* (OGC-OD-C&E-2700). As such the upstream oil and gas industry in B.C. has comprehensive, well-regulated spill response programs in place, both corporately, through corporate emergency response planning as required by OGC regulations, and geographically, through Western Canadian Spill Services (WCSS) which is a spill co-op that has been in place since 1972.

2. Existing Response Capacity

WCSS is an industry-funded, non-profit organization that is owned and directed by its shareholders; CAPP, Energy Producers Association of Canada (EPAC), pipeline companies through Kinder Morgan Canada Inc. and Enbridge Pipelines and independent licensees of wells and pipeline. WCSS is not a response organization, as it is the WCSS member company's responsibility to ensure that they have access to both internal and external competent responders. WCSS has been providing oil spill preparedness and response support to licensees of oil wells and pipeline since 1972 when industry collaborated with regulators from Alberta and N.E. British Columbia to develop the first oil spill cooperatives. WCSS offers spill support that includes:

- Assist members with the identification of equipment for their incident.
- Assist with getting the equipment to the staging area.
- Find certified boat operators if boats are required.
- Assist with initial spill response with Coop volunteers and or WCSS staff if available.
- Provide contacts for oil spill response resources.
- Assist the responsible part with their communications program on request.

WCSS also strives for continuous improvement through their 'Field Improvement Program' which is essentially a small scale research and development program. In addition, WCSS's communications program is designed to foster relationships with other emergency response groups and promote the upstream industry's robust oil spill preparedness and response program to the general public and stakeholders. WCSS equipment is also available to non-members on a cost recovery basis. Furthermore, B.C. can draw from its natural synergies for collaboration, utilizing Alberta located resources for additional services and materials as required.

Upstream petroleum companies maintain their own comprehensive spill preparedness and response programs, and identify WCSS as an important component of their overall program. The OGC emergency response regulations require companies to have a plan in place to address a release of any liquid product onto land or water from a well, pipeline, or facility. A company that is not a member of an oil spill cooperative must either join the cooperative or submit its own spill response contingency plan and obtain separate approval from the OGC⁵. WCSS resources include: 44 specialized Oil Spill Response Units in 36 locations in each of their 18 Oil Spill Cooperatives are located in northeast British Columbia, Alberta, and Area 1 in Saskatchewan. In N.E. British Columbia WCSS maintains a regional response unit, a barge and workboat in Fort St. John and an initial spill response unit and 2 workboats in Fort Nelson. It is also important to note that WCSS maintains specialized equipment (i.e. wildlife units, air boats, winter spill response units, specialized skimmers, an air curtain incinerator, boom vanes, heavy oil equipment and boom unit) that is dispatched to wherever the membership needs that equipment. Another important note is that many of our members also maintain their own oil spill equipment. WCSS resources also include Training Programs, Continuous Improvement (R&D), Communications Programs, and WCSS Oil Spill Contingency Manuals. Suggesting these industries should fund a PRO in addition to current

⁵ https://www.bcogc.ca/node/5767/download page 34

regulatory requirements creates duplication and additional financial burden to these already regulated industries and is to some extent inconsistent with the polluter-pay principle as the upstream industry will, in effect be paying for polluters not suitably covered by regulation and regimes.

3. Consistency Across Jurisdictions

The OGC's emergency response requirements are similar in nature and intent to those of the neighboring AER and share similarities and / or are complementary to emergency response requirements under Transport Canada and Environment Canada's jurisdiction. Such similarities are beneficial when jurisdictional agencies geographically overlap, as they provide consistency in response expectations and actions thereby enabling an effective response within an area regardless of jurisdictional responsibility (i.e., a NEB regulated pipeline spill versus an OGC spill at a well site).

3. Harmonization Opportunities

The B.C. government should seek to harmonize regulation with other jurisdictions as committed to by the Western Canadian governments in the Trade, Investment, and Labour Mobility Agreement (TILMA), *The New West Partnership* and the commitment outlined in the *BC/Alberta Deputy Ministers Working Group* announced in December 2013. The working group seeks to strengthen partnerships with governments, industry, and pipeline proponents and is aimed to enable Canada to be a leader in providing energy resources to the global market. The creation of a PRO as currently envisioned in the Second Intentions Paper risks moving B.C. in a contrary direction to the aims of these agreements

Intention 3: Funding for an Enhanced Provincial Environmental Emergency Program

The MOE Intention 3 is based on a 'polluter pays for prevention, preparedness, response and recovery' methodology with the funding mechanism to be established in advance of a spill event. Reviewing the proposed regulatory standards listed by the MoE, there are four different means proposed to ensure financial coverage for government; and minimize financial impacts to potentially affected stakeholders (i.e., members of the public).

The development of trusts and funding pools is sporadically required throughout the Canadian jurisdictions included in the regulatory gap analysis table. The NEB, Transport Canada and Environment Canada have regulations in place to enable the recovery of costs incurred by government agencies for activities undertaken preparing for a spill event without a specific spill event occurring. The Alberta, Saskatchewan and the BC petroleum regulators do not have comparable provisions. Within BC is the Oil and Gas Conservation Act (Sections 52 and 54), the Petroleum and Natural Gas Act (Section 107) and the Environmental Management Act – Spill Cost Recovery Regulation Section 2, permit the recovery of costs incurred by the agencies during a spill event response and for post event follow up activities. Similar requirements are in place through Transport Canada and Environment Canada regulations. For effect that for Transport Canada and Environment Canada jurisdictional spills, cost recovery processes are in place for reimbursing

government responders for response expenses. Through these existing regulations, the polluter pays for government agency response and recovery activities, thus ensuring that the polluter does 'pay' should a spill event occur.

What is not in place currently throughout the Canadian jurisdictions listed is the development of upfront and unique spill contingency funding (line item number 21, attached) where industry contributes funding for use by first responders, First Nations, government agencies etc. to ensure a timely response to a spill. The establishment of such a fund has the potential for overlap and duplication with the funding mechanisms mentioned in line item number 23 below (funding to support prevention, preparation government costs). It may also be difficult to clearly delineate those activities to be accessed by government (of which First Nations are considered to be through the local authority designation of the OGC) and first responders through the establishment of the fund detailed in line item number 21 and those activities and operations to be accessed through the other funding type proposed standards as reflected in line item numbers 6 and 23.

More broadly, the following key theme area, vis-à-vis the above intention area, emerged from the gap analysis:

1. Polluter Pay

The Second Intentions Paper indicates "The current provincial Environmental Emergency Program requires additional capacity to meet its mandate". While this is ultimately for government to determine, the data does not support an assessment that the capacity shortfall can be attributed to the upstream oil and gas, rail or pipeline industries. The upstream oil and gas industry has robust regulations and self-funding mechanisms in place for spill prevention, preparedness, response and remediation. Furthermore, and as provided in existing regulations, the polluter pays for costs associated with spill response and recovery operations. CAPP is broadly supportive of these existing regulations and of the existing implementation framework. Similarly, the pipeline and rail industries have regulations and funding mechanisms in place for their respective industries.

Conclusion

The OGC is a regulatory regime familiar to industry with established relationships and years of effective compliance activities. Modifications to the existing applicable OGC regulatory standards, where necessary, represents the most effective, efficient and transparent regulatory oversight process on a go-forward basis. WCSS is in place for land based oil spill response actions as required by regulation and the scope of WCSS obviates the need to establish a provincial preparedness response organization.

⁶ http://www.env.gov.bc.ca/epd/codes/spr_eep/pdf/spill_response_ip_2.pdf page 3

Table 1: Summary of CAPP Recommendations/Comments on Regulatory Gap Review

	British Columbia (BC) Ministry of Environment Regulatory Standard	Recommendations/ Comments for Consideration
#	Presently exists= Black Proposed = Blue	
BC	Minister of Environment (MoE)	Policy Intention #1: Spill Preparedness, Response and Restoration Standards
1	Spill reporting	CAPP respectfully recommends maintaining the current notification and spill reporting procedures required under the OGC's jurisdiction.
2	Ongoing spill response action report (requirement for RP to report on an	CAPP respectfully recommends maintaining the current notification and spill reporting procedures required under the OGC's jurisdiction (as noted within the above line item).
	ongoing basis for spill response	Continuing forward, using the current spill reporting procedures would enable cross-jurisdictional continuity as well as eliminating duplication, jurisdictional overlap, and potential conflicting requirements between the OGC and MoE.
3	Spill Response Closure report (requires RP to provide a full report of action taken and completed in response to a spill)	CAPP is of the position that modifying the current regulatory requirement is more effective and would avoid duplication of requirements and regulatory oversight. As such, it is recommended that, if deemed necessary, Section 4.8 of the OGC's ERP Requirements document be modified to state something similar to the below:
		"Within 30 days of the end of a Level 1, 2, or 3 incident, a licensee must file with the OGC an operator incident summary report structured as outlined in Appendix 3."
4	Incident response debriefs (requires the RP to undertake a debriefing of spill responses of a specified level)	This activity is standard operating procedure (SOP) following any incident or upset activity. For the development of an effective and robust post-incident report to be developed, an after-incident debrief session should be conducted with participants of the incident.
		As such, it is believed that, with the suggested modification provided towards line item # 3, this pending requirement will be satisfactorily addressed and undertaken by the Responsible Party.
5	Internal reporting of near misses,	It is recommended that no new regulation towards this issue be developed. It is standard operating procedure, prior to communicating and providing external notification, to first
3	hazards and spills (requires the RP	notify the appropriate persons internally within the company.
	to report to regulatory agencies any near misses or hazards) ⁷	It is our recommendation that no new regulatory requirements are needed to address this pending MoE regulatory standard. With the OGC's reporting oversight for all Minor, Level 1, 2, and 3 incidents as well as industry SOP on internal communication strategies prior to any external communication, this issue has been addressed to the most effective and efficient result practicable.
7	Emergency Management Program or system (company specific)	Recommend that current state and status quo as detailed within the Oil and Gas Activities Act, Section
	ar system (company specyco)	4 and Section 7 are sufficient for overseeing the pending regulatory standard for Emergency
		Management systems.
8	Continuous improvement (requirement to ensure companies	Continuous improvement is a vital component of ERP maintenance additional to Emergency Management program development.
	pursue continuous improvement)	As such, through the current regulatory requirement for having an Emergency Management program (Oil and Gas Activities Act, Sections 4 and 7(3)), and the ERP/WCSS manual updating requirements, it is the opinion that this pending regulatory standard is currently adequately addressed, and new requirements surrounding this issue represent duplication of regulation.
9	Emergency response plans (specific plans as to how an RP would	It is recommended that no further regulatory development is needed and that the current OGC requirements for ERP development, combined with the WCSS manual content guidelines, adequately

The Canadian Association of Petroleum Producers (CAPP) notes that there are discrepancies within this line item. This line item indicates that the Responsible Party (RP) is required to report to regulatory agencies any near misses or hazards. As the RP is going outside of its internal organization, this type of communication is 'external' in nature and not 'internal' as stated within this line item.

	respond to a spill)	address how a Responsible Party would respond to an incident/spill.
10		
10	Geographic response plans (specific plans that are geographically limited to relatively small areas that identify resources/infrastructure at risk, specific strategies to protect "at risk" resources, control points,	Currently, participation in a spill cooperative is required through the OGC's ERP Regulation Section 7.1. The WCSS is an established spill cooperative currently operating within NorthEast BC, of which the majority of industry is a member. The WCSS' current oil spill contingency manuals are geographically based with geographically specific information.
	access points to lakes/rivers, etc.)8	As such, it is recommended that no further requirements are needed to be developed in order to address the pending issue noted by the MoE.
		Should additional content be required for clarification, it is recommended that a definition be developed and incorporated within the OGC ERP Requirement document as well as the WCSS manual defining what a geographic response plan is.
11	Environmental sensitivity classification (process for classifying environmental sensitivity to ensure	It is recommended that the applicable government ministry undertake this responsibility to develop environmental sensitivity criteria. This would enable uniform application of the criteria for all industry sectors.
	all areas are classified using a consistent process)	With the applicable government department undertaking criteria development, it eliminates divergent methodologies used by individual companies and reduces external challenges to the criteria used and any resulting actions taken regarding that sensitivity classification. In essence, it will 'level the playing field' for industry sector participants.
12	Base map specifications (requirement for RPs to use a	It is recommended that a list of mapping requirements necessary for a 'Geographic Response Plan' be developed and compared against the OGC's current ERP Requirements (Section 4.4).
	specific base map for geographic plans/sensitivity mapping)	Should any additional mapping requirements for a Geographic Response Plan be identified, then the current ERP Requirements Section 4.4 should be modified with those items, thereby establishing one standard for response plan mapping.
13	Local Area Engagement and Consultation (specifications that outline who is to be engaged and consulted for the preparation of response plans, response, etc.)	The OGC currently has effective and rigorous consultation requirements towards stakeholders that may be impacted by petroleum developments. No new requirements on this issue to be overseen by the MoE are required.
15	Incident Command System protocols (regulation that requires the use of the Incident Command System for spill response)	Clarification is required pertaining to the extent of ICS compliance (e.g., response position naming convention) required by the MoE. It is further noted that the Canadian jurisdictions reviewed throughout this analysis do not currently mandate the use of ICS. The AER and Transport Canada currently highlight the benefits of ICS and/or
		strongly recommend the use of ICS, but do not mandate its implementation. It is recommended that wording similar to that of the AER and/or Transport Canada be adopted by BC towards incident response and not 'mandate' its adoption.
16	Responder training certification (requirements that specify the level of training required for responders based upon "position specific" roles and tasks)	No further requirements are needed other than those current requirements overseen by the OGC, CSA Z 731, Section 6.1, and the WCSS to maintain membership in good standing certification.
17	Frequency and scope of training/exercises (requirements that specify how frequently and the scope of training and exercising	No further requirements are needed other than those current requirements overseen by the OGC, CSA Z 731, Section 6.1, and the WCSS to maintain membership in good standing.
19	Regular updating of plans (requirement that specifies how often emergency response plans are to be updated, and/or submitted to the regulatory agency)	The current ERP updating requirements specify 'sour' operations and reference the EPZ distance for the extent to which a licensee is to provide updated information. Modifications of this language are recommended to make response plan updates applicable to spill response plans. Potential wording for consideration include:

⁸ As per Page 15 of the Second Intentions Paper, "Functions of the PRO could include: development of geographic response plans"

surface developments and conditions that would impact emergency response activities. Such changes as the creation of a new view channel from Boding events, installation of a new callading activities are to occur immediately and he evaluated against impacting the company's response procedures. Upon determination that the ERP requirements and and annual resources recovery (peptic) process or requirements outlined in regulation per resource (peptic) process or requirements outlined in regulation and withlife populations impacted by a spill) 24. Standards/elements to be addressed in an emergency response plan or good to the control of the control			"ERPs are to be continuously evaluated, and modifications made when applicable, to reflect changes in
The assessment of potentially impacted ecosystems, the service that these ecocystems provide, and the impact of specific process or requirements outlined in regulation for restoring habitat and fish and wildlife populations impacted by a spill) Standards/elements to be addressed in an emergency regione plan or geographic response plan or requirements to be addressed in an emergency regione plan or geographic response plan required by regulation 25 Altis assessment (requirement for industry to undertake a risk assessment of the hazards they present to the public, environment, and employees) 26 Altis assessment and the hazards they present to the public, environment, and employees in the proper plan or geographic response equipment and caches (requirements plan to geographic response equipment and caches (requirements plan to geographic response equipment and caches (requirements for the amount, type and location of equipment to be located in accordance with the risk assessment of the operation) 27 Spill response equipment and caches (requirements for the amount, type and location of equipment to be located in accordance with the risk assessment of the operation) 28 Protection strategies (specific strategies in which the RP would engage are currently required which the RP would engage are currently required which the RP would engage are currently required which the licensee's period accordance with the risk assessment of the operation) 29 Stoping strategies			as the creation of a new river channel from flooding events, installation of a new pipeline/well, or new surface developments within the developments zone of impact (also known as response zone, EPZ) are to be evaluated against impacting the company's response procedures. Upon determination that the ERP requires updating to reflect the new circumstances, updating activities are to occur immediately
Standards/elements to be addressed in an emergency response plan or geographic response plan required by regulation Moss of the plan of the provided in an emergency response plan or geographic response plan required by regulation The current OGC ERP requirements are stringent and robust. Combined with the requirements of the MocSS spill Contingency Manuals, no further modification or new creation of regulation on this issue is required. The current OGC ERP requirements are stringent and robust. Combined with the requirements are strongent and robust. Combined with the requirements are stringent and robust. Combined with the requirements of the works of the commended of the requirement and response or new commended to the requirement of the commended or required through ERP Requirement Section 7.5 to determine its higher risk facilities (such as pipelines, facilities, and wells in proximity to water bodies) and evaluate the risks to determine appropriate response actions and equipment needs. It is recommended that the current OGC regulation be modified to expand the listed facilities that may be considered high risk. Also, modifications to the current requirement are a high risk." "The licensee or provide details of its risk determination and assessment process upon OGC request." "The licensee is required to provide all supporting documentation detailing its process for the determination of "higher risk facilities" to the OGC upon request." The Oil and Gas Activities Act, Section 37(2) details the response requirements with which licensees are commended that no regulation is sufficient to ensure an effective response. The Oil and Gas Activities Act, Section 37(2) details the response requirements with which licensees or own spill contingency plan belonging to a spill cooperative w	20	environmental and natural resources recovery (specific process or requirements outlined in regulation for restoring habitat and fish and wildlife populations impacted by a	impacts caused by oil and hazardous substances is complex and often requires years. Seasonal influences, specifics on the oil or hazardous substances spilled including the amount and duration of the release, are all among the factors that impact how quickly resources are assessed, restored, and recovered. Given the environmental diversity within BC, providing specific universal environmental endpoints or
25 Rik assessment (requirement for industry to undertake a risk assessment of the hazards they present to the public, environment, and employees) 26 In the assessment of the hazards they present to the public, environment, and employees) 27 All assessment of the hazards they present to the public, environment, and employees) 28 Minimum spill response times (requirement for industry to undertake a risk assessment of the hazards they present to the public, environment, and employees) 29 Minimum spill response times (requirements that outline the minimum time required for an RP to have staff on site to address a spill) 29 Spill response equipment and caches (requirements for the operation) 29 Staging strategies (specific strategies in well to the staged in geographic areas for spill response eaunised) 29 Staging strategies (requirements that any pacify how equipment is to be staged in geographic areas for spill response taging strategies and pocations of the operation) 29 Staging strategies (requirements that specify how equipment is to be staged in geographic areas for spill response taging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at sits due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at sits due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) infrastructure at risk due to a spill) 29 Staging strategies (requirements that paced to protect resources) in			As such, should the MoE indicate that new regulation for this draft regulatory standard is required; it is
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be considered high risk. Also, modifications to the current requirement are recommended to require the licensee to provide details of its risk determination and assessment process upon OGC request. Potential suggested wording includes: "- or any other petroleum infrastructure that the licensee has determined operates at a high risk." "The licensee is required to provide all supporting documentation detailing its process for the determination of 'higher risk facilities' to the OGC upon request." It is recommended that no regulations are developed detailing specific response times. (requirements that outline the minimum time required for an RP to have staff on site to address a spill) The Oil and Gas Activities Act, Section 37(2) details the response requirements with which licensees are to comply. This regulation is sufficient to ensure an effective response. The Current ERP Requirements Section 7.2 regulation requires [in the absence of developing a licensee's soms spill contingency plan] belonging to a spill cooperative where the spill response contingency plan details (among other items) the inventory and location of response equipment. The placement and type of spill response equipment available is not only a function of the potential spill sources, but also of existing infrastructure and environs that allow for the secure storage and accessibility to the equipment and resources. Therefore, mandating specific locations and equipment may not address the site-specific needs during an incident response. The specific strategies in which the RP would engage are currently required within the licensee's ERP as well as the WCSS's spill contingency manual as are the responsibilities of the Staging Area Manager for such emergency manual as are the responsibilities of the Staging Area Manager for such emergency manual content and responsibilities of the Staging strategies and procedures are provided within the WCSS spill contingency manual as are the responsibilities of the Staging Area Manager for such emergency	25	industry to undertake a risk assessment of the hazards they present to the public, environment,	facilities (such as pipelines, facilities, and wells in proximity to water bodies) and evaluate the risks to determine appropriate response actions and equipment needs.
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It is recommended that no further regulations be developed or current regulations modified to address this line item. Further regulation on this issue could create redundancy and jurisdictional overlap. 29	28	strategies an RP will put into place	
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spill contingency manual content and responder roles and responsibilities (in addition to the current	29	specify how equipment is to be staged in geographic areas for spill	contingency manual as are the responsibilities of the Staging Area Manager (or such emergency management response position). Through the development of roles and responsibilities for the spill
			spill contingency manual content and responder roles and responsibilities (in addition to the current

30	Environmental sampling/monitoring	CAPP is not opposed to the development of standard sampling procedures as long as the procedures are
	strategies (requirements that specify what is to be included in a plan to	goal-based and not site-specific in nature. Such standards would be applicable to all industry sectors, thus creating a 'level playing field' for all stakeholders who have an interest in land in BC.
	prepare for environmental monitoring, e.g. environmental consultant to be retained, sampling/monitoring plan to be activated)	CAPP does not agree with government dictating which consultant is to be retained by the Responsible Party. That is an internal business decision for which companies have internal procedures and policies that are outside the MoE's jurisdiction.
31	Staff resources/capacity to address most probable and probable worst- case emergencies (requirement for plan to outline the staff and resources to be deployed to address the most probable and probable worst-case emergencies)	This draft regulatory standard is currently addressed within the listed adjacent OGC requirements. No further modification or development of new regulations is required.
32	General response tactics/strategies (criteria that specify general response tactics to be included in a plan)	No further development of new requirements or modifications of existing requirements is required, as the current OGC requirements for emergency response plan content, and the WCSS spill contingency plan content is sufficient to address this proposed regulatory standard.
33	Spill response communication technology (criteria to be addressed within a plan that outlines the specific technology to be used to allow responders to communicate)	It is our opinion that no further modification or development of new regulation is required for this draft MoE regulatory standard. The current OGC communication plan requirements are expansive and address communication technology without prescribing a specific technology which may not be practicable within a specific area or align with a company's existing communication hardware.
34	Agency and public information communication strategies during a spill (criteria to be addressed in a response plan that outline how the RP will provide information to the public and government during a spill)	It is our opinion that no further modification or development of new regulation is required for this draft MoE regulatory standard. The current communication plan requirements required by the OGC are expansive and capture the MoE's objective of this draft regulatory standard.
35	Environmental sampling (Air, soil and water sampling) – (plan criteria that addresses how the RP will undertake environmental sampling during and after a spill)	It is recognized that, within the OGC's 2013 Restoration Verification Audit Program Procedure Manual, sampling intensities for specific site assessment categories are listed. Additionally, within Schedule B - Site Reclamation Requirements, sampling procedures are detailed for surface leases and pipelines.
	auring and after a sput)	As there are sampling procedures already developed for a variety of petroleum developments, it is recommended that these procedures be modified to apply to spill events.
		Development of environmental sampling procedures, such as those detailed by the MoE's draft regulatory standard in line item #30, is similar in scope and intent to this item, and thus could represent duplication of regulation. While CAPP is not opposed to the development of standard sampling procedures, as long as the procedures are goal-based and not site-specific in nature, it is our position that how the Responsible Party would undertake environmental sampling during and after a spill would be addressed through complying with line item #30.
36	Spill modeling capability/capacity (air, water, and soil) – (plan criteria	It is recommended that the OGC develop a guidance document similar to the current Guidelines for Air Quality Dispersion Modelling in British Columbia, for water and soil dispersion.
	to require the RP to outline how they will undertake spill modeling – how will it be done, who will be engaged to do the modeling)	Such a document developed by the OGC would ensure that all licensees are operating under the same guidance document and that a consistent methodology and review procedures are applied to any data provided to the Commission should it be requested.
		Additionally, the development of any plan to address line item #30's intent would detail the Responsible Party's spill modeling approach and procedures.
		CAPP does not agree with government dictating which consultant is to be retained by the Responsible Party. That is an internal business decision for which companies have internal procedures and policies that are outside the MoE's jurisdiction.
37	Injured wildlife reporting (plan	It is noted that no other studied jurisdiction has such a requirement within Canada.
	requirements for outlining how	

	reports of injured wildlife will be received and addressed, e.g. 1-800 reporting line)	Injured wildlife would be reported through the incidents emergency management structure (e.g., ICS) where the appropriate Division or Strike Team (or equivalent) would report injured wildlife and take appropriate response actions.					
		Communication with applicable external agencies would occur via the Liaison Office (or equivalent).					
		Communication from stakeholders regarding oiled wildlife would occur as per the public information package through the 24-hour emergency number provided to the public and available on the Responsible Parties website.					
38	Wildlife Management (hazing, etc.) – (Plan criteria requiring the RP to outline what measures will be taken during a spill to prevent wildlife from being impacted, and to address wildlife that has been impacted by a spill)	Details of wildlife management strategies are provided within the WCSS spill contingency manual as are the responsibilities of the Wildlife Manager (or such emergency management response position equivalent). Through the development of roles and responsibilities for the spill response team, wildlife management measures would be ready for implementation. Therefore, it is recommended that no further requirements are needed for this issue.					
40	Waste Management plan/protocols (plan criteria to be met that outline how wastes from a spill will be managed, e.g. contaminated spill booms)	All oily and other wastes are required to be disposed of at an approved waste management facility ranked to accept the waste generated by the spill. As requirements already exist pertaining to this, no further regulatory standard development is required.					
41	Evacuation procedures (criteria for evacuation)	It is recommended that the evacuation procedures currently required and detailed within licensee's ERPs are applicable to those stakeholders impacted by a spill.					
		No modification of current or development of new requirements is needed.					
42	Clean up assessments (e.g. Shoreline Cleanup Assessments) – (plan	It is recommended that reference to the licensee having the capability and expertise to develop such a plan immediately following the identification of a spill be developed.					
	criteria to outline how assessments will be undertaken to determine how to clean impacted areas, and what are the end points for cleaning)	The recommendation is not to specify what should be included within such a response action plan of the development of such a plan prior to operations, but the recognition that licensees are to have such an action plan in place immediately following the detection of a spill.					
43	Environmental damage assessments (criteria as to how damage to the	Requirements for remediation and reclamation for surface leases and pipelines are currently detailed within the Environmental Management and Reclamation – Schedule B, documentation.					
	environment is to be assessed, and how post treatment assessments will be conducted)	As an alternative to developing new regulation towards this issue, it is recommended that the procedures and requirements stated in this document be expanded to include off lease and off right-of-way oil spills.					
ВС	MoE Policy Intention #2: Es	tablishment of a Provincial Preparedness and Response Organization					
14	Response Organization certification (certification process to qualify a	Current regulations in BC and Alberta require a licensee to either develop its own oil spill response plan or belong to an oil spill cooperative.					
	"response organization" involved in spill response)	Throughout Alberta, the western portions of Saskatchewan, and the Northeastern portion of BC, the WCSS response organization is established as the oil spill cooperative for the petroleum industry.					
		The mandate, vision, and response procedures of this organization are aligned with the proposed Provincial Preparedness and Response Organization (PRO) intention detailed by the MoE.					
		It is recommended that the WCSS be recognized by the MoE as a PRO, capable of meeting the MoE's intent for the PRO. It is further recommended that the same jurisdictional acknowledgement afforded to the Western Canadian Marine Response Corporation (WCMRC) is applied to the WCSS.					
23	Funding to support government costs (staff and operational activities) – this is related to providing funding to	Current regulatory provisions are in place through the Environmental Management Act (EMA) Spill Cost Recovery Regulation, Section 2. This regulation permits the recovery of governmental costs associated with response and post-incident/ recovery activities.					
	support "prevention and preparation activities" that regulatory agencies need to undertake – and provide capacity to be involved in major spill	Through this and other noted regulations (Oil and Gas Conservation Act, sections 52 and 54, the Petroleum and Natural Gas Act), mechanisms are in place for government to recover a wide spectrum of costs associated with overseeing spill response and related activities.					
	responses if required	It is recommended that no further modification of current or development of new regulations towards this issue occur.					
6	Spill Cost Recovery (provides agency to recover their costs from the RP related to responding to a	Current regulatory provisions are in place through the Environmental Management Act (EMA) Spill Cost Recovery Regulation, Section 2. This regulation permits the recovery of governmental costs					

	spill)	associated with response and post-incident/ recovery activities.					
		Through this and other noted regulations (Oil and Gas Conservation Act, sections 52 and 54, the Petroleum and Natural Gas Act), mechanisms are in place for government to recover a wide spectrum of costs associated with overseeing spill response and related activities.					
		It is recommended that no further modification of current or development of new regulations towards this issue occur.					
21	Spill contingency funding (Requirements for industry to contribute to a contingency fund that	Such funding is not required by other jurisdictions in Canada, as demonstrated within this comparison chart. As such, it is recommended that no new regulation development occurs requiring the establishment of					
	is accessible by first responders, including municipal, First Nation, provincial and federal government to ensure a timely response to a spill)	such a fund.					
22	Cost recovery for loss of public use of the environment due to a spill	It is recommended that no modification of current or development of new regulations towards this issue occur.					
	(requirements to recover compensation from a RP due to the public use of the environment or natural resources being impacted by a spill, e.g. sport fishery impacted due to fish kill. This is not to address 3 rd party damages, which are addressed through specific damage claim processes)	Licensees are required to have in place security/performance bonds and financial guarantees prior to operating in an area. These bonds act as a guarantee that the licensee will comply with any statute, law, municipal by-law, or regulation that is applicable to its operations and are available for use by the government instead of placing the responsibility of paying for remediation and other activities with taxpayer dollars.					
39	Damage claims process (3 rd party claims process)	Licensees are required to have securities and insurance in place prior to commencement of operations. Any third-party claims are paid through such financial means, and additional third-party liability funds are not required.					
Othe	er						
18	Training and exercise records management (requirements that specify how records are to be managed, e.g. length of time to retain records)	Upon comparison of the various jurisdictions record retention policies, a slight discrepancy exists between emergency response plans and spill plan response documentation. In order to provide consistency in application across jurisdictions listed, it is recommended that a 3-year (minimum) record retention requirement be detailed within the OGC's regulations.					

Note: This document serves as a starting point to illustrate the regulatory standards that exist within agencies across Canada as well as the leading U.S. regulatory pipeline transportation oversight agency. Documents reviewed for this gap analysis are listed in Appendix 1.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
BC Minis	ter of Environment (Mo	E) Policy Intention #1: S	pill Preparedness, Respo	nse and Restoration St	andards (all the line items	noted below are applicable to	Intention #1)		
1	Spill reporting	Onshore Pipeline Regulations (OPR), Section 51(1): A company shall immediately notify the Board of any incident relating to the construction, operation or abandonment of its pipeline and shall submit a preliminary and detailed incident	B.C. Oil and Gas Conservation Act (OGCA), Section 37(1)(b): A permit holder and a person carrying out an oil and gas activity must promptly report to the commission any damage or malfunction likely to cause spillage that could be a risk to public safety or the environment. Online Minor Incident Reporting System User	Pipeline Act, Section 35(1): When a leak or break occurs in a pipeline, the licensee shall immediately cause the Regulator to be informed of the location of the leak or break. Pipeline Act, Section 35(5): When a pipeline that is transmitting oil breaks on Crown land or in a forested area, the licensee shall immediately report the location of the break and the approximate quantity of oil that has escaped, to an employee or officer of the Government designated by the Minister responsible for the Public Lands Act. Environmental Protection and Enhancement Act (EPEA), Section 110: A person who releases or causes or permits the release of a substance into the environment that may cause, is causing or has caused an adverse effect shall, as soon as that person knows or ought to know of the release, report it to:	Environmental Management and Protection Act (2002) (EMPA), Section 5(1): A person who discharges or allows the discharge of a substance into the environment that may cause, is causing or has caused an adverse effect shall, as soon as that person knows or ought to know of the discharge, report it to: a) The Minister b) If the person reporting is not the owner of the land on which the discharge occurred and knows or is readily able to ascertain the identity of the owner, the owner of the land c) Any other person whom the person	Transportation of Dangerous Goods (TDG) Regulations Part 8, Section 8.1: In the event of an accidental release of dangerous goods from a means of containment, a person who has possession of the dangerous goods at the time of the accidental release must make an immediate report of the accidental release to the [applicable persons] if the accidental release consists of a quantity of dangerous goods or an emission of radiation that is greater than the quantity of emission level listed [in this section]. TDG Act, Section 18(1): Any person who has the charge, management or control of a means of containment shall report to every person prescribed for the purposes of this subsection any actual or anticipated release of dangerous good that is or could be in excess of a quantity or concentration specified by regulation from the means of containment if the release endangers, or could endanger, public	Canadian Environmental Protection Act (CEPA) Part 5, Section 95(1): Where there occurs or is a likelihood of a release into the environment of a substance specified on the List of Toxic Substances in Schedule 1 in contravention of a regulation any person shall as soon as possible in the circumstances: a) notify an enforcement officer or any other person designated pursuant to the regulations and provide a written report on the matter to the enforcement officer or other person b) Take all reasonable measures consistent with the protection of the environment and public safety to prevent the release or, if it cannot be prevented, to remedy any dangerous condition or reduce or mitigate any danger to the environment or to human life or health that results from the release of the substance or may reasonably be expected to result if the substance is released c) Make a reasonable effort to notify any member of the public	Title 49 of Code of Federal Regulations (CFR), Section 195.52(a): At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in §195.50, the operator of the system must give notice, in accordance with paragraph (b) of this section, of any failure that: 1) Caused a death or a personal injury requiring hospitalization 2) Resulted in either a fire or explosion not intentionally set by the operator 3) Caused estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000 4) Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines	CAPP respectfully recommends maintaining the current notification and spill reporting procedures required under the OGC's jurisdiction.
				a) The Director	e) Any other person		who may be adversely	5) In the judgment of the	

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
	Standard				Saskatchewan Energy			Emergency Response	
Line			(pending implementation		and Resources	Transport Canada		Requirements	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy		Regulatory Standard		<u>-</u>	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
				b) The owner of the	who the person		affected by the release	operator was significant	
				substance, where	reporting knows or		or likely release	even though it did not	
				the person reporting	ought to know may		CEPA, Part 5, Section	meet the criteria of any	
				knows or is readily	be directly affected		95(3):	other paragraph of this	
				able to ascertain the	by the discharge		` ´	section	
				identity of the owner	Pipeline Regulations,		Where there occurs a		
				c) Any person to whom	Section 20(1):		release of a substance, any		
				the berson reporting			person whose property is		
				reports in an	Every operator shall		affected by the release and		
				employment	immediately notify the		who knows that it is a		
				relationship	department, by the most		substance specified on the		
				d) The person having	expeditious method, of		List of Toxic Substances in		
				control of the	the occurrence of any of		Schedule 1 shall, as soon		
				substance, where	the following:		as possible in the		
				the person reporting	a) A fire		circumstances, report the		
				is not the person	b) A break, leak,		matter to an enforcement officer or to any person that		
				having control of the	malfunction of any		is designated by regulation.		
				substance and	equipment or a				
				knows or is readily	worker error that		CEPA, Part 8, Section 201:		
				able to ascertain the	results in the escape		When an environmental		
				identity of the	or release of oil,		emergency occurs for any		
				person having	saltwater,		substance listed on the List		
				control	condensate or other		of Toxic Substances,		
				e) Any other person	product ¹		Schedule 1, any person or		
				who the person	Saskatchewan		group of persons who owns		
				reporting knows or	Upstream Oil and Gas		or has the charge,		
				ought to know may	Industry Spill and		management or control of		
				be directly affected	Incident Reporting		the substance immediately		
				by the release	Guidelines (GL2011-01),		before the emergency		
				EPEA, Section 111(1):	Section 4.1:		shall, as soon as possible		
				A person who is	The following criteria are		under the circumstances,		
				required to report to the			notify an enforcement		
					spill requires immediate		officer or any other person designated pursuant to the		
				person, by telephone or			regulations.		
				by electronic means			•		
				and shall include the	For oil, saltwater,		Environmental Emergency		
				following in the report,	condensate, oil and		Regulations (E2), Section		
				where the information	gas waste or other		9(1):		
				is known or can be	product release,		When an environmental		
				readily obtained by that	immediate notification		emergency occurs in		
				person:	is required when:		respect of a substance set		
				a) The location and	The released volume		out in column 1 of		
				time of the release	is equal to or greater		Schedule 1, the person		
					than 2.0 m ³ or		who is designated to be		

Pipeline Regulation Section 20(3): An operator is not required to notify the department when the volume of oil, salt water, condensate or other product that escapes or is released is less than 1.6 m³ and is contained on property that the operator owns or leases.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
				b) A description of the circumstances leading up to the release c) The type and quantity of the substance released d) The details of any action taken and proposed to be taken at the release site e) A description of the location of the release and the immediately surrounding area In addition to a report, the person shall report in writing where required by the regulations. Directive 071, Section 11.1.1(4): The licensee must contact the AER immediately after it has communicated and activated internal response resources to confirm the level of emergency and convey the specifics of the incident. Directive 071, Appendix 9 – First Call Communication Form	The release is not contained on-lease, including releases that occur while the substance is being transported by a vehicle transported by a vehicle		provided with a written report is the Regional Director of the Environmental Enforcement Division of the Enforcement Branch of the Department of the Environment in the region where the environmental emergency occurs. Fisheries Act, Section 38(5): If there occurs a deposit of a deleterious substance in water frequented by fish that is not authorized under this Act, then every person shall without delay notify an inspector, a fishery officer or an authority prescribed by the regulations if the person at any material time a) owns or has the charge, management or control of i. the deleterious substance, or ii. the work, undertaking or activity that resulted in the deposit or the danger of the deposit b) causes or contributes to the occurrence or the danger of the occurrence		
2	Ongoing spill response action report (requirement for RP to report on an ongoing basis for spill response	OPR, Section 52: After notification of an incident, an inspection officer may partially or completely relieve a company from the requirement to submit a	Not Currently Required	Not Currently Addressed	Not Currently Addressed	Not Currently Addressed	Not Currently Addressed	49 CFR 195.52(d): An operator must provide an additional telephonic report to the NRC [National Response Centre] if significant new information becomes available during	CAPP respectfully recommends maintaining the current notification and spill reporting procedures required under the OGC's jurisdiction (as

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard preliminary and detailed incident report. OPR, Section 52 Guidance Document: As soon as practicable after becoming aware of an incident (typically within 1 hour), a company should communicate all available factual information to the Transportation Safety Board. ²	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)		Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW- the emergency response phase of a reported event at the earliest practicable moment after such additional information becomes known.	Recommendations/ Comments for Consideration noted within the above line item). Continuing forward, using the current spill reporting procedures would enable crossjurisdictional continuity as well as eliminating duplication, jurisdictional overlap, and potential conflicting requirements between the OGC and MoE.
3	Spill Response Closure report (requires RP to provide a full report of action taken and completed in response to a spill)	detailed analysis of the failed component (if necessary), b) identify the underlying causes and contributing factors of the incident, c) update the progress of any corrective actions taken or planned to be taken to minimize the effects of the incident, d) state any actions taken or planned to be taken to prevent a	OGC Emergency Response Plan Requirements (November 2004) (ERP Requirements), Appendix 3 – Operator Incident Summary ERP Requirements, Section 4.8: Within 30 days of the end of a Level 2 or Level 3 incident, a licensee must file with the OGC an operator incident summary report structured as outlined in Appendix 3. Oil and Gas Activities Act (effective October 1, 2014), Section 14: (1) A permit holder must evaluate the response to an emergency as soon as circumstances permit (2) A report of the results of an	recording: Incident Records: information gathered during and following an incident: these records provide documentation to be used for assessment, historical, and analytical purposes The licensee is	submitted to the appropriate regional office that includes: • Date, time and exact location (provided by legal subdivision, section, township and range, and latitude and longitude [NAD83]) where the incident occurred • An estimate of the initial volume of oil, saltwater,	'dangerous goods accident' or a 'dangerous goods incident,' a follow-up report must be made by the employer of the person who had possession of the dangerous goods at the time of the accidental release. TDG Act, Part 8, Section 8.2(2): The follow-up report must be made, in writing, to the Director General within 30 days after the occurrence of the accidental release. The follow-up report must include the following	 a) The name, civic address and telephone number of the person who owns or has the charge, management or control of the substance released b) The date, time and location of the release c) The mane and CAS registry number of the substance released d) The quantity of the substance released or, if the quantity cannot be determined, an estimate of it e) The identification of the container from which the substance was released and a description of its 	paragraph (a) of this section must be made to the National Response Center (NRC) either by telephone or electronically and must include the following information: 1) Name, address and identification number of the operator 2) Name and telephone number of the reporter 3) The location of the failure 4) The time of the failure 5) The fatalities and personal injuries, if any 6) Initial estimate of	CAPP is of the position that modifying the current regulatory requirement is more effective and would avoid duplication of requirements and regulatory oversight. As such, it is recommended that, if deemed necessary, Section 4.8 of the OGC's ERP Requirements document be modified to state something similar to the below: "Within 30 days of the end of a Level 1, 2, or 3 incident, a licensee must file with the OGC an operator incident summary report structured as outlined in Appendix 3."

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The Transportation Safety Board (TSB) Occurrence Hotline will forward all notifications and reports to the NEB.

GL2011-01 Section 5 contains a table listing various incident types and the corresponding immediate oral reporting, written follow-up reporting and reclamation reporting requirements.

			British Columbia Oil		-	Ī		I		
			and Gas Commission						Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory						Material Safety	
	(BC) Regulatory		Standard						Administration (PHMSA)-	
1	Standard				Saskatchewan Energy				Emergency Response	
Line		National Energy Board	(pending implementation	Albarta Enargy	and Resources		Transport Canada		Requirements	Recommendations/ Comments for
Item Number	Presently exists= Black Proposed = Blue	(NEB) Regulatory Standard	of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	-NEW-	"	Regulatory Standard (non-marine)	Environment Canada	-NEW-	Consideration
Number	1 Toposed = Dide	Otandard	evaluation under	Regulator (ALIV)			including the area code,	description of potential	extent of the damages	Oonsideration
			subsection (1) must		 A description of the circumstances 		at which that person	negative effects on the	ı	
			be prepared and		leading to the event		may be contacted	environment or on	49 CFR 195.54(b):	
			maintained until the		, and the second		The date, time and	human life or health	Whenever an operator	
			permit for the oil and		A discussion of the containment and		location of the	g) A description of the	receives any changes in the	
			gas activity that is		recovery procedures		accidental release	circumstances and of	information reported or	
			the subject of the		respecting the event		The name and address	the cause of the	additions to the original	
			plan is cancelled or		A discussion of	- /	of the place of business	release, if known and	report on DOT Form 7000-1,	
			is declared to be		steps to be taken to		of the consignor	or the infoacarde tartern	it shall file a supplemental	
			spent.		prevent similar		The classification of the	to mitigate any	report within 30 days.	
					future events; and	,	dangerous goods	negative effects on the		
					any other		The estimated quantity	environment or on		
					information that the	,	of dangerous goods	human life or health		
					ER [emergency		released and the total	h) The identification of all		
					response]		quantity of dangerous	persons and agencies that were notified as a		
					representatives		goods in the means of	result of the release		
					request		containment before the			
					Pipeline Regulations,		accidental release	i) All measures taken or planned to be taken to		
					Section 21(1):		A description of the	prevent similar		
					Every operator shall,		means of containment	releases		
					within 30 days after		involved based on the			
					notifying the department		identification markings	Fisheries Act, Section 38		
					submit a written report to		and a description of the failure or damage to the	(7):		
					the department		means of containment,	As soon as feasible after		
					containing:			the occurrence or after learning of the danger of		
					a) The date and time		or damage occurred	the occurrence, the person		
					and exact location	a)	For an accidental	shall provide an inspector,		
					where the incident	<i>\(\tau_{1}\)</i>		fishery officer or an		
					occurred		that has suffered a	authority prescribed by the		
					b) The action taken by		catastrophic failure, the	regulations with a written		
					the operating		certification safety	report on the occurrence or		
					personnel, including			danger of the occurrence		
					details of any remedial clean-up		of the failure			
					steps taken, in	,	The number of deaths			
					progress or		and injuries resulting			
					proposed		An estimate of the			
					c) The human injuries		number of people			
					or fatalities		evacuated from private residences, public area			
					d) A description of any		or public buildings			
							If an emergency			
					damage		response assistance			
					e) A description of the		plan was activated, the			
					quantities of		name of the person who			
					substances spilled,		responded to the			

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
					lost or burnt and a further estimate of any subsequent recovery f) A description of the cause of the incident, including any related technical report g) A description of the preventative action the operator intends to take to prevent a similar future occurrence Pipeline Regulations, Section 21(3): Every six months an operator shall submit, for the previous six-month period, a written summary report to the department respecting every incident involving a pipeline rupture, break or leaks for which the department was not required to be immediately notified.	emergency in accordance with the emergency response assistance plan			
4	Incident response debriefs (requires the RP to undertake a debriefing of spill responses of a specified level)	OPR, Section 32(1) Guidance Document Annex A, Section 2: The content of the emergency procedures manual should include, but are not limited to the following: Debriefing procedures Internal and external communications	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	49 CFR195.402(9): Procedural manual for operations, maintenance and emergencies: (9) Providing for a post-accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.	This activity is standard operating procedure (SOP) following any incident or upset activity. For the development of an effective and robust post-incident report to be developed, an after-incident debrief session should be conducted with participants of the incident. As such, it is believed that, with the suggested modification provided towards line item # 3, this pending

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
5	Internal reporting of	OPR, Section 6.3(1):	Online Minor Incident	Not Currently Required	Not Currently Required	TDG Regulations Part 8,	CEPA, Part 2, Section 16	49 CFR 195.55(a)(6):	requirement will be satisfactorily addressed and undertaken by the Responsible Party. It is recommended that no new regulation towards this issue be developed. It is standard operating
	near misses, hazards and spills (requires the RP to report to regulatory agencies any near misses or hazards) ⁴	The company shall establish documented policies and goals for meeting its obligations under Section 6, including a) a policy for the internal reporting of hazards, potential hazards, incidents and near misses that includes the conditions under which a person who makes a report will be granted immunity from disciplinary action. OPR, Section 6.5 (r): A company shall, as part of its management system and the programs referred toestablish and implement a process for the internal reporting of hazards, incident and near misses and for taking corrective and preventive actions, including the steps to manage imminent hazards. OPR, Section 27 Guidance Document: A company's operation and maintenance	Reporting System User Guide			Section 8.1(3): In the event of an imminent accidental release of dangerous goods, a person who has possession of the dangerous goods at the time of the imminent accidental release, must immediately report it to the [appropriate] person [listed]. An immediate report of an	(1): Where a person has knowledge of the commission or reasonable likelihood of the	(a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with §195.56 the existence of: any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent or more reduction in operating pressure or shutdown of operation of a pipeline.	procedure, prior to communicating and providing external notification, to first notify the appropriate persons internally within the company. It is our recommendation that no new regulatory requirements are needed to address this pending MoE regulatory standard. With the OGC's reporting oversight for all Minor, Level 1, 2, and 3 incidents as well as industry SOP on internal communication strategies prior to any external communication, this issue has been addressed to the most effective and efficient result practicable.

The Canadian Association of Petroleum Producers (CAPP) notes that there are discrepancies within this line item. This line item indicates that the Responsible Party (RP) is required to report to regulatory agencies any near misses or hazards. As the RP is going outside of its internal organization, this type of communication is 'external' in nature and not 'internal' as stated within this line item.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
7		manual should include, but is not limited ton) the company's policy for the internal reporting of hazards, incidents and near misses and the process for the reporting of such matters. OPR, Section 32 (1):		Directive 071, Section	Not Currently Required	Not Currently Required	Not Currently Required	40 CFR 105 402(a) and (a):	Recommend that
	Emergency Management Program or system (company specific)	A company shall develop, implement and maintain an emergency management program that anticipates,	permit holder's plans	14.6(22): The licensee must demonstrate that its plan management process keeps ERPs up to date. 5	Not Currently Required	INOT CUITENTILY REQUIRED	Not Currently Required	49 CFR 195.402(a) and (e): General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to ensure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted. (e) Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs: 1) Receiving, identifying, and classifying notices of events which need immediate response by	current state and status quo as detailed within the Oil and Gas Activities Act, Section 4 and Section 7 are sufficient for overseeing the pending regulatory standard for Emergency Management systems.

Directive 071, Section 1.2 states the AER has adopted the most recent edition of the Canadian Standards Association (CSA) CAN/CSA-Z-731-03: Emergency Preparedness and Response, and expects it to be used by the petroleum industry in conjunction with Directive 071. CSA-Z-731-03, Section 1 recognizes the development of emergency management programs.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
		management system set out in Section 7(3)(d), and requires the permit holder to evaluate the response to an emergency in accordance with Section 14.					the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action. 2) Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities. 3) Having personnel, equipment, instruments, tools, and material available as needed at the scene of an emergency. 4) Taking necessary action, such as emergency shutdown or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure. 5) Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards,	

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
								including possible intentional ignition in the cases of flammable highly volatile liquid. 6) Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action. 7) Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid. 8) In the case of failure of a pipeline system transporting a highly volatile liquid, use of appropriate instruments to assess the extent and coverage of the vapor cloud and determine the	
								hazardous areas. 9) Providing for a post-accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.	

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Comparison of Existing and Proposed Requirements for BC's Spill Preparedness and Response Across Regulators

Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	·	, J	<u> </u>		,		10) Actions required to be taken by a controller during an emergency, in accordance with §195.446.	

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
	Drogantly syleta Block			Alberto Energy	and Resources			Requirements	Comments for
Item	Presently exists= Black	(NEB) Regulatory Standard	of OGC's emergency	Alberta Energy	-NEW-	Regulatory Standard	Environment Conedo	-NEW-	
Number	Proposed = Blue		management regulation)	Regulator (AER)		(non-marine)	Environment Canada		Consideration
8	Continuous	Not Currently Required	ERP Regulations,	Directive 071, Section	Not Currently Required	Not Currently Required	Not Currently Required	49 CFR 194.121(a):	Continuous
	improvement		Section 7.2:	14.6 (25):				a) Each operator shall	improvement is a vital
	(requirement to ensure		A licensee must have a	The licensee must				update its response plan	component of ERP
	companies pursue		plan in place to address	demonstrate that its				to address new or	maintenance additional
	continuous		a release of any liquid	plan management				different operating	to Emergency
	improvement)		product onto land or	process keeps ERPs				conditions or	Management program
			water from a well,	up to date. A plan				information. In addition,	development.
			pipeline or facility. The	management process				each operator shall	As such, through the
			plan, must include:	ensures that:				review its response plan	current regulatory
			Pian, maet moiade.	 plans are reviewed 				in full at least every 5	requirement for having
			 annual training and 	and updated on a				years from the date of	an Emergency
			exercise programs, a	semi-annual basis,				the last submission or	Management program
			record of the training	if necessary, with				the last approval as	(Oil and Gas Activities
			and exercise and	changes made to				follows:	Act, Sections 4 and
			recommendations for	ensure that the					7(3)), and the
			continuous	information				 For substantial harm 	ERP/WCSS manual
			improvement	remains accurate;				plans, an operator	updating requirements,
			WCSS Manual – It is the	 residents are 				shall resubmit its	it is the opinion that this
				contacted to				response plan to	pending regulatory
			[WCSS] manual owner's	update their				Office of Pipeline	standard is currently
			responsibility to update his or her manual at a	information and				Safety (OPS) every 5	adequately addressed,
				 ground truthing 				years from the last	and new requirements
			minimum of once per	identifies any				submission date.	surrounding this issue
			year.	changes, such as				2) For significant and	represent duplication of
				new residents,				substantial harm	regulation.
				businesses, and				plans, an operator	regulation.
				renters and verifies				shall resubmit every 5	
				the ERP maps –				years from the last	
				the licensee may				approval date.	
				use any method for				1 ''	
				ground truthing.				49 CFR 194.121(b):	
				Directive 071 Section				b) If a new or different	
				Directive 071 Section				operating condition or	
				14.11 (30):				information would	
				The licensee must				substantially affect the	
				have a process for				implementation of a	
				recording the following activities:				response plan, the	
								operator must	
				Incident Records				immediately modify its	
				Keeping ERPs Current				response plan to	
				Training, Meetings, and				address such a change	
				Exercise Records				and, within 30 days of	
				Talks about lessons				making such a change,	
				learned and action				submit the change to	
				plans				PHMSA.	
								49 CFR 194, Appendix A,	
								Section 8(b):	
<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	1	

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	I	T	Barrier or or	1		T	T	T	
Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	1 10p0000 - Did0		anagement regulation)			(Procedures to review the	201121201211011
								plan after a worst-case discharge and to evaluate and record the plan's effectiveness.	
9	Emergency response	OPR, Section 32 (1), (2)	OGCA, Section 38(1)(b):	Pipeline Rule, Section	OGCA, Section 62(5):	TDG Regulations Part 7,	CEPA, Part 4, Section	49 CFR 194.107(c):	It is recommended that
		Guidance Document:	A permit holder must	8(1):	In the event [of a	Section 7.2(2):	56(1):	Each response plan must	no further regulatory
	to how an RP would respond to a spill)	A company's	prepare and maintain an	A licensee of a pipeline	spill/release], the	The application for an	The Minister may, at any	include a core plan	development is needed and that the current
	теѕропа то а ѕрііі)	emergency	emergency response	shall prepare and	operator shall:	Emergency Response	time, publish in the Canada	consisting of	OGC requirements for
		management program	plan and a response	maintain a corporate	a) Implement the	Assistance Plan (ERAP)	Gazette and in any other manner that the Minister	i. An information	ERP development,
		includes an up-to-date	contingency plan	emergency response	operator's	must be signed by the	considers appropriate a	summary as required	combined with the
		emergency procedures manual that it files with	satisfactory to the commission or as	plan in accordance with the requirements of	emergency	person submitting it and must include the following:	notice requiring any person	in §194.113	WCSS manual content
		the Board. An	prescribed by regulation.	Directive 071 and shall	response plan and		or class of persons	ii. Immediate notification	guidelines, adequately
		emergency procedures	Pipeline & LNG	submit a copy to the	take immediate steps to contain and	a) The name and address of the place of business	described in the notice to	procedures	address how a Responsible Party
		manual includes roles	Regulation, Section 8:	Regulator for review on	clean up the spilled	of the applicant	prepare and implement a	iii. Spill detection and	would respond to an
		and responsibilities in	If fluids to be transported	request.	materials	b) The telephone number	pollution prevention plan in respect for substance or	mitigation procedures	incident/spill.
		the event of an	through a pipeline will	Pipeline Rule, Section	b) Ensure that any	including area code and	group of substances	iv. The name, address,	'
		emergency, response procedures, contact lists	contain H2S, the pipeline	8(3):	contaminated	if applicable the	specified on the List of	and telephone number	
		and relevant	permit holder, before	For a pipeline	product is:	electronic mailing	Toxic Substances in	of the oil spill response organization, if	
		documentation including	beginning operation, must:	conveying a product	i. Processed in the	address and facsimile	Schedule 1.	appropriate	
		contact lists, maps,		that contains hydrogen	operator's own	number of the applicant	CEPA, Part 4, Section	v. Response activities	
		agreements and forms	calculate an EPZ	sulphide gas in the gas	facility		56(2):	and response	
		and records.	prepare an ERP	phase when the	ii. Sent to a waste	dangerous good to which the ERAP relates	The notice may specify:	resources	
		OPR, Section 33:	respecting the zone referred to in	pipeline is operating at the licensed conditions,	processing facility		a) The substance or	vi. Names and telephone	
		A company shall	[subsection] (a)	a licensee shall	iii. Disposed of in	d) The type and size of the means of containment	group of substances in	numbers of Federal,	
		establish and maintain	 submit the plan to 	calculate the	another manner		relation to which the	State and local	
		liaison with the	the commission and	emergency planning	that is satisfactory to the Minister	dangerous good to	plan is to be prepared	agencies which the	
		agencies that may be	in the case of an	zone in accordance	c) Remediate the area	which the ERAP relates	b) The commercial,	operator expects to have pollution control	
		involved in an emergency response on	emergency, respond	with Directive 071 and determine whether any	to a state that is	e) The geographical area	manufacturing,	responsibilities or	
		the pipeline and shall	to the emergency in	surface development	satisfactory to the	covered by the ERAP	processing or other activity in relation to	support	
		consult with them in	accordance with the	exists or is taking place	NAC - Control	f) The telephone number,	which the plan is to be	vii. Training procedures	
		developing and	plan	within the EPZ.	OGCA, Section 62(6):	including area code, to	prepared	viii. Equipment testing	
		updating the emergency	ERP Requirements,	Pipeline Rule, Section		call to have the ERAP activated immediately	c) The factors to be	ix. Drill program—an	
		procedures manual.	Section 1.4.5:	8(4):	The operator shall process all spilled	•	considered in preparing	operator will satisfy the	
		OPR, Section 34:	A licensee of an oil	If any surface	materials:	g) A description of the emergency response	the plan	requirement for a drill	
		A company shall take all	well, a saltwater disposal	development exists or		capabilities available to	d) Et al	program by following	
		reasonable steps to	well or a liquid pipeline	is taking place within	a) At a facility that is licensed pursuant to	the person offering for	CEPA, Part 8, Section 198:	the National	
		inform all persons who	must develop and submit for approval a spill	the calculated EPZ of a	the Act or	transport or importing	The Minister shall publish	Preparedness for Response Exercise	
		may be associated with	response contingency	pipeline, the licensee	b) In a manner that is	dangerous goods	in the Canada Gazette, or	Program (PREP)	
		an emergency response	plan encompassing	shall prepare a site-	satisfactory to the	h) A potential accident	in any other manner that	guidelines. An	
		activity on the pipeline of the practices and	production and pipeline	specific emergency response plan in	Minister	assessment including:	the Minister considers	operator choosing not	
		procedures to be	facilities and trucking	accordance with		i) A general analysis of	appropriate, guidelines and	to follow PREP	
	l .	IF. 50044.00 to bo	l .	accordance with	1			l .	

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	1		Buildiah Calumbia C'	I	1		Т		
			British Columbia Oil					Divoling and Harandons	
	British Columbia		and Gas Commission					Pipeline and Hazardous	
			(OGC) Regulatory Standard					Material Safety Administration (PHMSA)-	
	(BC) Regulatory Standard		Standard		Saskatchewan Energy				
Line	Standard	National Energy Board	(pending implementation		and Resources	Transport Canada		Emergency Response Requirements	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
		followed and make	routes. Unless the	Directive 071.		how an accidental	codes of practice.	guidelines must have a	
		available to them the	licensee is an active oil			release of dangerous	CEPA, Part 8, Section	drill program that is	
		relevant information that	spill cooperative member	Oil and Gas		goods could occur		equivalent to PREP.	
		is consistent with that	in the area where its	Conservation Rule		ii) A general description	199(1):	The operator must	
		which is specified in the	operations are located,	(OGCR), Part 8.004(1):		of the potential	The Minister may at any	describe the drill	
		emergency procedures	the licensee must also	A licensee of a sour		consequences of an	time publish in the Canada	program in the	
		manual.	purchase spill cleanup	production facility and		accidental release of	Gazette, and in any other	response plan and	
			equipment to ensure that	associated gathering			manner that the Minister	OPS will determine if	
		OPR Guidance	environmental risk to a	system shall prepare a		dangerous goods	considers appropriate, a	the program is	
		Document Annex A,	body of water is	specific ERP for each		iii) A description of the	notice requiring any person	equivalent to PREP.	
		Section 2:	minimized.	sour production facility		action the applicant is	or class of persons	'	
		Contains Emergency		and associated		expected to take in	described in the notice to	x. Plan review and	
		Procedures Manual	ERP Regulations,	gathering system in		the event of an	prepare and implement an	update procedures	
		content.	Section 7.2:	accordance with		accidental release or	environmental emergency		
		Content.	If not exempt from the	Directive 071.		an imminent	plan respecting the		
			requirements of Section			accidental release of	prevention of,		
			7.1, a licensee must have	Directive 071, Section		dangerous goods	preparedness for, response		
			a plan in place to	2.1(2):		iv) A copy of any formal	to or recovery from an		
			address a release of any	As a minimum, the		agreement with a	environmental emergency		
			liquid product onto land	licensee must include		third party for the	in respect of:		
			or water. The plan in the	the following		provision of	a) A substance or group		
			form of a manual, must	information in its ERP:		assistance	of substances on the		
			address the following	Information in its Livi .		assistance	List of Toxic		
			components:	 Key licensee 			Substances in		
				contacts			Schedule 1		
			 a description of initial 	A 24 have liagness					
			emergency response				E2, Section 4(1):		
			procedures and	emergency contact			A person required to		
			actions, as well as all	telephone number			submit a notice to the		
			contacts	 A method of 			Minister under subsection		
			 an inventory of wells, 	classifying			3(1) must prepare an		
			pipelines and	incidents and			environmental emergency		
			associated facilities	response actions			plan with respect to the		
			 topographical maps 	for specific incident			substance referred to in		
			showing designated	•			that subsection in the		
1			spill control points,	A communication			following circumstances:		
			access roads, urban	plan that			a) If the subsection is set		
			centres, bodies of	addresses:			out in column 1 of Part		
			water and streams,	communication			1 of Schedule 1 and is		
			information related to	with response			not a mixture, and		
			water supply intakes	team, support			·		
			for municipal and	services and			b) If the substance is set		
			industrial operations,	government,			out in column 1 of Part		
			pipelines, wells and	communication			1 of Schedule 1 and is		
1			facilities within the	with the public and			a component in a		
1			operating area	media and			mixture, other than a		
			=	downgrading and			mixture that is a		
							substance set out in		
			and expertise of	emergency levels			column 1 of Schedule		
			roles, responsibilities and expertise of	stand-down of emergency levels					

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					· · · · · · · · · · · · · · · · · · ·			·	
1	1	1	British Columbia Oil	1	1	1	1	(<u> </u>	
1	1	l i	and Gas Commission		1	1	· I	Pipeline and Hazardous	•
1	British Columbia	1	(OGC) Regulatory	1	1	1	1	Material Safety	
1	(BC) Regulatory	l i	Standard	1		1	1	Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation	1	Saskatchewan Energy	Transport Canada	1	Emergency Response	Recommendations/
	Presently exists= Black		of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard	1	Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
1.2	opossa – Dide	J.u. 14414		· · · ·	+	(1, and	+	
1	1	l i	company personnel	Responsibilities of personnel required		1	·	t l	
1	1	l i	to manage the	personnel required		1	c) If the substance is set	t l	
1	1	l i	response	to respond to an		1	out in column 1 or Part	t l	
1	1	l i	policies for worker	emergency		1	2 of Schedule 1, and	1	
1	1	l i	safety at an oil spill	 Establishment of 		1	d) If the substance is set	1	
1	l l	l i	containment site	incident		1	out in column 1 of Part	t I	
1	l I	l i	 inventory and 	management		1	3 of Schedule 1	t I	
1	l l	l i	location of response	systems and		1		t I	
1	l l	l i	equipment	activation of a		1	E2, Section 4(3):	t I	
1	l l	l i	containment and	reception centre		1	The environmental	t I	
1	l l	l i		Directive 071, Section		1	emergency plan must	t I	
1	l l	l i	1	7(1), Table 5:	1	1	include:	t l	
1	l l	l i	type, volume and	` '	1	1		t l	
1	l l	l i	nature of the	The licensee must		1	a) A description of the	t I	
1	l l	l i	production and time	have an approved sour		1	factors considered	t I	
1	l i	l i	of vear and	operation ERP for	1	1	b) The identification of	t l	
1	l l	l i	annual training and	situations listed in		1	any environmental	t I	
1	l l	l i	annual training and exercise programs, a	Table 5 or for any other		1	emergency that can	t I	
1	1	l i		situation in which the		1	reasonably be	t l	
1	1	l i	and exercise and	ERCB determines that		1	expected to occur at	t l	
1	1	l i	recommendations for	a plan is required.		1	the place and that	t l	
1	l I	l i	continuous	Directive 071, Sections		1	would likely cause	t I	
1	l l	l i	improvement	10.2.1 and 10.3.1:	1	1	harm to the	t l	
1	l l	l i	·		1	1	environment or	t l	
1	l l	l i		The spill response plan		1	constitute a danger to	t I	
1	1	l i		addresses a release of		1	human life or health	1	
1	1	l i		any liquid product onto		1	and identification of the	t l	
1	1	l i		land or water from any		1	harm or danger	1	
1	1	l i	Scotion 1 Sour Con	well, pipeline or facility.		1	c) A description of the	1	
1	1		and Sour Multiphase	The plan, which may		1	measures to be used to	t l	
1	l l	l i	CDDo '	consist of several different manuals,	1	1	prevent, prepare for,		
1	l l	l i		contains the following:		1	respond to and recover		
1	l i	l i			1	1	from any environmental	t l	
1	l l	l i	7.1:	A description of	1	1	emergency identified	t l	
1	l l	l i	A licensee is exempt	initial emergency		1	under paragraph (b)	t I	
1	l i		from the requirement to	response	1	1	d) A list of the individuals	t l	
1	l l		develop a spill response	procedures and	1	1	who are to carry into	t l	
1	l l		contingency plan or to	actions, as well as	1	1	effect the plan in the	1	
1	l l		purchase spill cleanup	information on all		1	event of an	t I	
1	l l		equipment if it is an	contacts and	1	1	environmental	t l	
1	l l		active member in good	services		1	emergency and a	t I	
1	l i		standing of an oil spill	An inventory of	1	1	description of their	t l	
1	l l		cooperative in the area	wells, pipelines	1	1	roles and	t l	
] 1	l l	l i	where its operations are	carrying liquids and		1	responsibilities	t I	
1	l l	l i	located.	associated facilities		1	e) The identification of the	t l	
1	l l	l i	Western Canadian Spill	Topographical	1	1	raining required for	t l	
] 1	l l	l i	Services Ltd – Oil Spill	Topographical maps showing		1	each of the individuals	t I	
		<u></u>	JOI VIOUS EIG - OII SPIII	maps snowing		1		<u> </u>	·

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
			Contingency Manual [content]	designated spill control points, access roads, urban centres, bodies of water, and water supply intakes for municipal and industrial operations, pipelines, wells and facilities within the operating area Roles, responsibilities and resources to manage the response Policies for worker safety at emergency spill management sites Inventory and location of response equipment Containment and recovery procedures applicable to the type, volume, and nature of the production and time of year, annual training and exercise programs, a record of the training and exercises and recommendations for continuous improvement.			f) A list of the emergency response equipment included as part of the environmental emergency plan and the equipment's location g) A description of the measures to be taken by the person referred to in subsection (1) to notify members of the public who may be adversely affected by an environmental emergency and to inform them of those measures and of what to do in the event of an environmental emergency		
10		OPR, Section 32 Guidance Document: A company's emergency	ERP Requirements, Section 7.5: Licensees that operate higher-risk facilities, such	Directive 071, Section 5.2.2(5): Special procedures may be required for	Not Currently Required	TDG Regulations Part 7, Section 7.2(2)(e): The application for an Emergency Response	Not Currently Required	49 CFR 194.107(c)(2): Each response plan must include an appendix for each response zone that	Currently, participation in a spill cooperative is required through the OGC's ERP Regulation

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	Notional Engravy Board	(nanding implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Decemmendations/
Line	Dragantly exists Block	National Energy Board	(pending implementation of OGC's emergency	Alberto Energy	and Resources	Transport Canada		Requirements	Recommendations/ Comments for
Item	Presently exists= Black Proposed = Blue	(NEB) Regulatory Standard		Alberta Energy	-NEW-	Regulatory Standard (non-marine)	Environment Canada	-NEW-	Consideration
Number	<u> </u>		management regulation)	Regulator (AER)	-INE VV-	` '	Environment Canada		
	identify	management program	as:	evacuating public		Assistance Plan (ERAP)		includes the information	Section 7.1.
	resources/infrastructur	includes an up-to-date	- Pipelines (carrying	facilities; if large		must be signed by the		required in paragraph	The WCSS is an
	e at risk, specific	emergency procedures	liquids) crossing named	numbers of people are		person submitting it and		(c)(1)(i)-(ix) of this section	established spill
	strategies to protect "at		water bodies or	involved, the licensee		must include:		and the worst-case	cooperative currently
		the Board. An	- Facilities, wells, or	must address assistance with		The geographical area		discharge calculations that	operating within
	points, access points to lakes/rivers, etc.) ⁶	emergency procedures manual includes roles	pipelines (carrying	transportation or		covered by the ERAP		are specific to that response zone. An operator	NorthEast BC, of which
	to takes/fivers, etc.)	and responsibilities in	liquids) located within	changes in the normal		,		submitting a response plan	the majority of industry
		the event of an	100m of a named water	notification procedures.				for a single response zone	is a member. The
		emergency, response	body					does not need to have a	WCSS' current oil spill
		procedures, contact lists	must evaluate the risk	Directive 071, Section				core plan and a response	contingency manuals
		and relevant	and ensure that they	5.2.5:				zone appendix. The	are geographically
		documentation including		The licensee should				operator of a single	based with
		contact lists, maps,	capabilities and	identify any special				response zone onshore	geographically specific
		agreements and forms	expertise, in addition to	procedures needed to				pipeline shall have a single	information.
		and records.	membership in a spill	address any major				summary in the plan that	As such, it is
		OPR, Section 6.1(e):	equipment cooperative.	highways and railways				contains the required	recommended that no
		OF IX, Section 6.1(e).	ERP Regulation, Section	passing through the				information in §194.113.7.	further requirements
		A company shall	7.1:	EPZ that could be				49 CFR 194, Appendix A,	are needed to be
		establish, implement		impacted by the				Section 9:	developed in order to
		and maintain a	A licensee is exempt	hazard.					address the pending
			from the requirement to	Directive 071, Section				Each response zone	issue noted by the
		that corresponds to the	develop a spill response	5.3(12):				appendix would provide the	MoE.
		size of the company to	contingency plan or to	, ,				following information:	Should additional
		the scope, nature and complexity of its	purchase spill cleanup equipment if it is an	The licensee must ensure that maps				a) The name and	content be required for
		activities and to the	active member in good	included in the ERP are				telephone number of the	clarification, it is
		hazards and risks	standing of an oil spill	sized to provide a clear				qualified individual;	recommended that a
		associated with those	cooperative in the area	representation of the				b) Notification procedures;	definition be developed
		activities.	•	entire mapped area				c) Spill detection and	and incorporated within
		ODD Cuidanaa	located.	and clearly identify:				mitigation procedures;	the OGC ERP
		OPR Guidance Document Annex A,	Western Canadian Smill					d) Name, address, and	Requirement document as well as the WCSS
		Section 2:	Western Canadian Spill Services Ltd – Oil Spill	Surface location(s)				telephone number of oil	manual defining what a
			Contingency Manual	of the operation(s) and access roads,				spill response	geographic response
		The contents of the	[content]	EPZ boundary				organization;	plan is.
		emergency procedures	[COMONG	1				e) Response activities and	F
		manual should include,		 Locations within the EPZ of 				response resources	
		but are not limited		residences and				including (1) Equipment	
		toenvironmental or		their reference				and supplies necessary	
		other area requiring special consideration or		numbers including				to meet §194.115, and	
		protection.		those residences				(2) The trained	
		protoction.		adjacent to the				personnel necessary to	
				EPZ or on dead-				sustain operation of the	
1				end roads requiring				equipment and to staff	
				egress through the				the oil spill removal	
1								organization and spill	

⁶ As per Page 15 of the Second Intentions Paper, "Functions of the PRO could include: development of geographic response plans"

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-								,	
			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Roard	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
Item	Presently exists= Black		of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
114111501	1 10p0000 = Blac	Otaliaa. a	management regulation/	EPZ		(iieii iiiaiiie)		management team for	
								the first 7 days of the	
				Provincial, local				response;	
				and access				· ·	
				roadways and				f) Names and telephone	
				dead-ends in the				numbers of Federal,	
				EPZ				state and local agencies	
				 Lakes, rivers, 				which the operator	
				streams, and any				expects to assume	
				elevation features				pollution response	
				that could impact				responsibilities;	
				emergency				g) The worst-case	
				response in the				discharge volume;	
				EPZ				h) The method used to	
				 Urban density 				determine the worst-	
				development,				case discharge volume,	
				campgrounds,				with calculations;	
				recreation areas,				i) A map that clearly	
				public facilities and				shows—(1) The location	
				any other publicly				of the worst-case	
				used development				discharge, and (2) The	
				within the EPZ				distance between each	
				 Trapping area, 				line section in the	
				grazing lease and				response zone and—(i)	
				range allotment				Each potentially affected	
				boundaries and				public drinking water	
				their reference				intake, lake, river, and	
				numbers				stream within a radius of	
				Other industrial				5 miles (8 kilometers) of	
				operations,				the line section, and (ii)	
				including oil and				Each potentially affected	
				gas operations				environmentally	
				Railways and				sensitive area within a	
				airports				radius of 1 mile (1.6	
				•				kilometer) of the line section;	
				Corporate				· ·	
				boundaries				j) A piping diagram and	
				 Municipal and 				plan-profile drawing of	
				Health Authority				each line section, which	
				boundaries				may be kept separate	
				Directive 071, Section				from the response plan	
				10.1. ⁷				if the location is	
				10.1.				identified; and	
				Western Canadian Spill				k) For every oil type	
				Services Ltd – Oil Spill				transported by each	
				CS. 1.000 Eta On Opin				pipeline in the response	

Directive 071, Section 10.1 recognizes Western Canada Spill Services Ltd (WCSS) Spill Cooperative that sets out licensee obligations. The WCSS has divided oil and gas operations in Western Canada into geographical areas each with its own distinctive oil spill contingency manual.

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	British Columbia (BC) Regulatory Standard		British Columbia Oil and Gas Commission (OGC) Regulatory Standard		Saskatchewan Energy			Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response	
Line Item Number	Presently exists= Black Proposed = Blue	(NEB) Regulatory Standard	(pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Requirements -NEW-	Recommendations/ Comments for Consideration
				Contingency Manual [content]				zone, emergency response data that— 1) Include the name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods; and 2) Meet 29 CFR 1910.1200 or 49 CFR 172.602.	
11	Environmental sensitivity classification (process for classifying environmental sensitivity to ensure all areas are classified using a consistent process)	Not Currently Required	Not Currently Required	Alberta Environment Fact Sheet: Siting an Upstream Oil and Gas Site in an Environmentally Sensitive Area on Private Land: Operators must identify environmental sensitivity at every proposed site and consider relocating the site when a sensitive category is identified. The following is a checklist of areas to investigate when working in sensitive areas. [14 items in the checklist are listed for further investigation] Guide to the Code of Practice for Pipeline s and Telecommunication Lines crossing a Water Body, Including Guidelines for Complying with the Code of Practice,	Not Currently Required	Not Currently Required	Not Currently Required	49 CFR 195.6, Unusually Sensitive Areas (USAs) ⁸ As used in this part, a USA means a drinking water or ecological resource area that is unusually sensitive to environmental damage from a hazardous liquid pipeline release	It is recommended that the applicable government ministry undertake this responsibility to develop environmental sensitivity criteria. This would enable uniform application of the criteria for all industry sectors. With the applicable government department undertaking criteria development, it eliminates divergent methodologies used by individual companies and reduces external challenges to the criteria used and any resulting actions taken regarding that sensitivity classification. In essence, it will 'level the playing field' for industry sector participants.

In Area Contingency Plans, environmentally sensitive areas are determined by the plan developers, with input from federal, state, and local resource managers and others.

Note: In Federal Register Vol. 70, No. 35 (Wednesday, February 23, 2005), PHMSA states that "... the NCP and ACPs provide sufficient guidance to operators on environmentally sensitive areas." Thus, PHMSA defers to the definitions and areas identified in the NCP and ACPs.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
				Section 7 The class of water body that is determined based on the 'sensitivity' of fish habitats and their known distribution. The sensitivity for the class of water body is as follows: Class A – highest sensitivity, habitat areas are sensitive enough to be damaged by any type of activity within the water body, water body critical to the continued viability of a population of fish species in the area. Class B – high sensitivity. Class C – moderate sensitivity Class D – low sensitivity, fish species not present					
12	Base map specifications (requirement for RPs to use a specific base map for geographic plans/sensitivity mapping)	OPR Guidance Document Annex A, Section 2: The content of the emergency procedures manual should include, but are not limited toup-to- date area maps.	ERP Requirements, Section 4.4: Maps included in the ERP must be sized to provide a clear representation of the entire mapped area. Maps must clearly identify: Surface locations of the operations EPZ boundaries being used and EAZ boundaries Residence locations and reference numbers within the EPZ, including those	Directive 071, Section 5.3(12): The licensee must ensure that maps included in the ERP are sized to provide a clear representation of the entire mapped area and clearly identify: Surface location(s) of the operation(s) and access roads, EPZ boundary Locations within the EPZ of residences and their reference numbers including those residences	Not Currently Required	The application for an ERAP must be signed by the person submitting it and	for the Environmental Emergency Regulations, Section 5.2, page 14: The plan should include site plats and material safety data sheets for each	 49 CFR Part 194, Appendix A, Section 9(e)(i): A map that clearly shows 1) The location of the worst-case discharge, and 2) The distance between each line section in the response zone and (i) Each potentially affected public drinking water intake, lake, river, and stream within a radius of 5 miles (8 kilometers) of the line section, and (ii) Each potentially affected environmentally sensitive area within a radius of 1 mile (1.6 	mapping requirements for a Geographic Response Plan be identified, then the

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				T			1		
			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	Notional Energy Board	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
				Albarta Enargy	and Resources			Requirements	Comments for
	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	-NEW-	Regulatory Standard	Favinanment Canada	NIE VA/	
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEVV-	(non-marine)	Environment Canada	-NEW-	Consideration
			residences bordering	adjacent to the				kilometer) of the line	one standard for
			the EPZ or on dead-	EPZ or on dead				section.	response plan mapping.
			end roads requiring	end roads requiring					
			egress through the	egress through the					
			EPZ	EPZ					
			 Provincial, local and 	 Provincial, local 					
			access roadways	and access					
			and dead ends	roadways and					
				dead-ends in the					
			Topographical factures including	EPZ					
			features, including						
			lakes, rivers,	Lakes, rivers,					
			streams, and any significant elevation	streams, and any elevation features					
			feature that could	that could impact					
			affect either	emergency					
			dispersion of a sour	response in the					
			gas release or the	EPZ					
			ability to evacuate	 Urban density 					
			members of the	development,					
			public	campgrounds,					
			 Campgrounds, 	recreation areas,					
			recreation areas,	public facilities and					
			churches, schools,	any other publicly					
			hospitals, and any	used development					
			other publicly used	within the EPZ					
			facilities within the	 Trapping area, 					
			mapped area	grazing lease and					
			Trap line grazing	range allotment					
			lease, and range	boundaries and					
			allotment boundaries	their reference					
			and their reference	numbers					
			numbers for the full	Other industrial					
			map area	operations,					
			Other industrial	including oil and					
			operations, including	gas operations					
			oil and gas	- '					
			operations	Railways and airports					
			Location of	airports					
				 Corporate 					
			emergency shutdown devices	boundaries					
				 Municipal and HA 					
			Railways and	boundaries					
			airports for the full	A legend, scale,					
			map area	and north					
			 Corporate 	directional indicator					
			boundaries (hamlets,						
			villages, towns, etc.)	For sour well site-					

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
				specific drilling and/or completion ERPs only, potential roadblock locations Directive 071, Sections 10.2.1 and 10.3.1: The spill response plan addresses a release of any liquid product onto land or water from any well, pipeline or facility. The plan, which may consist of several different manuals, contains the following: Topographical maps showing designated spill control point, access roads, urban centres, bodies of water, and water supply intakes for municipal and industrial operations, pipelines, wells, and facilities within the operating area.					
13	Local Area Engagement and Consultation (specifications that outline who is to be engaged and consulted for the preparation of response plans, response, etc.)	OPR, Section 33: A company shall establish and maintain liaison with the agencies that may be involved in an emergency response on the pipeline and shall consult with them in developing and updating the emergency procedures manual.	Involvement in Emergency Preparedness and Response Oil and Gas Activities Act (effective October 1, 2014), Section 3 (1) and	Directive 071, Section 4.1, Table 2 – When to notify and consult Directive 071, Section 4.3, Table 3 – who to notify or notify and consult within the EPZ Directive 071, Section 4.3 – Conducting the Public Involvement Program ⁹	Not Currently Required	Not Currently Required	CEPA Part 5, Section 95(1): Where there occurs or is a likelihood of a release into the environment of a substance specified on the List of Toxic Substances in Schedule 1 in contravention of a regulation any person shall as soon as possible in the circumstances: c) Make a reasonable	Requirements provided within the National Contingency Plan and associated Area Contingency Plans	The OGC currently has effective and rigorous consultation requirements towards stakeholders that may be impacted by petroleum developments. No new requirements on this issue to be overseen by the MoE are required.

The AER through this section recognizes the CAPP *Guidelines for Effective Public Involvement*, as a source for assisting in the preparation and conducting of a public involvement program.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
Item		(NEB) Regulatory		Alberta Energy Regulator (AER)		Regulatory Standard	effort to notify any member of the public who may be adversely affected by the release or likely release CEPA, Part 8, Section 201(1)(c): If there occurs an environmental emergency in respect of a substance of a list established under the regulations or interim orders, any person, shall as soon as possible in the circumstances, make a reasonable effort to notify any member of the public who may be adversely affected by the environmental emergency. E2, Schedule 4 – Information to be submitted in the Report Regarding the Preparation of an Environmental Emergency Plan: Item number 3: Local level involvement: a) Give the name of the local authorities, community or interest groups that have been	-NEW-	Comments for
		Emergency Planning Zones; and mutual aid agreements or a reference to mutual aid agreements in the emergency procedures manual.					involved in the plan's development, if any, and b) Identify whether the plan or its relevant parts were made available to the appropriate local authorities (such as police and fire departments) that may be involved in an emergency response.		

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			British Columbia Oil						
Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
15	Incident Command	Not Currently Required ¹⁰	Not Currently Required	Not Currently Required ¹¹	Not Currently Required	Not Currently Required ¹²	Not Currently Required	49 CFR 194.107(3): A description of the operator's response management system including the functional areas of finance, logistics, operations, planning and command. The plan must demonstrate that the operator's response management system uses common terminology and has a management span of control, a clearly defined chain of command and sufficient trained personnel to fill each position.	Clarification is required pertaining to the extent of ICS compliance (e.g., response position naming convention) required by the MoE. It is further noted that the Canadian jurisdictions reviewed throughout this analysis do not currently mandate the use of ICS. The AER and Transport Canada currently highlight the benefits of ICS and/or strongly recommend the use of ICS, but do not mandate its implementation. It is recommended that wording similar to that of the AER and/or Transport Canada be adopted by BC towards incident response and not 'mandate' its adoption.
16	Responder training certification (requirements that specify the level of training required for responders based upon "position specific" roles and tasks)	A company shall develop and implement a training program for any employee of the company who is directly	ERP Requirements, Section 4.13: A licensee must undertake training sessions on a regular basis for fulfilling functions defined in its ERP in accordance with CAN.CSA Z-731 to ensure that responsible personnel retain competency in emergency response procedures. Personnel	Pipeline Rule, Section 8(6)(c): A licensee of a pipeline shall, in accordance with Directive 071, ensure that it is capable of adequately responding to spills. Directive 071, Section 14.9(27): The licensee must provide training sessions to ensure that	INOT Currently Required	TDG Regulations Part 6, Section 6.1(1): A person who handles, offers for transport or transports dangerous goods must: a) Be adequately trained and hold a training certificate, or b) Perform those activities in the presence and under the direct supervision of a person	E2, Section 4(3)(e): The environmental emergency plan must include the identification of the training required for each of the individuals listed.	 49 CFR 194.117: (a) Each operator shall conduct training to ensure that: 1. All personnel know— i. Their responsibilities under the response plan, ii. The name and address of, and the procedure for contacting, the operator on a 24-hour 	No further requirements are needed other than those current requirements overseen by the OGC, CSA Z 731, Section 6.1, and the WCSS to maintain membership in good standing certification.

OPR Guidance Document Annex A, Section 2: identified Incident Command System (ICS) as an incident management system. "The contents of the emergency procedures manual should include, but are not limited to.... Incident management system (e.g., ICS)."

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Directive 071, Section 2.1.4(9) states "the AER strongly supports the use of the ICS as a means of ensuring consistent command and communication among all parties.

As per Transport Canada's website (http://www.tc.gc.ca/eng/tdg/erap-menu-72.htm#sec9) for ERAPs, use of the incident management system ICS is identified.

			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
	Standard				Saskatchewan Energy			Emergency Response	
Line	Standard	National Energy Board	(pending implementation		and Resources	Transport Canada		Requirements	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
	'	emergency procedures	must be trained and	response personnel are		who is adequately		basis, and	
		set out in the manual	capable of carrying out	competent in		trained and who holds a		,	
		developed under	their responsibilities at all	emergency response		training certificate		iii. The name of, and	
		Section 32 and the	times.	procedures. The				procedures for	
		procedures for the		licensee is expected to		TDG Regulations Part 6,		contacting, the	
		operation of all	ERP Regulations,	provide ERP training		Section 6.2:		qualified individual on	
		•	Section 7.3:	Ι'		A marage is a degree to be		a 24-hour basis,	
		emergency equipment	Contill and an areations	on:		A person is adequately		2. Reporting personnel	
		that the employee could	Spill cooperative	The overall plan		trained if the person has a		know—	
		reasonably be expected	members operating	•		sound knowledge of all the		i. The content of the	
		to use.	wells, pipelines or	Roles and		topics listed below that		information summary	
		OPR, Section 46(3):	facilities must incorporate	responsibilities		relate directly to the			
		, , ,	training exercises into	during an incident		person's duties and to the		of the response plan,	
		The company shall use	their preparedness plans	 Public protection 		dangerous good the person		ii. The toll-free	
			by:	measures used		is expected to handle, offer		telephone number of	
		ensure that any	Being represented	during an		for transport or transport:		the National	
		employee who attends	• •	omorgonov and		a) The classification		Response Center,	
		a training program has	and participating at a	Available		criteria and test		and	
		a working knowledge of	minimum of one					iii. The notification	
		the subject-matter of the	cooperative annual	communication methods		methods		process.	
		program at the end of	exercise in the area	methods		b) Shipping names		'	
		the program.	where its operations	Directive 071, Section		c) The use of Schedules		3. Personnel engaged in	
			are located	16.1.1(1):		[′] 1, 2 and 3		response activities	
			 Having an area 	, ,		d) The shipping		know—	
			representative	As part of its spill		document and train		 The characteristics 	
			complete a	response training, a		consist requirements		and hazards of the oil	
			recognized spill	licensee that is a		in Part 3		discharged,	
			response course or	member of a spill		Documentation		ii. The conditions that	
			on-scene	cooperative must:				are likely to worsen	
			commander course	 Attend¹³ and be 		e) The dangerous goods		emergencies,	
			in lieu of attendance	appropriately		safety mark		including the	
1			at a particular spill	represented at a		requirements		consequences of	
			cooperative area	minimum of one		f) The certification safety		facility malfunctions	
			exercise	cooperative annual		marks requirements,		or failures, and the	
				exercise in the area		safety requirements		appropriate corrective	
			Having an area			and safety standards		actions,	
			representative	where its		· ·		·	
			complete a	operations are		g) The emergency		iii. The steps necessary	
			recognized spill	located		response assistance		to control any	
			response self-study	 Have an area 		plan requirements		accidental discharge	
			course in lieu of	representative		h) The report		of oil and to minimize	
			exercise attendance	complete a spill		requirements		the potential for fire,	
				response course,		i) Safe handling and		explosion, toxicity, or	
				self-study spill		transportation		environmental	
				responder course,		practices for		damage, and	
				or on on-scene spill		dangerous goods,		iv. The proper	
				commander course		including the		firefighting	
1				from a recognized		characteristics of the		procedures and use	
			I .	a .000g/m200		characteristics of the		procedures and use	

Attendees are required to achieve 70% or better on a written exercise quiz to achieve credit for the exercise.

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			British Columbia Oil					Pineline and Hazardaya	
Line Item	British Columbia (BC) Regulatory Standard Presently exists= Black		and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency	Alberta Energy	Saskatchewan Energy and Resources	Transport Canada Regulatory Standard		Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements	Recommendations/ Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER) training institution in lieu of attendance at an oil spill cooperative exercise		(non-marine) dangerous goods j) The proper use of any equipment used to handle or transport the dangerous goods k) The reasonable emergency measures the person must take to reduce or eliminate any danger to public safety that results or may reasonably be expected to result from an accidental release of the dangerous goods TDG Regulations Part 6, Section 6.5(b) states: A training certificate expires for transport by road vehicle, railway vehicle or ship 36 months after its date of issuance.		of equipment, fire suits, and breathing apparatus. (b) Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan: 1) Records for operator personnel must be maintained at the operator's headquarters; and 2) Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator. (c) Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the Occupational Safety and Health Administration (OSHA) standards for emergency response operations in 29 CFR 1910.120, including volunteers or casual laborers employed during a response who are subject to those standards pursuant to 40 CFR part 311. 49 CFR 195.403(a): ¹⁴ (a) Each operator shall	Consideration
								establish and conduct a	

In Federal Register Vol. 70, No. 35 (Wednesday, February 23, 2005), PHMSA recommends preparers consult the Training Reference for Oil Spill Response (August 1994) document for guidance related to training-related portions of their plans. This reference can be found on the US Coast Guard's -web page, http://www.CoastGuard.mi

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	1, 222	,			,		continuing training program to instruct emergency response personnel to:	
							Carry out the emergency procedures established under 195.402 that relate to their assignments;	
							2) Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions;	
							3) Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquids or carbon dioxide spills, and take appropriate corrective action;	
							4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage; and	
							5) Learn the potential causes, types, sizes, and consequences of fire and the appropriate use of portable fire extinguishers and other on-site fire control equipment, involving, where feasible, a simulated pipeline emergency condition.	

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
								 (b) At intervals not exceeding 15 months, but at least once each calendar year, each operator shall: Review with personnel their performance in meeting the objectives of the emergency response training program set forth in paragraph (a) of this section; and Make appropriate changes to the emergency response training program as necessary to ensure that it is effective. (c) Each operator shall require and verify that its supervisors maintain a thorough knowledge of that portion of the emergency response procedures established under 195.402 for which they are responsible to ensure compliance. 	
17	Frequency and scope of training/exercises (requirements that specify how frequently and the scope of training and exercising	Section 7: Emergency response exercises should: Be held with sufficient frequency. At least one simulated exercise	ERP Regulations, Section 7.2: A licensee must have a plan in place to address a release of any liquid product onto land or water from a well, pipeline or facility. The plan must include: • annual training and exercise programs, a record of the training and exercise and recommendations for continuous improvement	Directive 071, Section 14.10(28): The licensee must test its ERPs through the following types of planned exercises to promote emergency response preparedness: Tabletop or communication exercise, held annually for each ERP, except in a year when a major exercise is held Major exercise, held once every	Not Currently Required	Not Currently Required	E2, Section 6(1): The person referred to in subsection 5(1) must update and test the environmental emergency plan at least once each calendar year to ensure that it continues to meet the requirement.	49 CFR 195.403(b): At intervals not exceeding 15 months, but at least once each calendar year, each operator shall: 1) Review with personnel their performance in meeting the objectives of the emergency response training program set forth in paragraph (a) of this section and 2) Make appropriate changes to the emergency response training program as necessary to ensure that	No further requirements are needed other than those current requirements overseen by the OGC, CSA Z 731, Section 6.1, and the WCSS to maintain membership in good standing.

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			British Columbia Oil and Gas Commission					Pipeline and Hazardous	
Line Item	British Columbia (BC) Regulatory Standard Presently exists= Black	National Energy Board (NEB) Regulatory	(OGC) Regulatory Standard	Alberta Energy	Saskatchewan Energy and Resources	Transport Canada Regulatory Standard		Material Safety Administration (PHMSA)- Emergency Response Requirements	Recommendations/ Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
		years • Be varied to confirm that all aspects of potential emergencies are tested • Simulate a wide range of potential geographic and weather conditions as well as worsecase spill or gas release scenarios		three years for each are ERP Directive 071, Section 16.2.1(4): A licensee that is not affiliated with a local spill cooperative must conduct its own exercise in the area where its operations are located. The licensee may choose between conducting an annual deployment training exercise or a tabletop exercise depending on the training needs for each area. A tabletop exercise cannot be used in consecutive years.				it is effective. 49 CFR 194.107(c): vii) Training procedures viii) Equipment testing ix) Drill program – an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.	
19	plans (requirement that specifies how often emergency response plans are to be updated, and/or submitted to the regulatory agency)	A company shall develop, implement and maintain an emergency	ERP Requirements, Section 4.2.2: Sour production facility ERPs must be continuously updated in the field to reflect changes in surface developments (wells, pipelines and facilities) within the EPZ. Any significant changes in the above [listed ERP content requirements] must be submitted to the OGC and plans updated. In addition to the above, sour production facility ERPs must be revised and updated at least annually (within 12 months of the date of the last submitted sour production facility ERP to the OGC).	ensuring that its sour	Not Currently Required	Not Currently Required	E2, Section 6(1): The person referred to in subsection 5(1) must update and test the environmental emergency plan at least once each calendar year to ensure that it continues to meet the regulatory requirements.	 49 CFR 194.121: (a) Each operator shall update its response plan to address new or different operating conditions or information. In addition, each operator shall review its response plan in full at least every 5 years from the date of the last submission or the last approval as follows: 1) For substantial harm plans, an operator shall resubmit its response plan to OPS every 5 years from the last submission date. 2) For significant and substantial harm plans, an operator shall resubmit every 5 years from the last approval date. 	The current ERP updating requirements specify 'sour' operations and reference the EPZ distance for the extent to which a licensee is to provide updated information. Modifications of this language are recommended to make response plan updates applicable to spill response plans. Potential wording for consideration include: "ERPs are to be continuously evaluated, and modifications made when applicable, to reflect changes in surface developments

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	T TOPOSCO = DIOC	Ottandard	Oil and Gas Activities Act (effective October 1, 2014), Section 10(1): A permit holder must review and, if necessary, update the information included in a plan: a) At least once a year b) After an evaluation of the response to an emergency is completed under Section 14 c) If the site-specific hazards and risks of the oil and gas activity that is the subject of the plan change significantly	, ,		(non marme)		(b) If a new or different operating condition or information would substantially affect the implementation of a response plan, the operator must immediately modify its response plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA.	and conditions that would impact emergency response activities. Such changes as the creation of a new river channel from flooding events, installation of a new pipeline/well, or new surface developments within the developments zone of impact (also known as response zone, EPZ) are to be evaluated against impacting the company's response procedures. Upon determination that the ERP requires updating to reflect the new circumstances, updating activities are to occur immediately and the appropriate notifications completed."
20	Process for implementing environmental and natural resources recovery (specific process or requirements outlined in regulation for restoring habitat and fish and wildlife populations impacted by a spill)	Remediation Process Guide, Section 6.1: At a minimum the Remedial Action Plan (RAP) should includecontrol measures and contingency plans to mitigate potential adverse effects to adjacent receptors such as human, water wells, surface water, livestock, vegetation and wildlife.	ERP Requirements, Section 7.2: If not exempted from the requirements of Section 7.1, a licensee must have a plan in place to address a release of any liquid product onto land or water from a well, pipeline, or facility described above. The plan in the form of a manual, must address: • A description of initial emergency response procedures and actions as well as all contacts • Containment and recovery procedures applicable to the type,	that may cause, is causing or has caused an adverse effect is released into the environment, the person responsible for the substance shall, as soon as that person becomes aware of our ought to have become aware of the release: a) Take all reasonable measures to: i. repair, remedy and confine the effects of the substance, and	EMPA, Section 14(2): Every person directly responsible for a discharge shall, within a period specified by the Minister: a) Prepare a remedial action plan for the contaminated site EMPA, Section 14(3): The person or persons directly responsible for a discharge shall submit the remedial action plan and any agreements for remedial action to the Minister for approval. GL2011-01, Section 8: A report detailing the	Not Currently Required	Not Currently Required	The regulatory oversight for this activity is performed by the US Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and/or the US Fish and Wildlife Service, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available.	The assessment of potentially impacted ecosystems, the service that these ecosystems provide, and the impacts caused by oil and hazardous substances is complex and often requires years. Seasonal influences, specifics on the oil or hazardous substances spilled including the amount and duration of the release, are all among the factors that impact how quickly resources are assessed, restored, and recovered.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
			volume, and nature of the production and time of year	manage, remove or otherwise dispose of the substance in such a manner as to prevent an adverse effect or further adverse effect. b) Restore the environment to a condition satisfactory to the Director	reclamation must be submitted to the appropriate ER regional office within six months of completing the reclamation. GL2011-01, Section 8.1: For spills that occur onlease, regardless of size, a reclamation summary describing activities that took place can be provided to ER via the 90-day written report or in a separate report if necessary or required. The reclamation summary will include: Sampling of contamination and soil test results Excavation details Confirmatory sampling and test results Disposal of soil details Any treatment of soil that took place Fill material details Restoration information Any further reclamation plans that are required but could not be implemented				environmental diversity within BC, providing specific universal environmental endpoints or processes for industry to follow may not meet the needs and site-specific conditions for every spill. As such, should the MoE indicate that new regulation for this draft regulatory standard is required; it is recommended that more global terminology and goals are stated rather than 'specific processes'.
24	Standards/elements to be addressed in an emergency response plan or geographic response plan required by regulation	Section 2: The contents of the emergency procedures	ERP Regulations, Section 3 – Corporate- level ERP ERP Regulations, Section 4 – Sour Gas and Sour Multiphase ERPs	Directive 071, Section 2 – Corporate-level ERPs Directive 071, Section 5 – Common Requirements for ERPs Directive 071, Sections	Not Currently Required	TDG Regulations Part 7, Section 7.2(2): The application for an Emergency Response Assistance Plan (ERAP) must be signed by the person submitting it and	E2, Section 4(3): The environmental emergency plan must include: a) A description of the factors considered	49 CFR 194.107(b): An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each	The current OGC ERP requirements are stringent and robust. Combined with the requirements of the WCSS Spill Contingency Manuals, no further modification

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				1					
			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
Number	Proposed = blue			` ` '	-14/244-				
		Manual distribution	ERP Regulations,	10.2.1 and 10.3.1:		must include the following:	under subsection (2)	applicable ACP as follows:	or new creation of
		lists	Section 7.2:	The spill response plan		a) The name and address	b) The identification of	1) As a minimum to be	regulation on this issue
		 Manual updating 	If not exempt from the	addresses a release of		of the place of business	any environmental	consistent with the NCP	is required.
		procedures and	requirements of Section	any liquid product onto		of the applicant	emergency that can	a facility response plan	
		schedule	7.1, a licensee must have			b) The telephone number	reasonably be	must:	
		 Description of initial 	a plan in place to	well, pipeline or facility.		including area code and	expected to occur at	i. Demonstrate an	
		actions when	address a release of any	The plan, which may		if applicable the	the place and that	operator's clear	
		someone reports an	liquid product onto land	consist of several		electronic mailing	would likely cause	understanding of the	
		incident	or water. The plan in the	different manuals,		address and facsimile	harm to the	function of the	
		 Definitions and 	form of a manual, must	contains the following:		number of the applicant	environment or	Federal response	
		levels of	address the following	A description of		c) The classification of the	constitute a danger to	structure, including	
		emergencies	components:	initial emergency		dangerous good to	human life or health	procedures to notify	
		· ·	a description of initial	,		which the ERAP relates	and identification of the	the National	
		Corporate and	emergency response	response procedures and			harm or danger	Response Center	
		operational chains	procedures and	actions, as well as		d) The type and size of the	c) A description of the	reflecting the	
		of command (e.g.,	actions, as well as all	information on all		means of containment	measures to be used to	relationship between	
		organization	contacts	contacts and		used to transport the	prevent, prepare for,	the operator's	
		structures)		services		dangerous good to which the ERAP relates	respond to and recover	response	
		 Management of 	an inventory of wells,				from any environmental	organization's role	
		threat information	pipelines and	An inventory of		e) The geographical area	emergency identified	and the Federal On	
		 Incident 	associated facilities	wells, pipelines		covered by the ERAP	under paragraph (b)	Scene Coordinator's	
		management	 topographical maps 	carrying liquids and associated facilities		f) The telephone number,		role in pollution	
		system (e.g., ICS)	showing designated			including area code, to	d) A list of the individuals	response;	
		Spill control	spill control points,	 Topographical 		call to have the ERAP	who are to carry into	ii. Establish provisions	
		procedures and	access roads, urban	maps showing		activated immediately	effect the plan in the	to ensure the	
		location of spill	centres, bodies of	designated spill		g) A description of the	event of an environmental	protection of safety at	
		control points	water and streams,	control points,		emergency response		the response site;	
		•	information related to	access roads,		capabilities available to	emergency and a	and	
		 Debriefing procedures 	water supply intakes	urban centres,		the person offering for	description of their roles and	iii. Identify the	
		•	for municipal and	bodies of water,		transport or importing	responsibilities	procedures to obtain	
		 Internal and 	industrial operations,	and water supply		dangerous goods	•	any required Federal	
		external	pipelines, wells and facilities within the	intakes for municipal and		h) A potential accident	e) The identification of the	and State	
		communication	operating area	industrial		assessment including:	training required for each of the individuals	permissions for using	
		 External 	operating area	operations,		i. A general analysis of	each of the individuals	alternative response	
		communication	 roles, responsibilities 	pipelines, wells and		how an accidental		strategies such as in-	
		information,	and expertise of	facilities within the		release of dangerous	f) A list of the emergency	situ burning and	
		warnings and	company personnel	operating area		goods could occur	response equipment	dispersants as	
		evacuations (e.g.,	to manage the			ii. A general description	included as part of the	provided for in the	
		public relations or	response	 Roles, responsibilities and 		of the potential	environmental	applicable ACPs.	
		media plan)	 policies for worker 	responsibilities and		consequences of an	emergency plan and	2) As a minimum, to be	
		 Alternative means 	safety at an oil spill	manage the		accidental release of	the equipment's	consistent with the	
		of communication	containment site	response		dangerous goods	location	applicable ACP the plan	
		 Roles and 		-		iii. A description of the	g) A description of the	must:	
		responsibilities for	inventory and	Policies for worker of the st		action the applicant is	measures to be taken	i. Address the removal	
		internal positions	location of response	safety at		expected to take in	by the person referred	of a worst-case	
		involved in a	equipment	emergency spill		the event of an	to in subsection (1) to	discharge and the	
		response (including	 containment and 	management sites			notify members of the	mitigation or	
			containment and	management sites		uie event oi an	notify members of the		

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
		contractors) Roles and responsibilities for agencies that would likely be involved in a response Environmental or other areas requiring special consideration or protection Detailed product information Internal and external reporting requirements Up-to-date internal and external contact lists Lists of persons in the EPZ Description and location of response equipment, including information on how to access the response equipment on a 24-hour basis Up-to-date area maps Mutual aid agreements or a reference to mutual aid agreements in the emergency procedures manual Forms and records	production and time of year annual training and exercise programs, a record of the training and exercise and recommendations for continuous improvement	 Inventory and location of response equipment Containment and recovery procedures applicable to the type, volume, and nature of the production and time of year Annual training and exercise programs, a record of the training and exercises and recommendations for continuous improvement 		accidental release or an imminent accidental release of dangerous goods iv. A copy of any formal agreement with a third party for the provision of assistance	public who may be adversely affected by an environmental emergency and to inform them of those measures and of what to do in the event of an environmental emergency	prevention of a substantial threat of a worst-case discharge; ii. Identify environmentally and economically sensitive areas; iii. Describe the responsibilities of the operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and iv. Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals. 49 CFR 194.107(c): Each response plan must include a core plan consisting of: i. An information summary as required in §194.113, ii. Immediate notification procedures, iii. Spill detection and mitigation procedures, iv. The name, address, and telephone number of the oil spill response organization, if appropriate, v. Response activities and response resources, vi. Names and	

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Line Item Prese	ritish Columbia BC) Regulatory Standard ently exists= Black roposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW- telephone numbers of Federal, State and local agencies which the operator expects to have pollution control responsibilities or support, vii. Training procedures,	Recommendations/ Comments for Consideration
(requii indust risk as hazard to the enviro	airement for astry to undertake a assessment of the ards they present e public, conment, and loyees)	OPR, Section 6.5(1)(a): A company shall as part of its management system establish and implement a process for identifying and analyzing all hazards and potential hazards: (d) establish and maintain an inventory of the identified hazards and potential hazards (e) establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal operating conditions (f) establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks	ERP Requirements, Section 7.5: Licensees that operate higher-risk facilities, such as: - Pipelines (carrying liquids) crossing named water bodies or - Facilities, wells, or pipelines (carrying liquids) located within 100m of a named water body must evaluate the risk and ensure that they have response capabilities and expertise, in addition to membership in a spill equipment cooperative.	Not Currently Required		TDG Regulations Part 7, Section 7.2(h): An ERAP must include the following information: • A potential accident assessment including: i. A general analysis of how an accidental release of dangerous good could occur ii. A general description of the potential consequence of an accidental release of dangerous goods iii. A description of the action the applicant is expected to take in the event of an accidental release or an imminent accidental release of dangerous goods	consequences from an environmental emergency on the environment and on human life or health	viii. Equipment testing, 49 CFR 194.103(c): A line section can be expected to cause significant and substantial harm to the environment in the event of a discharge of oil into or on the navigable waters or adjoining shorelines if; the pipeline is greater than 6% inches (168 millimeters) in outside nominal diameter, greater than 10 miles (16 kilometers) in length, and the line section— 1) Has experienced a release greater than 1,000 barrels (159 cubic meters) within the previous five years, 2) Has experienced two or more reportable releases, as defined in §195.50, within the previous five years, 3) Contains any electric resistance welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under §195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength	Licensees are currently required through ERP Requirement Section 7.5 to determine its higher risk facilities (such as pipelines, facilities, and wells in proximity to water bodies) and evaluate the risks to determine appropriate response actions and equipment needs. It is recommended that the current OGC regulation be modified to expand the listed facilities that may be considered high risk. Also, modifications to the current requirement are recommended to require the licensee to provide details of its risk determination and assessment process upon OGC request. Potential suggested wording includes: "— or any other petroleum infrastructure that the licensee has determined operates at a high risk" "The licensee is required to provide all

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			British Columbia Oil	1					
Line	British Columbia (BC) Regulatory Standard	National Energy Board	and Gas Commission (OGC) Regulatory Standard (pending implementation		Saskatchewan Energy	Transport Canada		Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
								of the pipe, 4) Is located within a 5-mile (8-kilometer) radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes, or	supporting documentation detailing its process for the determination of 'higher risk facilities' to the OGC upon request."
					_			5) Is located within a 1-mile (1.6-kilometer) radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas	
26	Minimum spill response times (requirements that outline the minimum time required for an RP to have staff on site to address a spill)	Not Currently Required	Not Currently Required	Not Currently Required		Not Currently Required		49 CFR 194.115(b): An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst-case discharge, or to mitigate the substantial threat of a discharge, as follows: - High Volume area • Tier 1: 6 hours • Tier 2: 30 hours • Tier 3: 54 hours • Tier 1: 12 hours • Tier 2: 36 hours • Tier 2: 36 hours	It is recommended that no regulations are developed detailing specific response times. The Oil and Gas Activities Act, Section 37(2) details the response requirements with which licensees are to comply. This regulation is sufficient to ensure an effective response.
27	Spill response equipment and caches (requirements for the amount, type and location of equipment to be located in accordance with the risk assessment of the	OPR Guidance Document Annex A, Section 8(1): • An assessment on whether firefighting and other special equipment is	ERP Requirements, Section 7.2: The [spill response contingency plan], in the form of a manual, must address: Inventory and	Directive 071, Sections 10.2.1 and 10.3.1: The spill response plan addresses a release of any liquid product onto land or water from any well, pipeline, or facility.	Not Currently Required	TDG Regulations Part 7, Section 7.2(2)(g): An ERAP must include: • A description of the emergency response capabilities available to the person offering for	emergency plan must include a list of the emergency response equipment included as part	49 CFR 194.115(b): An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst-	The Current ERP Requirements Section 7.2 regulation requires [in the absence of developing a licensee's own spill contingency plan] belonging to a spill cooperative where

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Line Item	Presently exists= Black	National Energy Board (NEB) Regulatory	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency	Alberta Energy	Saskatchewan Energy and Resources	Transport Canada Regulatory Standard	Facility and Consider	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements	Recommendations/ Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
	operation)	necessary based on the hazard assessment (as per CSAZ662 Clause 10.2.7). Sufficient response equipment is necessary to respond to a serious emergency as determined by their hazard assessment (CSA Z662 Clause 10.2.7.1). Placement of equipment should be based on people, property and environmental considerations to minimize response times and reduce potential impacts of incidents.	location of response equipment	The plan, which may consist of several different manuals, contains the following: Inventory and location of response equipment Directive 071, Section 10.3.2 (2): A licensee that is not a member of an oil spill cooperative must: Purchase appropriate spill cleanup equipment, considering the type of operations and terrain in which the licensee operates Maintain the equipment in good working order Store the equipment in the general area where it may be required and ensure immediate access to it Directive 071, Section 14.4(16): The licensee must ensure that equipment identified in the ERP is available and located where specified in the ERP for any operation.		transport or importing dangerous goods including: • A list of the specialized equipment that can be transported to and used at the site of an emergency • A description of the transportation arrangements to bring specialized emergency response personnel and equipment to the site of an emergency	emergency plan and the equipment's location.	case discharge, or to mitigate the substantial threat of a discharge, as follows: - High Volume area • Tier 1: 6 hours • Tier 2: 30 hours • Tier 3: 54 hours - All other areas • Tier 1: 12 hours • Tier 2: 36 hours • Tier 3: 60 hours	the spill response contingency plan details (among other items) the inventory and location of response equipment. The placement and type of spill response equipment available is not only a function of the potential spill sources, but also of existing infrastructure and environs that allow for the secure storage and accessibility to the equipment and resources. Therefore, mandating specific locations and equipment may not address the site-specific needs during an incident response.
28	(specific strategies an RP will put into place	OPR Guidance Document Annex A, Section 1: A company's hazard	ERP Regulations, Section 7.2: If not exempt from the requirements of Section	Directive 071, Section 10.2.1: The spill response plan addresses a release of	Not Currently Required	Not Currently Required		49 CFR 194.107(c)(1): A core plan consisting of— Response activities and response resources:	The specific strategies in which the RP would engage are currently required within the licensee's ERP as well

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Line	British Columbia (BC) Regulatory Standard	National Energy Board	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation		Saskatchewan Energy	Transport Canada		Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
20		assessment for its emergency management program should include: Consideration of the dangers arising from human activity in addition to natural perils Measures that could reduce or eliminate the hazard OPR Guidance Document Annex A, Section 2: The contents of the emergency procedures manual should include: Spill control procedures and locations of spill control points Environmental or other areas requiring special consideration or protection	address: a description of initial emergency response procedures and actions, as well as all contacts roles, responsibilities and expertise of company personnel to manage the response policies for worker safety at an oil spill containment site containment and recovery procedures applicable to the type, volume and nature of the production and time of year ERP Requirements, Section 4.3 – Public Protection Measures ERP Requirements, Section 4.3.1 – Notification ERP Requirements, Section 4.3.2 – Evacuation ERP Requirements, Section 4.3.3 – Sheltering	land or water from any well, pipeline, or facility. The plan, which may consist of many manuals, contains the following: • A description of initial emergency response procedures and actions	Not Currently Poquired	Not Currently Poquired	the environment of a substance specified on the List of Toxic Substances in Schedule 1 in contravention of a regulation any person shall as soon as possible in the circumstances: b) Take all reasonable measures consistent with the protection of the environment and public safety to prevent the release or, if it cannot be prevented, to remedy any dangerous condition or reduce or mitigate any danger to the environment or to human life or health that results from the release of the substance or may reasonably be expected to result if the substance is released E2, Section 4(3): The environmental emergency plan must include a description of the measures to be used to prevent, prepare for, respond to and recover from any environmental emergency identified under paragraph (b).	vii) Names and telephone numbers of Federal, State and local agencies which the operator expects to have pollution control responsibilities or support vii) Training procedures viii) Equipment testing	as the WCSS's spill contingency manuals. It is recommended that no further regulations be developed or current regulations modified to address this line item. Further regulation on this issue could create redundancy and jurisdictional overlap.
29	Staging strategies (requirements that specify how equipment is to be staged in geographic areas for	Not Currently Required.	ERP Requirements, Section 7.2: The [spill response contingency plan], in the	The spill response plan addresses a release of	Not Currently Required	Not Currently Required	Not Currently Required	49 CFR 194.115(b): An operator shall identify in the response plan the response resources which	Details of spill response staging strategies and procedures are provided within the WCSS spill contingency

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	spill readiness)		form of a manual, must address: Inventory and location of response equipment	any liquid product onto land or water from any well, pipeline, or facility. The plan, which may consist of many manuals, contains the following: Inventory and location of response equipment Directive 071, Section 10.3.2(2): A licensee that is not a member of an oil spill cooperative must: Purchase appropriate spill cleanup equipment, considering the type of operations and terrain in which the licensee operates Store the equipment in the general area where it may be required and ensure immediate access to it				are available to respond within the time specified, after discovery of a worst-case discharge, or to mitigate the substantial threat of a discharge, as follows: - High Volume area - Tier 1: 6 hours - Tier 2: 30 hours - Tier 3: 54 hours - All other areas - Tier 1: 12 hours - Tier 2: 36 hours - Tier 3: 60 hours	manual as are the responsibilities of the Staging Area Manager (or such emergency management response position). Through the development of roles and responsibilities for the spill response team, staging strategies will be developed. Therefore, it is recommended that no further requirements are needed for this issue, as both the WCSS spill contingency manual content and responsibilities (in addition to the current ERP Requirements Section 7.2) address this issue adequately.

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			British Columbia Oil and Gas Commission					Pipeline and Hazardous	
	British Columbia (BC) Regulatory Standard		(OGC) Regulatory Standard		Saskatchewan Energy			Material Safety Administration (PHMSA)- Emergency Response	
Line Item	Presently exists= Black	National Energy Board (NEB) Regulatory	(pending implementation of OGC's emergency	Alberta Energy	and Resources	Transport Canada Regulatory Standard		Requirements	Recommendations/ Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
30	monitoring, e.g. environmental	NEB Remediation Process Guide, Section 6.1: A RAP is a document which describes how the cleanup of a contaminated site will occur. At a minimum the RAP should include: • Method by which remediation will be conducted. This should include consideration of physical/chemical limitations, construction requirements, environmental as well as health and safety implications, regulatory approvals and public expectations. • Details of sampling and analysis to be performed and quality assurance and quality control measures to be implemented.	Not Currently Required	Requirements contained in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines, 2014	For spills that occur on- lease, regardless of size, a reclamation summary describing activities that took place can be provided to ER via the 90-day written report or in a separate report if necessary or required. The reclamation summary will include: Sampling of contamination and soil test results Excavation details Confirmatory sampling and test results Disposal of soil details Any treatment of soil that took place Fill material details Restoration information Any further reclamation plans	Not Currently Required	Not Currently Required	The regulatory oversight for this activity is performed by the US Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and/or the US Fish and Wildlife Service, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available through the Natural Resource Damage Assessment (NRDA) process as well as the Shoreline Cleanup Assessment Technique (SCAT) process.	CAPP is not opposed to the development of standard sampling procedures as long as the procedures are goal-based and not site-specific in nature. Such standards would be applicable to all industry sectors, thus creating a 'level playing field' for all stakeholders who have an interest in land in BC. CAPP does not agree with government dictating which consultant is to be retained by the Responsible Party. That is an internal business decision for which companies have internal procedures and policies that are outside the MoE's jurisdiction.
					that are required but could not be implemented				
31	Staff resources/capacity to address most probable and probable worst- case emergencies (requirement for plan to outline the staff and resources to be deployed to address the most probable and probable worst-case emergencies)	Not Currently Required	ERP Regulations, Section 1.1: A comprehensive ERP: Must be well organized to ensure quick access to critical information Coordinates activities among industry responders, emergency services,	Directive 071, Section 2 – Corporate-level ERPs Directive 071, Section 10.2.1: The [spill response] plan contains the following: • A description of initial emergency response	Not Currently Required	Not Currently Required	E2, Section 4(3): The environmental emergency plan must include: d) The identification of any environmental emergency that can reasonably be expected to occur at the place and that would likely cause	49 CFR 194.107(c)(2): (2) An appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a	This draft regulatory standard is currently addressed within the listed adjacent OGC requirements. No further modification or development of new regulations is required.

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Roard	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
Item	Presently exists= Black		of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number		(NEB) Regulatory Standard			-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-INEVV-	(non-marine)			Consideration
			local authorities,	procedures and			harm to the	core plan and a response	
			governments and	actions as well as			environment or	zone appendix. The	
			others who have a	information on all			constitute a danger to	operator of a single	
			role in providing an	contacts and			human life or health	response zone onshore	
			effective response	services			and identification of	pipeline shall have a single	
			Ensures	 An inventory of 			the harm or danger	summary in the plan that	
			communication with	wells, pipelines			Implementation Guidelines	contains the required	
			all parties involved in	carrying liquids and			for the Environmental	information in §194.113.7.	
			or potentially affected	· . ·			Emergency Regulations,		
			by the emergency	 Topographical 			Section 5.2, page 14:		
				maps showing					
			 Assists personnel in 	designated spill			To satisfy the requirements		
			determining the level	control points,			of Section 4 of the E2		
			of emergency and	access roads,			regulations, regulators		
			the appropriate	urban centres,			should develop accidental		
			response	bodies of water,			release scenarios for any		
			Clearly establishes	and water supply			facility based on any		
			roles and	intakes for			environmental emergency		
			responsibilities of all	municipal and			that can reasonably be		
			responders	industrial			expected to occur at that		
			·	operations,			place. For this reason,		
			• Etc.	pipelines and wells			regulators should focus on		
			An ERP addresses	• •			defining both a worst-case scenario in which the		
			worst-case emergency	• Roles,			contents of the largest		
			scenarios, potential	responsibilities and			container on-site are		
			hazards to the public and	resources to			released and alternative		
			systems required for	manage the			scenarios involving the		
			adequate response.	response			release of lesser amounts.		
			· ' '	 Policies for worker 			Telease of lesser afflourits.		
			ERP Requirements,	safety at					
			Section 3.1.4:	emergency spill					
			It [the ERP] must identify	management site					
			which response	• Etc.					
			management centres are	_10.					
			to be activated as a						
			result of a worst-case						
			emergency at its						
			operations, address the						
			roles and responsibilities						
			of personnel at each						
			centre and outline how						
			coordination and						
			communication between						
			centres will be managed.						
<u> </u>		<u> </u>	control will be managed.		l l		1	1	

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Line Item Number	Presently exists= Black Proposed = Blue	(NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
32		OPR, Section 32 (1) and (2) Guidance Document: An emergency procedures manual includes roles and responsibilities in the event of an emergency, response procedures, contact lists and relevant documentation including contact lists, maps, agreements and forms and records. OPR Guidance Document Annex A, Section 2: Contains Emergency Procedures Manual content.	ERP Requirements, Section 3.1.1 – Criteria for Classifying Incidents and Possible Action Plans	Directive 071, Section 2 – Corporate-level ERPs Directive 071, Section 10.2.1: The [spill response] plan contains the following: • A description of initial emergency response procedures and actions as well as information on all contacts and services • Roles, responsibilities and resources to manage the response • Policies for worker safety at emergency spill management site • Containment and recovery procedures applicable to the type, volume and nature of the production and time of year • Etc.	Not Currently Required	Emergency Response Guidebook 2012, Table 1: Lists initial isolation and protective action distances for small spills and large spills for each listed substance	E2, Section 4(3)(c): The environmental emergency plan must include a description of the measures to be used to prevent, prepare for, respond to and recover from any environmental emergency identified under paragraph (b).	Each response plan must include an appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst-case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in §194.113.7. 49 CFR 194, Appendix A, Section 9: Each response zone appendix would provide the following information: a) The name and telephone number of the qualified individual; b) Notification procedures; c) Spill detection and mitigation procedures; d) Name, address, and telephone number of oil spill response organization; e) Response activities and response resources including (1) Equipment and supplies necessary to meet §194.115, and (2) The trained personnel necessary to	No further development of new requirements or modifications of existing requirements is required, as the current OGC requirements for emergency response plan content, and the WCSS spill contingency plan content is sufficient to address this proposed regulatory standard.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
								sustain operation of the equipment and to staff the oil spill removal organization and spill management team for the first 7 days of the response;	
								f) Names and telephone numbers of Federal, state and local agencies which the operator expects to assume pollution response responsibilities;	
								g) The worst-case discharge volume;	
								h) The method used to determine the worst- case discharge volume, with calculations;	
								i) A map that clearly shows—	
								The location of the worst-case discharge, and	
								The distance between each line section in the response zone and—	
								i. Each potentially affected public drinking water intake, lake, river, and stream within a radius of 5 miles (8 kilometers) of the line section, and	
								ii. Each potentially affected environmentally sensitive area within a radius of 1 mile (1.6 kilometers) of the line section;	

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
								 j) A piping diagram and plan-profile drawing of each line section, which may be kept separate from the response plan if the location is identified; and k) For every oil type transported by each pipeline in the response zone, emergency 	
								response data that— 1) Include the name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods; and 2) Meet 29 CFR 1910.1200 or 49 CFR	
33	Spill response communication technology (criteria to be addressed within a plan that outlines the specific technology to be used to allow responders to communicate)	pertaining to technology. OPR Guidance Document Annex A, Section 2: The content of the emergency procedures manual should include: Internal and external communication Alternative means of communication	ERP Requirements, Section 3.1.2: Procedures must be established and detailed in the ERP for contacting and maintaining communications with key licensee personnel, government, support services, members of the public (in and outside of the EPZ), and the media. The licensee is required to identify all key communication systems and equipment needed to effectively respond to an emergency.	 (including location, number and type) of the following: Communications equipment for the public safety coordinator, rovers, roadblocks and air monitoring 	Not Currently Required	TDG Regulation Part 7, Section 7.2(g)(vi): An ERP must include a description of the emergency response capabilities available to the person offering for transport or importing dangerous good including a description of the communications systems that can be made available at the site of an emergency.	Not Currently Required	Not Currently Required	It is our opinion that no further modification or development of new regulation is required for this draft MoE regulatory standard. The current OGC communication plan requirements are expansive and address communication technology without prescribing a specific technology which may not be practicable within a specific area or align with a company's existing communication hardware.

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Comparison of Existing and Proposed Requirements for BC's Spill Preparedness and Response Across Regulators

Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
			response personnel)					

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			Buitish Columbia C'			T	1	T	1
			British Columbia Oil and Gas Commission					Pipeline and Hazardous	
	British Calumbia								
	British Columbia (BC) Regulatory		(OGC) Regulatory Standard					Material Safety Administration (PHMSA)-	
	Standard		Standard		Saskatchewan Energy			Emergency Response	
Line		National Energy Board			and Resources	Transport Canada		Requirements	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy		Regulatory Standard		·	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
34	Agency and public	OPR Guidance	ERP Requirements,	Directive 071, Section	Not Currently Required	TDG Regulations Part 8,	E2, Section 4(3)(g):	49 CFR 194.107(c)(1)(ii):	It is our opinion that no
	information	Document Annex A,	Section 3.1.2:	11.1.2(5):		Section 8.1(5):	A description of the	A core plan consisting of	further modification or
	communication	Section 2:	Procedures must be	After contacting the		A person must make an	measures to be taken by	immediate notification	development of new
	strategies during a spill	The contents of the	established and detailed	AER, the licensee must		immediate report to:	the person referred to in	procedures.	regulation is required
	(criteria to be	emergency procedures	in the ERP for contacting	notify the local			subsection (1) to notify	1'	for this draft MoE
	addressed in a	manual should include:	and maintaining	authority, the		a) The appropriate	members of the public who	49 CFR 194.107(c)(1)(vi):	regulatory standard.
	response plan that outline how the RP will	 Internal and 	communications with key	RCMP/police, the local		provincial authority	may be adversely affected	Names and telephone	The current communication plan
	provide information to	external	licensee personnel,	health authority, other		b) The person's employer	by an environmental	numbers of Federal, State	requirements required
	the public and	communication	government, support	applicable government		c) The consignor of the	emergency and to inform	and local agencies which	by the OGC are
	government during a	External	services, members of the	agencies, and support		dangerous goods	them of those measures	the operator expects to have	expansive and capture
	spill)	communication	public (in and outside of	services required to			and of what to do in the	pollution control	the MoE's objective of
	-T- /		the EPZ), and the media.	assist with initial		d) For a road vehicle, the	event of an environmental	responsibilities or support.	this draft regulatory
		and evacuations,	The licensee is required	response if the		owner, lessee or	emergency.		standard.
		alternative means of	to identify all key communication systems	hazardous release goes off site and has		charterer of the road			
		communication	and equipment needed to			vehicle			
		Up-to-date internal	effectively respond to an	the public or if the		e) For a railway vehicle,			
		and external contact		licensee has contacted		CANUTEC			
		lists		members of the public					
			ERP Requirements,	or the media.					
		 Lists of persons in the EPZ 	Section 3.1.2.1:	Directive 074					
		THE EFZ	An ERP must clearly	Directive 071, Appendix 8 –					
			define the responsibility	Information					
			to contact the OGC and	Disseminated to the					
			other responders in the	Public at the Onset of					
			event of an emergency.	and During an Incident.					
			ERP Requirements,	_					
			Section 3.1.2.2:	To those					
			The ERP must clearly	evacuated or					
			describe procedures that	sheltered at the onset:					
			will be implemented						
			during the incident to	 Type and status 					
			contact and maintain	of the incident					
			communications with	 Location and 					
			directly impacted	proximity of the					
			members of the public in	incident to					
			order to keep them	people in the					
			informed of the situation	vicinity					
			and actions being taken.	o Public					
				protection					
				measures to					
				follow,					
				evacuation					
				instructions,					
				and any other					
				emergency					

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
Number	Proposed = Blue	Standard	management regulation)	response measures to consider Actions being taken to respond to the situation, including anticipated time period Contacts for additional information To those evacuated or sheltered during: Description of the products involved and their short-term and long-term effects Effects the incident may have on people in the vicinity Areas impacted by the incident Actions the affected public should take if they experience adverse effects To the general public — during: Type and status of the incident Location of the incident		(non-marine)	Environment Canada	-NEW-	Consideration
				Areas impacted by the incidentDescription of					

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
	1 Topocou Bido		management regulation,	the products	1	(11011111111111111111111111111111111111		1.2	301101001011
				involved					
				 Contacts for 					
				additional					
				information					
				 Actions being 					
				taken to					
				respond to the					
				situation,					
				including					
				anticipated time					
				period					
35	Environmental	There are no current	ERP Requirements,	Not Currently Required	GL2011-01, Section 8.1:	Not Currently Required	Not Currently Required	The regulatory oversight for	It is recognized that,
	sampling (Air, soil and	requirements pertaining	Section 4.3.6:	, ,	·	, ,	, ,	this activity is performed by	within the OGC's2013
	water sampling) -	to air/soil and water	The time of air meanitering		For spills that occur on-			the US Environmental	Restoration Verification
	(plan criteria that	sampling during a spill.	The type of air monitoring unity and the number of		lease, regardless of size, a reclamation summary			Protection Agency, the	Audit Program
	addresses how the RP	NEB Remediation	monitors required are		describing activities that			National Oceanic and	Procedure Manual,
	will undertake	Process Guide, Section	based on site-specific		took place can be			Atmospheric Administration,	sampling intensities for
	environmental	6.	information, including:		provided to ER via the			and/or the US Fish and	specific site
	sampling during and	о. По.	intermation, moldang.		90-day written report or			Wildlife Service, for all spills	assessment categories
	after a spill)	At a minimum the	 Access and egress 		in a separate report if			within the boundary of the	are listed. Additionally,
		Remediation Action	points		necessary or required.			United States under the	within Schedule B - Site
		Plan (RAP) should	 Population density 		The reclamation			PHMSA as the Federal	Reclamation
		include:	and proximity to		summary will include:			Incident Commander.	Requirements, sampling procedures
		 A detailed map(s) 	urban density		Compliant			Information on the response	are detailed for surface
		that clearly	developments, and		 Sampling of contamination and 			process is available	leases and pipelines.
		identifies the	Local conditions		soil test results				• •
		contaminant source	Local conditions						As there are sampling
		location, affected	Air quality monitoring		 Excavation details 				procedures already
		surface and	must occur downwind,		 Confirmatory 				developed for a variety of petroleum
		subsurface area	with priority being		sampling and test				developments, it is
		and all sample	directed to the nearest		results				recommended that
		locations	un-evacuated residence		Diamagal (fig.)				these procedures be
		 Details of sampling 	or area where people		Disposal of soil				modified to apply to spill
		and analysis to be	may be present.		details				events.
		performed and	The minimum required		 Any treatment of soil 				
		quality assurance	criteria for mobile air		that took place				Development of
		and quality control	quality monitoring		Fill material details				environmental sampling procedures, such as
		measures to be	equipment are outlined in						those detailed by the
		implemented	Table 3.		 Restoration 				MoE's draft regulatory
		 Any proposed long- 	ERP Requirements,		information				standard in line item
		term monitoring	Section 4.3.6, Table 3 –		Any further reclamation				#30, is similar in scope
		program including	Downwind mobile air		plans that are required				and intent to this item,
		details and timing of	quality monitoring		but could not be				and thus could
		sampling and	requirements		implemented				represent duplication of
		analysis to be			-				-

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard performed	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration regulation. While
		penomeu	Schedule B – Site Reclamation Requirements						CAPP is not opposed to the development of standard sampling procedures, as long as the procedures are goal-based and not site-specific in nature, it is our position that how the Responsible Party would undertake environmental sampling during and after a spill would be addressed through complying with line item #30.
36		Not Currently Required ¹⁵	ERP Requirements, Section 4.3.6: The type of air monitoring unity and the number of monitors required are based on site-specific information, including: Access and egress points Population density and proximity to urban density developments, and Local conditions Air quality monitoring must occur downwind, with priority being directed to the nearest un-evacuated residence or area where people may be present. The minimum required criteria for mobile air quality monitoring equipment are outlined in Table 3.	Directive 071, Section 5.2.6 (11): The licensee must provide details in its ERP on the intended use and procedures surrounding the activation of air quality monitoring equipment, such as stationary and mobile air quality monitoring units and personal handheld monitors	Not Currently Required	Not Currently Required	Not Currently Required	49 CFR 194.107(c)(2): Each response plan must include an appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst-case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in §194.113.7. 49 CFR 194, Appendix A, Section 9: Each response zone appendix would provide the following information: a) The name and	It is recommended that the OGC develop a guidance document similar to the current Guidelines for Air Quality Dispersion Modelling in British Columbia, for water and soil dispersion. Such a document developed by the OGC would ensure that all licensees are operating under the same guidance document and that a consistent methodology and review procedures are applied to any data provided to the Commission should it be requested. Additionally, the development of any plan to address line item #30's intent would detail the Responsible Party's spill modeling approach and

OPR Section 48 states "A company shall develop, implement and maintain an environmental protection program that anticipates, prevents, manages and mitigates conditions that could adversely affect the environment."

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
			ERP Requirements, Section 4.3.6, Table 3 – Downwind mobile air quality monitoring requirements Guidelines for Air Quality Dispersion Modelling in British Columbia					telephone number of the qualified individual; b) Notification procedures; c) Spill detection and mitigation procedures; d) Name, address, and telephone number of oil spill response organization; e) Response activities and response resources including 1) Equipment and supplies necessary to meet §194.115, and 2) The trained personnel necessary to sustain operation of the equipment and to staff the oil spill removal organization and spill management team for the first 7 days of the response; f) Names and telephone numbers of Federal, state and local agencies which the operator expects to assume pollution response responsibilities; g) The worst-case discharge volume; h) The method used to determine the worst-case discharge volume, with calculations; i) A map that clearly shows— 1) The location of the worst-case discharge, and	cape does not agree with government dictating which consultant is to be retained by the Responsible Party. That is an internal business decision for which companies have internal procedures and policies that are outside the MoE's jurisdiction.

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	I	1	Duitich Calematic C'	1	Ī	Т		1	
			British Columbia Oil and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation		Saskatchewan Energy and Resources	Transport Canada		Emergency Response	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy		Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
								2) The distance between	
								each line section in the response zone	
								and—	
								i. Each potentially	
								affected public	
								drinking water	
								intake, lake, river,	
								and stream within a	
								radius of 5 miles (8	
								kilometers) of the line section, and	
								ii. Each potentially affected	
								environmentally	
								sensitive area within	
								a radius of 1 mile	
								(1.6 kilometers) of	
								the line section;	
								j) A piping diagram and	
								plan-profile drawing of each line section, which	
								may be kept separate	
								from the response plan	
								if the location is	
								identified; and	
								k) For every oil type	
								transported by each	
								pipeline in the response zone, emergency	
								response data that—	
								Include the name,	
								description, physical	
								and chemical	
								characteristics, health	
								and safety hazards,	
								and initial spill- handling and	
								firefighting methods;	
								and	
								2) Meet 29 CFR	
								1910.1200 or 49 CFR	
								172.602.	
37	Injured wildlife	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	The regulatory oversight for	It is noted that no other
	reporting (plan							this activity is performed by	studied jurisdiction has

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	requirements for outlining how reports of injured wildlife will be received and addressed, e.g. 1-800 reporting line)							the US EPA, the NOAA, and/or the USFWS, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available.	such a requirement within Canada. Injured wildlife would be reported through the incidents emergency management structure (e.g., ICS) where the appropriate Division or Strike Team (or equivalent) would report injured wildlife and take appropriate response actions. Communication with applicable external agencies would occur via the Liaison Office (or equivalent). Communication from stakeholders regarding oiled wildlife would occur as per the public information package through the 24-hour emergency number provided to the public and available on the Responsible Parties website.
38	Wildlife Management (hazing, etc.) – (Plan criteria requiring the RP to outline what measures will be taken during a spill to prevent wildlife from being impacted, and to address wildlife that has been impacted by a spill)	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required		The regulatory oversight for this activity is performed by the US EPA, the NOAA, and/or the USFWS, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available.	Details of wildlife management strategies are provided within the WCSS spill contingency manual as are the responsibilities of the Wildlife Manager (or such emergency management response position equivalent). Through the development of roles and responsibilities for the spill response team, wildlife management measures would be ready for

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration implementation. Therefore, it is recommended that no further requirements are needed for this issue.
40	Waste Management plan/protocols (plan criteria to be met that outline how wastes from a spill will be managed, e.g. contaminated spill booms)	Not Currently Required	Not Currently Required	OGCR, Part 8.051(e): Where oil, water or unrefined product is spoiled while being transported, otherwise than by pipeline, from a well, pipeline or other facility over which the Regulator has jurisdiction to any other like facility, the licensee of a well or pipeline or operator of the facility and the owner of the transportation facility shall immediately ensure that the spill material is treated or disposed of in accordance with Directive 058, 16 unless otherwise approved by the Regulator.	Not Currently Required	Not Currently Required	Not Currently Required	The regulatory oversight for this activity is performed by the US EPA for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available.	All oily and other wastes are required to be disposed of at an approved waste management facility ranked to accept the waste generated by the spill. As requirements already exist pertaining to this, no further regulatory standard development is required.
41	(criteria for evacuation)	OPR, Section 47: A company shall develop, implement and maintain a safety management program that anticipates, prevents, manages and mitigates potentially dangerous conditions and exposure to those conditions during all activities relating to construction, operation, maintenance, abandonment and	ERP Requirements, Section 4.3.2: Evacuation of the public within the EPZ must be initiated no later than a level 2 emergency in accordance with actions defined in the specific ERP if the zone of highest H2S release has been penetrated. Evacuation should commence with those	Directive 071, Section 5.2.2 (4): The licensee must address how evacuation from within the response zones will be accomplished during an incident, including how transients, such as hunters, trappers, recreational users, and non-resident landowners, will be located and evacuated.	Not Currently Required	Emergency Response Guidebook (ERG) 2012 Table 1: Listed substance sheets provide evacuation distance recommendations for large spill and fire related incidents.	Not Currently Required	49 CFR 194.107(e)(1)(v): Each response plan must include: A core plan consisting of response activities and response resources. 49 CFR 195.402(e): Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal	It is recommended that the evacuation procedures currently required and detailed within licensee's ERPs are applicable to those stakeholders impacted by a spill. No modification of current or development of new requirements is needed.

AER Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry

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Line			British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation		Saskatchewan Energy and Resources	Transport Canada		Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements	Recommendations/
Item Number	Presently exists= Black Proposed = Blue	(NEB) Regulatory Standard	of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	-NEW-	Regulatory Standard (non-marine)	Environment Canada	-NEW-	Comments for Consideration
		emergency situations. OPR Guidance Document, Section 47: A safety management program is focused on all hazards that have the potential to cause harm to the public, workers and contractors. OPR Guidance Document Annex A, Section 2: The contents of the emergency procedures manual should include: • External communication information, warning and evacuations	ERP Requirements, Section 4.3.2, Table 2 – Notification and evacuation requirements outside the EPZ	Directive 071, Section 5.2.2 (5): Special procedures may be required for evacuating public facilities. If large number of people are involved, the licensee must address assistance with transportation or changes in the normal notification procedures. Directive 071, Appendix 6 – Evacuation Requirements				operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to ensure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted. (e) Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs: 6) Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action. 7) Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a volatile	

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW- liquid.	Recommendations/ Comments for Consideration
42	Clean up assessments (e.g. Shoreline Cleanup Assessments) – (plan criteria to outline how assessments will be undertaken to determine how to clean impacted areas, and what are the end points for cleaning)	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required ¹⁷	Not Currently Required	Not Currently Required	The regulatory oversight for this activity is performed by the US EPA, the NOAA, and/or the USFWS, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available	It is recommended that reference to the licensee having the capability and expertise to develop such a plan immediately following the identification of a spill be developed. The recommendation is not to specify what should be included within such a response action plan or the development of such a plan prior to operations, but the recognition that licensees are to have such an action plan in place immediately following the detection of a spill.
43	Environmental damage assessments (criteria as to how damage to the environment is to be assessed, and how post treatment assessments will be conducted)	Not Currently Required	EMA, Division 3 – Liability for Remediation, Sections 45-47 Environmental Management and Reclamation – Schedule B – Site Reclamation Assessment - reclamation procedures and documentation requirements for surface leases and pipelines	Alberta Her II Soli and	EMPA, Section 7: Any person who discharges or allows the discharge of a substance into the environment shall: a) Take all reasonable measures to: i. Prevent, reduce and remedy the adverse effects of the substance ii. Remove or otherwise dispose of the substance in a manner that minimizes the adverse effects b) Restore the	Not Currently Required	Not Currently Required	The regulatory oversight for this activity is performed by the US EPA, the NOAA, and/or the USFWS, for all spills within the boundary of the United States under the PHMSA as the Federal Incident Commander. Information on the response process is available	Requirements for remediation and reclamation for surface leases and pipelines are currently detailed within the Environmental Management and Reclamation – Schedule B, documentation. As an alternative to developing new regulation towards this issue, it is recommended that the procedures and requirements stated in this document be expanded to include off lease and off right-of-

The Saskatchewan Petroleum Industry/Government Environmental Committee (SPIGEC) Guideline No. 3 – Restoration of Spill Sites on Saskatchewan Agriculture and Pasture Lands, Introduction states: "There are no "magic" numbers from a soil analysis to verify that the soil has been reclaimed. Indicators of sufficient reclamation are derived by comparing analysis obtained from the spill impacted soil with relevant off-site soil analysis (soils which have not been impacted by the spill and possess similar or relevant biophysical properties), referencing the most current provincial remediation criteria and national environmental quality criteria and monitoring the reclaimed soil's ability to sustain long term and relevant vegetation growth."

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
					environment to a condition satisfactory to the Minister c) Take any other measures that are necessary to protect or restore the environment EMPA, Section 14(2): Every person directly responsible for a				way oil spills.
BC MoF I	Policy Intention #2: Esta	ablishment of a Provinci	al Preparedness and Res		discharge shall, within a period specified by the Minister: a) Prepare a remedial action plan for the contaminated site	applicable to Intention #2)			
14	Response Organization certification (certification process to qualify a "response organization" involved in spill response)			Not Currently Required		Not Currently Required	Not Currently Required	Responsibility overseen by the US Coast Guard for waters of the USA; responsibility overseen by the U.S. Environmental Protection Agency (US EPA) for Onshore incidents.	Current regulations in BC and Alberta require a licensee to either develop its own oil spill response plan or belong to an oil spill cooperative.
									Throughout Alberta, the western portions of Saskatchewan, and the Northeastern portion of BC, the WCSS response organization is established as the oil spill cooperative for the petroleum industry.
									The mandate, vision, and response procedures of this organization are aligned with the proposed Provincial Preparedness and Response Organization (PRO) intention detailed

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
									by the MoE. It is recommended that the WCSS be recognized by the MoE as a PRO, capable of meeting the MoE's intent for the PRO. It is further recommended that the same jurisdictional acknowledgement afforded to the Western Canadian Marine Response Corporation (WCMRC) is applied to the WCSS.
BC MoE I	Policy Intention #3: Fur	nding for an Enhanced P	ı Provincial Environmental I	ı E mergency Program (all	I I line items listed below are	applicable to Intention #3)			
23	Funding to support government costs (staff and operational activities) – this is related to providing funding to support "prevention and preparation activities" that regulatory agencies need to undertake – and provide capacity to be involved in major spill responses if required	NEB Act, Section 24.1(1)(a): The NEB may, for the purposes of recovering all or a portion of such costs as the NEB determines to be attributable to its responsibilities under his or any other Act of Parliament, make regulations imposing fees, levies or charges on any person or company authorized under this Act to: i) construct or operate a pipeline, iii) export or import oil or gas.		Not Currently Required		TDG Act, Section 22(1): Her Majesty in right of Canada may recover the costs and expenses reasonably incurred while taking any measures under Section 17 or 19.	CEPA Part 8, Section 205(1)(c): Subject to this Part, the person who owns or has the charge, management or control of a substance immediately before an environmental emergency is liable, for costs and expenses incurred by the Minister in respect of measures taken to prevent, repair, remedy or minimize the environmental emergency to the extent that the measures taken and the costs and expenses are reasonable, and for any loss or damage caused by such measures.	Addressed through Congressional appropriations	Current regulatory provisions are in place through the Environmental Management Act (EMA) Spill Cost Recovery Regulation, Section 2. This regulation permits the recovery of governmental costs associated with response and postincident/ recovery activities. Through this and other noted regulations (Oil and Gas Conservation Act, sections 52 and 54, the Petroleum and Natural Gas Act), mechanisms are in place for government to recover a wide spectrum of costs associated with overseeing spill response and related activities. It is recommended that

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration no further modification of current or
									development of new regulations towards this issue occur.
6	Spill Cost Recovery (provides agency to recover their costs from the RP related to responding to a spill)	Not Currently Required	From the proceeds of spillage disposed of under Section 52(3)(1) or of petroleum or other substances disposed of under 53(2)(b), the commission: a) Must pay royalties owed with respect to the petroleum or natural gas under Part 10 of the Petroleum and Natural Gas Act b) After making the payments referred to in paragraph (a), may pay i. costs and expenses incurred as a result of proceedings taken under Section 52 and 53 ii. Costs and expenses of carrying out investigations and conservation measures that the commission considers necessary in connection with the exercise of its powers under Sections 52 and	Pipeline Act, Section 36(1)(b): When a substance escapes from a pipeline and it appears to the Regulator that the substance may not otherwise be contained and cleaned up forthwith, the Regulator may enter on the area where the substance has escaped and conduct any operations it considers necessary to contain and clean up the substance that has escaped and to prevent further escape of the substance. Pipeline Act, Section 36(2)(b): When the Regulator enters on an area pursuant to Section 36(1)(b), the Regulator may recover, deal with and dispose of the escaped substance as if it were the property of the Regulator, and if any escaped substance is sold, apply the proceeds to pay the costs and expenses of the operations conducted by the Regulator. Pipeline Act, Section		TDG Act, Section 22(1): Her Majesty in right of Canada may recover the costs and expenses reasonably incurred while taking any measures under Section 17 or 19. ¹⁸	CEPA Part 8, Section 203(1): Her Majesty in right of Canada may recover the costs and expenses of and incidental to taking any measures under subsection 201(4) from: c) Any person referred to in paragraph 201(2)(a), and d) Any person referred to in paragraph 201(2)(b) to the extent of their negligence or wilful conduct in causing or contributing to the environmental emergency CEPA Part 8, Section 203(2): The costs and expenses referred to in subsection 1 shall only be recovered to the extent that they can be established to have been reasonably incurred in the circumstances. CEPA Part 8, Section 205(1)(b): Subject to this Part, the person who owns or has the charge, management or control of a substance immediately before an environmental emergency is liable for costs and	Oil Pollution Act, 1990 (OPA 90) 33 United States Code (USC) 2702(a) and (b)(1)(A): a) In general notwithstanding any other provision or rule of law, and subject to the provisions of this Act, each responsible party for a vessel or a facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, into or upon the navigable waters or adjoining shorelines or the exclusive economic zone is liable for the removal costs and damages specified in subsection (b) of this section that result from such incident. b) Covered removal costs and damages 1) Removal costs The removal costs referred to in subsection (a) of this section are: (A) all removal costs incurred by the United States, a State, or an Indian tribe under subsection (c), (d), (e), or (l) of Section 1321 of this title, under the Intervention on the High	Current regulatory provisions are in place through the Environmental Management Act (EMA) Spill Cost Recovery Regulation, Section 2. This regulation permits the recovery of governmental costs associated with response and post-incident/ recovery activities. Through this and other noted regulations (Oil and Gas Conservation Act, sections 52 and 54, the Petroleum and Natural Gas Act), mechanisms are in place for government to recover a wide spectrum of costs associated with overseeing spill response and related activities. It is recommended that no further modification of current or development of new regulations towards this issue occur.

TDG Act Section 17 is applicable to an inspector remedying non-compliance issues. Section 19 is applicable to the inspector's intervention authority.

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Board	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
Item	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard		Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
Number	Proposed = Blue	Standard	management regulation)		-INEVV-	(HOH-Marme)			Consideration
			53	36(3):			expenses incurred by a	Seas Act (33 USC 1471 et	
			OGCA, Section 52(3)(b):	When any operations			public department ¹⁹ within	seq.), or under State law.	
			. , , ,	are considered			the meaning of the Criminal		
			If costs or expenses are	pursuant to this			Code or other public		
			incurred by the	section, the Regulator			authority in Canada in		
			commission in	may determine the			respect of measures taken		
			implementing or carrying	costs and expenses of			to prevent, repair, remedy		
			out measures to contain	the operations and			or minimize the damage to the environment resulting		
			and eliminate spillage or	direct by whom and to			from the emergency,		
			making a reimbursement under subsection (2), the	what extent they are to			including measures taken		
			commission may order:	be paid.			in anticipation of the		
				EPEA, Section 30(2):			environmental emergency,		
			 the permit holder, 	, ,			to the extent that the		
			or	The Environmental			measures taken and the		
			ii. the person who	Protection and			costs and expenses are		
			the commission	Enhancement Fund			reasonable, and for any		
			believes is	shall be used for the			loss or damage caused by		
			responsible for the	purposes of			such measures.		
			spillage or for the	environmental					
			likely source or	protection and			CEPA Part 8, Section		
			cause of the	enhancement and			205(1)(c):		
			spillage	emergencies with			For costs and expenses		
				respect to any matter			incurred by the Minister in		
			to pay the costs and	that is under the			respect of measures taken		
			expenses, or a part of	administration of the			to prevent, repair, remedy		
			them.	Minister.			or minimize the		
			OGCA, Section 52(3)(c):				environmental emergency		
							to the extent that the		
			{the commission may]				measures taken and the		
			Order the permit holder or person referred to in				costs and expenses are		
			paragraph (b) to				reasonable, and for any		
			indemnify the				loss or damage caused by		
			commission for costs or				such measures.		
			expenses paid by the				Fisheries Act, Section		
			commission.				42(2):		
							All the costs and expenses		
			Petroleum and Natural				referred to in subsection (1)		
			Gas Act (PNGA), Section				are recoverable by Her		
			170(1)(b):				Majesty in right of Canada		
			Subject to any				or a province with costs in		
			regulations, the board				proceedings brought or		
			may order a party to an				taken therefore in the name		
			application under this				of Her Majesty in any such		
			Part or an intervener to				right in any court of		
			1. 3.1 5. 3.1 11101 701101 10	i	1		Ingine in any obtain of		

As per the Canadian Criminal Code (https://laws-lois.justice.gc.ca/Search/Search.aspx?txtS3archA11=public+department+&txtT1tl3=%22Criminal+Code%22&h1ts0n1y=0&ddC0nt3ntTyp3=Acts), a public department means "a department of the Government of Canada or a branch thereof or a board, commission, corporation or other body that is an agency of Her Majesty in right of Canada."

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			British Columbia Oil						
			and Gas Commission					Pipeline and Hazardous	
	British Columbia		(OGC) Regulatory					Material Safety	
	(BC) Regulatory		Standard					Administration (PHMSA)-	
Line	Standard	National Energy Roard	(pending implementation		Saskatchewan Energy	Transport Canada		Emergency Response	Recommendations/
	Presently exists= Black	(NEB) Regulatory	of OGC's emergency	Alberta Energy	and Resources	Regulatory Standard		Requirements	Comments for
Number	Proposed = Blue	Standard	management regulation)	Regulator (AER)	-NEW-	(non-marine)	Environment Canada	-NEW-	Consideration
Hamber	1 Toposea = Blac	Gtaridard		regulator (AER)	NEW	(non marme)		14244	Consideration
			pay part of the actual				competent jurisdiction.		
			reasonable legal fees						
			and disbursements and						
			other reasonable costs						
			and expenses incurred						
			by the board in connection with the						
			application, if the board considers the conduct of						
			a party or intervener has been improper,						
			vexatious, frivolous or						
			abusive.						
			abusive.						
			Environmental						
			Management Act (EMA)						
			- Spill Cost Recovery						
			Regulation Section 2(1):						
			The expenditures for the						
			following by or on behalf						
			of the government are, in						
			addition to any other						
			costs incurred by						
			government in the						
			matter, to be applied for						
			the purposes of the						
			determination of						
			reasonable costs of spill						
			response actions under						
			Section 80 of the EMA						
			(a) hours of field						
			response and office						
			activities						
			undertaken by one						
			or more responding						
			government						
			employees						
			(b) hourly charge of						
			responding						
			government						
			employees						
			(c) kilometres traveled						
			by government						
			vehicles						
			(d) distance charges for						
			use of government						
			vehicles						
			(e) food and						
			accommodation						

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue		British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
110	1 Topocod Bido	0.0	expenditures	i roganator (r i=r t)		(iiiiiiiiiiii)			00110101011
			expenditures (f) private goods and series contracted, hired, rented or purchased (g) consulting and other professional charges (h) rent on use of government equipment (i) replacement, repair or cleaning of damaged or used response equipment, directly resulting from field response action undertaken (j) research and analysis series related to post-incident evaluation, contingency plan reviews, cleanup certification and other incident follow-up activities.						
21	Spill contingency funding (Requirements for industry to contribute to a contingency fund that is accessible by first responders, including municipal, First Nation, provincial and federal government to ensure a timely response to a spill)	Not Currently Required	· '	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	OPA 90 [26 USC 9509(b)(1)]: b) Transfers to Trust Fund There are hereby appropriated to the Oil Spill Liability Trust Fund amounts equivalent to— (1) taxes received in the Treasury under Section 4611 (relating to environmental tax on petroleum) to the extent attributable to the Oil Spill Liability Trust Fund financing rate under Section 4611(c).	Such funding is not required by other jurisdictions in Canada, as demonstrated within this comparison chart. As such, it is recommended that no new regulation development occurs requiring the establishment of such a fund.
22	Cost recovery for loss of public use of the environment due to a spill (requirements to	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	Not Currently Required	CEPA Part 8, Section 205(1)(b): Subject to this Part, the person who owns or has	OPA 90 [33 USC 2702(b)(2)(A), (C), and (F): (b) Covered removal costs	It is recommended that no modification of current or development of new regulations

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
	recover compensation from a RP due to the public use of the environment or natural resources being impacted by a spill, e.g. sport fishery impacted due to fish kill. This is not to address 3 rd party damages, which are addressed through specific damage claim processes)						or control of a substance immediately before an environmental emergency is liable, for costs and expenses incurred by a public department within the meaning of the Criminal Code or other public authority in Canada in respect of measures taken to prevent, repair, remedy or minimize the same to the environment resulting from the emergency, including measures taken in anticipation of the environmental emergency, to the extent that the measures taken and the costs and expenses are reasonable, and for any loss or damage caused by such measures.	and damages (2) Damages, The damages referred to [include]: (A) Natural Resources – damages for injury to, destruction of, loss of use of, natural resources, including the reasonable costs of assessing the damage, which shall be recoverable by a US trustee, a State trustee, an Indian tribe trustee, or a foreign trustee, (C) Subsistence use: Damages for loss of subsistence use of natural resources, which shall be recoverable by any claimant who so uses natural resources which have been injured, destroyed, or lost without regard to the ownership or management of the resources, (F) Public Services – Damages for net costs of providing increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by a discharge of oil, which shall be recoverable by a State or a political subdivision of a State. 33 USC 2706 – Natural Resource [Damage]	towards this issue occur. Licensees are required to have in place security/performance bonds and financial guarantees prior to operating in an area. These bonds act as a guarantee that the licensee will comply with any statute, law, municipal by-law, or regulation that is applicable to its operations and are available for use by the government instead of placing the responsibility of paying for remediation and other activities with taxpayer dollars.
39	Damage claims process (3 rd party claims process)	Not Currently Required	Not Currently Required	 EPEA, Section 131: The Minister may: a) In accordance with any applicable regulations b) In the absence of any applicable regulations, in the 	Not Currently Required	Not Currently Required	CEPA Part 8, Section 205(6): Nothing in this Part shall be construed as limiting or restricting any right of recourse that the person who is liable under subsection (1) may have against any other person.	OPA 90 (33 CFR 136 Oil Spill Liability Trust Fund, Claims, Procedures, Designations of Source and Advertisement)	Licensees are required to have securities and insurance in place prior to commencement of operations. Any third-party claims are paid through such financial means, and additional third-party liability funds

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	National Energy Board (NEB) Regulatory Standard	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
				manner and amount the Minister considers appropriate pay compensation to any person who suffers loss or damage as a direct result of the application of this Division [Contaminated Sites].			CEPA Part 8, Section 206: Costs and expenses incurred by the person referred to in subsection (1) in respect of measures voluntarily taken to prevent, repair, remedy or minimize same from the environmental emergency, including measures taken in anticipation of any environmental emergency, to the extent that the measures taken and the costs and expenses are reasonable, rank equally with other claims against any security given by that person in respect of that person's liability under this section.		are not required.
Other							Section.		
18	records management	OPR, Section 56: A company shall, in addition to complying with the record retention requirements set out in the [applicable] CSA standards, retain: • An annual report on the training program developed that compares the actual training received by employees to the planned training	Petroleum & LNG Regulation, Section 12: A pipeline permit holder and an LNG facility permit holder must maintain records of any spillage and any damage or malfunction likely to cause spillage that could be a risk to public safety or the environment. Petroleum & LNG Regulation, Section 13: A pipeline permit holder must comply with the record retention requirements set out in CSA Z662 and Annex N of CSA Z662. ERP Requirements, Section 7.4: A copy of the training exercise report summary	Records of staff training Within 60 days of an exercise, a report of exercise results to be maintained for assessment purposes that includes: type of exercise held, scope and objectives, persons involved, outcome, lesson learned, action plan,		TDG Regulations Part 6, Section 6.6: An employer or a self- employed person must keep a record of training or a statement of experience, as well as a copy of a training certificate, in electronic or paper form, beginning on the date the training certificate is issued and continuing until 2 years after the date it expires.	emergency] plan, a record of the results from the annual updates and tests for a period of not less than five years beginning the	a training record for each individual that has been trained as required by this section. These records must	Upon comparison of the various jurisdictions record retention policies, a slight discrepancy exists between emergency response plans and spill plan response documentation. In order to provide consistency in application across jurisdictions listed, it is recommended that a 3-year (minimum) record retention requirement be detailed within the OGC's regulations.

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Line Item Number	British Columbia (BC) Regulatory Standard Presently exists= Black Proposed = Blue	British Columbia Oil and Gas Commission (OGC) Regulatory Standard (pending implementation of OGC's emergency management regulation)	Alberta Energy Regulator (AER)	Saskatchewan Energy and Resources -NEW-	Transport Canada Regulatory Standard (non-marine)	Environment Canada	Pipeline and Hazardous Material Safety Administration (PHMSA)- Emergency Response Requirements -NEW-	Recommendations/ Comments for Consideration
		management regulation) must be completed within 30 days following the training exercise. These reports must be available to the OGC upon request for a period of two years following each training exercise.	including timelines Documentation of all pre-sour and/or critical sour meetings, such as meeting sign-in sheets, invitations and minutes for possible review by the AER ER Assessment Program The licensee is expected to retain all records for a period of three years Directive 071, Section 16.1.2(3): The spill cooperative must complete the training exercise repot summary within 30 days following the training exercise and make it available to the AER upon request for a period of two years following each training exercise. Directive 071, Section 16.2.2(7): The licensee [nonmember of an oil spill coop] must complete the training exercise report summary within 30 days following the			Environment Canada	-NEW-	
			training exercise and make it available to the AER upon request for a period of two years following each training					

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APPENDIX 1: GAP ANALYSIS REVIEW DOCUMENTS

National Energy Board (NEB) Review Documents

- Onshore Pipeline Regulations
 - http://laws-lois.justice.gc.ca/eng/regulations/SOR-99-294/FullText.html
- Onshore Pipeline Regulations Guidance Document
 - o http://www.neb-one.gc.ca/clf-nsi/rpblctn/ctsndrgltn/rrggnmgpnb/nshrppln/gdncntnshrpplnrgltn-eng.html
- Incident Report Form
 - o http://www.neb-one.gc.ca/clf-nsi/rpblctn/ctsndrgltn/rrggnmgpnb/nshrppln/incidnt_e.pdf
- NEB Cost Recovery Regulations
 - o http://laws-lois.justice.gc.ca/PDF/SOR-91-7.pdf
- NEB Act
 - http://laws-lois.justice.gc.ca/eng/acts/N-7/index.html

British Columbia Oil and Gas Commission (OGC)

- Oil and Gas Activities Act
 - o http://www.bclaws.ca/civix/document/id/complete/statreg/08036_01
- Petroleum and Natural Gas Act
 - http://www.bclaws.ca/civix/document/id/complete/statreg/96361_01
- Environmental Management Act
 - o http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/03053_00
- Pipeline and Liquefied Natural Gas Facility Regulation
 - o http://www.canlii.org/en/bc/laws/regu/bc-reg-281-2010/latest/bc-reg-281-2010.html
- Producing Well, Pipeline and Facility Emergency Response Plan Requirements
 - o http://www.bcogc.ca/industry-zone/documentation/Emergency-Response-and-Safety
- Environmental Management and Reclamation Schedule B Site Reclamation Assessment
 - http://www.bcogc.ca/node/5756/download
- Guidelines for Air Quality Dispersion Modeling in British Columbia (March 2001)
 - o http://www.env.gov.bc.ca/epd/bcairquality/reports/pdfs/air_disp_model_08.pdf
- 2013 Restoration Verification Audit Program Procedure Manual
 - http://www.bcogc.ca/node/8029/download
- Site Reclamation Requirements Schedule B
 - o http://www.bcogc.ca/node/5756/download

Alberta Energy Regulator (AER)

- Pipeline Act
 - http://www.qp.alberta.ca/documents/Acts/p15.pdf
- Pipeline Rules
 - o http://www.qp.alberta.ca/documents/Regs/2005_091.pdf
- Oil and Gas Conservation Rules
 - http://www.qp.alberta.ca/documents/Regs/1971_151.pdf
- Environment Protection and Enhancement Act, 2000
 - o http://www.qp.alberta.ca/documents/acts/e12.pdf
- Directive 071 Emergency Preparedness and Response Requirements for the Petroleum Industry
 - o http://www.aer.ca/rules-and-regulations/directives/directive-071
- Directive 077: Pipeline Requirements and Reference Tools
 - http://www.aer.ca/documents/directives/Directive077.pdf
- Soil Monitoring Directive
 - http://esrd.alberta.ca/lands-forests/land-industrial/inspections-andcompliance/documents/SoilMonitoringDirective-May2009.pdf
- Alberta Environment Fact Sheet: Siting an Upstream Oil and Gas Site in an Environmentally Sensitive Area on Private Land:
 - o http://environment.gov.ab.ca/info/library/5940.pdf

Comparison of Existing and Proposed Requirements for BC's Spill Preparedness and Response across Regulators

- Guide to the Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body, Including Guidelines for Complying with the Code of Practice
 - o http://esrd.alberta.ca/water/legislation-guidelines/documents/PipelineGuide.pdf
- Alberta Tier 1 Soil and Groundwater Remediation Guidelines, 2014
 - http://esrd.alberta.ca/lands-forests/land-industrial/inspections-and-compliance/documents/AlbertaTier1Guidelines-May23-2014.pdf

Saskatchewan Energy and Resources (SER)

- Emergency Planning Act 1989
 - o http://www.publications.gov.sk.ca/details.cfm?p=504
- The Provincial Disaster Assistance Program Regulations, 2011
 - o http://www.publications.gov.sk.ca/details.cfm?p=32019
- The Pipeline Regulations, 2000
 - o http://www.qp.gov.sk.ca/documents/English/Regulations/Regulations/P12-1R1.pdf
- SaskSpills Program Ministry of Environment
 - http://www.saskspills.ca/about.asp
- Saskatchewan Upstream Oil and Gas Industry Spill and Incident Reporting Guidelines
 - o http://economy.gov.sk.ca/PDBENV19
- The Environmental Management and Protection Act, 2002
 - o http://www.qp.gov.sk.ca/documents/english/Statutes/Statutes/e10-21.pdf
- Environmental Spill Control Regulations
 - o http://www.saskspills.ca/PDF/d14r1-env_spill_control_regs.pdf
- Oil and Gas Conservation Act 2012
 - o http://www.qp.gov.sk.ca/documents/gazette/part2/2012/G2201214.pdf

Transport Canada

- Transportation of Dangerous Goods Act
 - o http://laws-lois.justice.gc.ca/PDF/T-19.01.pdf
- Transportation of Dangerous Good Regulations
 - o http://www.tc.gc.ca/eng/tdg/clear-download-372.htm
- CANUTEC Emergency Response Guidebook, 2012
 - o http://www.tc.gc.ca/eng/canutec/guide-menu-227.htm

Environment Canada

- Fisheries Act
 - http://laws-lois.justice.gc.ca/PDF/F-14.pdf
- Canadian Environmental Quality Guidelines, 2012
 - o http://documents.ccme.ca/
- Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method
 - http://www.ccme.ca/assets/pdf/final_phc_method_rvsd_e.pdf
- Canadian Environmental Protection Act, 1999
 - http://www.ec.gc.ca/lcpe-cepa/26A03BFA-C67E-4322-AFCA-2C40015E741C/lcpe-cepa_201310125_loibill.pdf
- Environmental Emergency Regulations (E2)
 - http://laws-lois.justice.gc.ca/PDF/SOR-2003-307.pdf
- Implementation Guidelines for the Environmental Emergency Regulations
 - http://www.ec.gc.ca/lcpe-cepa/1FB6D405-BFE5-4CA1-96F9-89E40F75221E/rev guidelines e2 regulations-eng.pdf

Comparison of Existing and Proposed Requirements for BC's Spill Preparedness and Response across Regulators

Pipeline and Hazardous Materials Safety Administration, Department of Transportation

- Title 49 Transportation, Volumes 2 and 3
 - o http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49tab_02.tpl
- Oil Pollution Act, 1990 (OPA) Title 33-Navigation and Navigable Waters, Chapter 40 Oil Pollution
 - o http://www.gpo.gov/fdsys/pkg/USCODE-2010-title33/html/USCODE-2010-title33-chap40.htm
- Oil Spill Liability Trust Fund: Claims Procedures; Designation of Source; and Advertisement
 - o http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=33:2.0.1.2.7
- Environmental Quality Oil Spill Preparedness and Response
 - o http://www.fws.gov/contaminants/issues/oilspill.cfm



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July 24, 2014

Ms. Cindy Bertram
C. Rankin & Associates
PO Box 28159 Westshore RPO
Victoria, BC V9B 6K8
Email: cindybertram@shaw.ca

Dear Ms. Bertram,

Re: Canadian Energy Pipeline Association Response to the Land Based Spill Preparedness and Response in British Columbia Policy Intentions Paper for Consultation (April 2014)

On behalf of the Canadian Energy Pipeline Association (CEPA), I would like to thank the British Columbia Ministry of the Environment for the opportunity to provide comments on the government's second policy intentions paper on land based spill response. CEPA members are committed to working collaboratively with all levels of government and other stakeholders to further earn the trust of Canadians. This includes acknowledging the need for a world leading spill response system for the province.

Attached are comments that represent the views of the transmission pipeline industry. Please contact Amanda Affonso, Director, Regulatory and Financial at 403-221-8756 or aaffonso@cepa.com, if you have any questions or require further elaboration of our comments.

Sincerely,

Chief Operating Officer

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1. Canadian Energy Pipeline: Association Response to the Land Based Spill Preparedness and Response in British Columbia Policy Intentions Paper for Consultation (April 2014)

On behalf of the Canadian Energy Pipeline Association (CEPA), please accept comments on the *Land Based Spill Preparedness and Response in British Columbia* Policy Intentions Paper (April 2014). CEPA members are the companies that operate 115,000 kilometres of transmission pipeline in Canada. Our members transport 97 per cent of Canada's daily natural gas and onshore crude oil production from producing regions to markets throughout Canada and the US in a manner that emphasizes safety, pipeline integrity, and social and environmental stewardship.

CEPA supports the Ministry's guiding principles presented in the Policy Intentions Paper for Consultation. Specifically they are:

 Polluter pays, requirements are based on risk, avoid unnecessary duplication, fair and transparent, opportunities for communities and First Nations in preparedness and response, strong government oversight, and continuous improvement.

The transmission pipeline industry operates in a unique regulatory landscape and has proven to be a safe and reliable form of energy transportation. CEPA member companies have made a commitment to zero incidents and, if a spill were to occur, our members have both the means and the capabilities to respond in an efficient and effective manner to mitigate the impact to the environment and the public. Our operations are heavily regulated by both provincial and federal agencies to ensure that we continue to operate with a high standard for safety and reliability.

As outlined in our paper, "World leading Land Based Spill Preparedness and Response in British Columbia: The Perspective of Large Liquid Hydrocarbon Transporters", we believe the establishment of an Industry Steering Committee (ISC), meets the Ministry's guiding principles. This document presents the perspective of a group formed through collaboration and composed of CEPA, the Railway Association of Canada (RAC), the Western Canada Marine Response Corporation (WCMRC) and Western Canadian Spill Services Ltd. (WCSS). The paper articulates a clear vision for a world leading, robust and continuously improving land based spill preparedness and response capacity in British Columbia. It extracts maximum leverage and benefits from existing systems, organizations and capabilities, and it ensures seamless and effective implementation of evolving policies and regulations of other provinces and of the Federal Government.

While CEPA supports the guiding principles, there are recommendations that may improve the clarity of the Ministry's goals. They are:

- CEPA supports the concept of a single window regulator. Additional regulations
 proposed by the BC Ministry of Environment should not be applied to the
 transmission pipeline industry.
- 2. CEPA recommends that the Ministry endorse a multi-stakeholder Industry Steering Committee.
- 3. CEPA members benefit from strong government oversight, cost recovered by industry. Additional funding mechanisms for the province's Environmental Emergency program should not be applied to the transmission pipeline industry.

The following comments provide further elaboration and rationale to our recommendations.

2. New Requirements for preparedness, response and restoration

CEPA supports seeking a comprehensive and effective world-leading regime for land based spill preparedness and response, built on a philosophy of continuous improvement. However, transmission pipeline companies should not be subject to measures that are required to address other transporters that are not otherwise captured through regulations. Other energy transportation industries, that lack equipment, regular exercises, cooperative agreements and other tools that the transmission pipeline industry has at its disposal, may benefit from enhanced requirements. Our industry already demonstrates and is committed to continually improving on sustainable effective spill preparedness and response programs that meet regulatory and public expectations, without the development of additional regulations.

The intention paper states:

"For sectors and individual companies that already meet high standards under regulatory authorities other than the B.C. Ministry of Environment, the major implication of these intentions will likely be limited to increased obligations for coordination, collaboration and communication."

CEPA members fall within this category. CEPA and the Railway Association of Canada have recommended the formation of an Industry Steering Committee (ISC) to increase coordination, collaboration and communication related to emergency preparedness and response. The Ministry of Environment's guiding principles would be best and most expeditiously achieved by harnessing and coordinating existing expertise, experience, capabilities and equipment through an ISC. A ISC one-window approach for coordination and communications would ensure effective and sustainable land based spill preparedness, response and recovery, while continuing to allow individual companies to address their specific risks.

2.1. Polluter pays

CEPA supports the polluter pays principle. Our member companies have a strong track record of appropriate restoration of the environment subsequent to a spill, without any financial consequence borne by the public. This has always included consideration for loss of public use, repair of public and private property and other effects resulting from a spill incident.

CEPA does not support the imposition of a formulaic, punitive approach to loss of use considerations. An effective regulatory regime should enable "fit for purpose" regulations for pipelines, recognizing that transmission pipelines are different from other modes of energy transportation, with different footprints and surface impacts. We believe the federal proposal requiring companies operating major crude oil pipelines to have a minimum of \$1 billion in financial capacity to respond to leaks, spills and ruptures is an appropriate requirement for the transmission pipeline industry. It is also worth noting that owners at fault would have unlimited liability placed on them under the federal proposal. We encourage the BC government to work with the federal government to eliminate duplication and to create pathways to build on this new regulation provincially.

2.2. Avoid unnecessary duplication

Harmonization across jurisdictional boundaries is important for all parties to ensure that there are clear requirements, resulting in better protection of the environment, human health and safety, as well as ensuring that Canadian companies remain competitive in the global market. CEPA members are concerned that non-harmonized and duplicative requirements will create uncertainty and inefficiencies. These inefficiencies increase as jurisdictions continue to develop and implement differing reporting and regulatory systems. Consistency, based on recognized standards and systems, is critical to strengthening performance across all jurisdictions nationwide.

In an increasingly competitive global market to access energy resources, the development of harmonized regulations and standards that allow Canadian natural resources to access global markets is critical. Anticipated production growth in the Western Canadian Sedimentary Basin, and the associated economic benefits attributable to a growing energy sector in Canada, will be constrained significantly if additional pipeline capacity is not built to access new markets.

Individual companies have active spill prevention programs which are mandated by federal or provincial legislation. Transmission pipeline companies are subject to strict regulations regarding incident preparedness, response and restoration. There are existing comprehensive requirements that govern the individual companies regarding training level requirements of employees as well as exercising and testing requirements. These regulations address response expectations that govern equipment and personnel levels for response, in addition to response time guidelines. There are also existing regulatory requirements for auditing emergency response plans specific to the transportation corridors that address the effectiveness of proposed response tactics and strategies. In addition, CEPA members have committed to a series of programs that are followed as industry best practices.

The CEPA Integrity First® program includes guidance documents that outline best practices and requirements for pipeline integrity and emergency management, which transmission pipeline companies worked together to create. Member companies will use the guidance documents to evaluate their current systems and identify areas for improvement. For more information about CEPA's Integrity First Program go to www.cepa.com/about-us/cepa-integrity-first.

2.3. Opportunities for communities and First Nations in preparedness and response

CEPA supports effective and efficient rules for restoration of the environment following a spill, as well as appropriate consultation and environmental monitoring in coordination with appropriate regulatory agencies and impacted stakeholders.

CEPA member companies engage the public and First Nations groups in the planning and design of a project, prior to submitting an application to the NEB or the appropriate provincial regulator. This allows for direct engagement and takes local interests into consideration. The participation of First Nations peoples is an important part of each phase in the lifecycle of a project (i.e. project design, construction, operation and maintenance, and retirement).

We believe enhancing local engagement through Geographic Response Plans that reflect input from stakeholders and First Nations is a natural extension of what is already being done by CEPA and its member companies. An Industry Steering Committee incorporating opportunities for First Nations participation would be a valuable leadership vehicle for coordination and communications with transporters, spill response and recovery service providers, governments, regulators, First Nations, local communities and other stakeholders.

2.4. Strong government oversight

All aspects of our companies' operations are subject to strict regulatory oversight. Extensive federal and provincial regulation assures that the safe and responsible operation of pipelines is in the Canadian public interest. As an industry we strive for continuous improvement of our operations. Many of the industry practices we support are designed to complement or become standards, beginning as official recommended practices through bodies such as the Canadian Standards Association (CSA).

We do not support a more formal process addressing incident response and restoration as it should be fit for purpose and led by appropriate regulatory agencies. The CSA is the appropriate technical organization to engage in establishing world leading standards for spill preparedness and response. National standards for emergency response are currently being developed (Emergency Management CSA Z246-2) and is expected to be published in the Fall of 2014.

2.5. CEPA recommendation

CEPA supports the concept of a single window regulator, cost recovered by industry. Additional regulations proposed by the BC Ministry of Environment should not be applied to the transmission pipeline industry.

We believe that in order to best achieve the guiding principles outlined in the Policy Intentions Paper, the Ministry should not include transmission pipeline companies in measures that are required to address regulatory gaps faced by other transporters transporting liquid products. The transmission pipeline industry is subject to strict regulatory oversight and we have demonstrated we are a safe and

reliable form of energy transportation. In the unlikely event of an incident, we have the resources and capacity to respond in an efficient and effective manner.

CEPA supports the concept of a single energy regulator with consolidated responsibilities for oversight of land oil spill prevention, preparedness, and response and recovery requirements. This ensures that there are clear requirements that enhance compliance, resulting in better protection of the environment and human health and safety. Duplication of regulatory requirements and oversight will complicate a company's ability to effectively and efficiently respond to the unlikely event of an incident.

3. Provincial Preparedness and Response Organization (PRO)

CEPA supports the Ministry's objective to ensure that when a spill occurs there is always the capability and capacity to effectively respond, and that funding is not an impediment to the participation of any parties necessary to the response. However, we do not support the establishment of a province-wide spill response organization as it would be highly duplicative of current regulatory requirements and industry initiatives.

Where practical along utility corridors, industry may wish to establish new cooperatives to provide efficient services. This model is currently being explored by the proposed multi-stakeholder Industry Steering Committee. Furthermore, our view is that additional collection of funds for the establishment of a provincial spill response fund is not required, given industry's requirements to fund their preparedness and response activities.

This does not mean that a significant amount of money will not be spent on spill response and preparedness. CEPA member companies spent \$1.4 billion dollars on monitoring and maintenance activities in 2013. We believe this is a more effective and efficient use of resources and combined with effective regulations, transmission pipeline companies are best suited to effectively respond when an incident occurs.

This is why we have taken the first steps towards establishing an Industry Steering Committee. In collaboration with the Railway Association of Canada, CEPA has created a framework for an industry driven and multi stakeholder Industry Steering Committee. Next steps include drafting detailed mandate and terms of reference, liaising with the evolving policy discussions in the Federal Government, determining the optimum governance and funding model and considering undertaking a comprehensive land based oil spill needs assessment. The Industry Steering Committee could be the starting point to pursue a more formal organizational framework.

3.1. Requirements are based on risk

CEPA supports requirements that are based on risk assessment. The risk assessment model must consider the strong track record that the pipeline industry has with respect to very low spill frequency and our commitment to responsible emergency response and remediation efforts in the event of a release.

Over the last ten years, our industry averaged only 3.75 incidents per year. Additionally, in 2013, 99.999% of oil and refined products transported via pipelines made it safely to market. It is also worth noting that none of the incidents involved serious injuries or fatalities. A combination of strong regulatory oversight and industry commitment toward ongoing performance improvements make the Canadian pipeline sector very safe.

3.2. Avoid unnecessary duplication

CEPA is committed to working collaboratively with provincial and federal governments to ensure a robust land based spill preparedness and response regime is established, without creating confusing and unnecessary duplication. We support practices that enable seamless alignment between provincial and federal jurisdictions, sharing of learning and best practices, and maximum leverage of resources such as similar training programs and interchangeable personnel and equipment.

The Ministry of Environment's proposal to establish a PRO would create unnecessary duplication resulting in an inconsistent and inefficient spill response and preparedness amongst our industry. Pipeline systems crossing provincial or international boundaries are regulated by the federal government under the authority of the National Energy Board (NEB), and may be subject to the regulations of Natural Resources Canada, Environment Canada, Fisheries and Oceans Canada and Transport Canada. The NEB is responsible for ensuring companies comply with regulations concerning the safety of employees, the public, and the environment, throughout the full life cycle of a pipeline.

The proposed federal requirements are more appropriate for the transmission pipeline industry. Specifically, the federal proposal would require pipeline companies hold a minimum level of accessible financial resources to ensure they can respond quickly to pipeline incidents. This type of requirement more than adequately addresses the unique business environment of the transmission pipeline industry. The federal proposal includes the option for companies to participate in a voluntary, industry managed cooperative organization as an alternative to holding financial resources for spill response and preparedness. This allows companies with less financial capacity to comply with new requirements, without having companies or industries cross subsidizing one another. For more information of the federal proposal see Appendix 2.

We encourage the BC Ministry to work closely with the federal government, as well as their provincial counterparts, to ensure harmonization across jurisdictions.

3.3. Fair and transparent

CEPA believes that a provincial spill response regime should be fair and transparent. This means recognizing transmission pipeline companies are sophisticated and well capitalized businesses and have demonstrated in-house capacity to respond to incidents in an effective and efficient manner. Furthermore, the regime should reflect the strong track record of the transmission pipeline industry as well as our commitment to transparency.

We recognize that there are increasing expectations around pipeline safety and environmental performance. Our industry is being held to a higher performance standard. CEPA welcomes the scrutiny because the pipeline industry has an exceptional track record.

CEPA members take responsibility for all phases of emergency response, remediation, and reclamation in the event of an incident and will continue to do so, regardless of regulation. Major transmission pipeline companies currently have:

- programs to prevent and manage incidents, as required under the Onshore Pipeline Regulations;
- insurance to manage the costs of incidents; and
- financial capacity to backstop insurance instruments.

In addition to their internal capacities, CEPA members have agreed to abide by the Mutual Emergency Assistance Agreement to enhance their emergency response effectiveness by assisting each other in the event of a significant emergency within the member companies. The agreement, which came into effect January 1, 2014, includes a regional inventory of resources that are available in the event of an incident.

3.4. CEPA recommendation

CEPA recommends that the Ministry endorse a multi-stakeholder Industry Steering Committee.

We see significant value in an industry-driven and self-sustaining Industry Steering Committee to enhance coordination and communications between transporters, governments, host communities, and providers of land based oil spill prevention, response and recovery systems which include cooperatives such as the Western Canadian Spill Services Ltd. (WCSS) and the Western Canada Marine Response Corporation (WCMRC). Both the WCSS and the WCMRC are cooperative models that should be built upon to more efficiently and effectively address the Ministry's intentions.

Specific duties of the Industry Steering Committee are likely to include:

- Credible technical advice to government on response priorities, objectives and actions in concert with current regulations,
- · Data management and quality assurance,
- · Strategic management and coordination of resources,
- · Continuous improvement and sustainability,
- Government engagement and participation,
- Aboriginal participation; and
- Potential incremental capacity support: needs assessment, enhanced capacity and gap closure plans, area plans development, joint exercises, lessons learned.

With the Ministry of the Environment's support, the Industry Steering Committee would take the appropriate steps to reach out to stakeholders and proceed with drafting detailed terms of reference and examine appropriate governance structures in order to ensure effective and sustained implementation.

4. Enhanced Environmental Emergency program

The BC Oil and Gas Commission (OGC) plays a strong coordinating role to ensure all resources are used to maximum effect. We do not support any additional funding mechanisms for the Province's Environmental Emergency Program that would be applied to the pipeline industry. Additional funding and responsibilities of the Ministry of Environment could result in duplication of regulatory oversight, inefficient use of capital, and an increase in the administrative burden on transmission pipeline operators.

4.1. Fair and transparent

CEPA supports a reasonable cost recovery model that incorporates a high level of certainty of process. Direct industry funding to the BC Ministry of Environment is neither optimal nor efficient. Transmission pipeline companies make significant contributions to the land based preparedness and response regime in BC. Our companies do this through: levies and fees paid to provincial and federal regulators; corporate and property taxes; and 'in kind' support. Careful consideration is necessary before any additional collection of funding is proposed in order to ensure no duplication of regulatory oversight, the efficient use of capital, and no increase in the administrative burden on transmission pipeline operators.

Regulatory oversight for transmission pipelines in BC is currently the responsibility of the NEB or the OGC. Both government agencies are funded through levies and fees paid by industry and work on a cost recovery model. In addition, the pipeline industry provides significant revenues to the BC government in the form of taxes. In 2013, CEPA members contributed a combined total of \$115 million dollars in corporate and property tax in BC.

Our members also contribute to the land based spill preparedness and response regime through inkind support such as structured awareness and education programs, robust equipment and personnel spill response capability provided by companies. Pipeline operators are trained and required to manage emergency situations. They are required to have emergency response plans in place by the regulator, whose role is to review and audit these plans. Pipeline operators use the Incident Command System (ICS), a standardized on-site management system designed to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. These and other "in kind" supports should be recognized by the Ministry.

4.2. Strong government oversight

CEPA supports effective and efficient government oversight and coordination of industry spill response. The primary role of a government is to demonstrate and apply governance through appropriate regulatory agencies. For example, in BC, oil and gas pipelines are regulated by the OGC

and interprovincial pipelines are regulated by the NEB. Both agencies review operator emergency response plans and work with operators to ensure that they have comprehensive and effective response plans.

The intention of the Ministry of Environment is to have the discretion to take control of emergency response in the event that an operator is not responding adequately to an incident. Although CEPA understands that such provisions give comfort to the public, we do not believe that this is necessary or productive for the pipeline industry and should only be considered in the most extraordinary circumstances. Furthermore, if there is strong evidence that the company is unwilling or unable to respond, we believe that the appropriate regulatory body (NEB or OGC) would be better suited to address specific concerns related to the transmission pipeline industry. In fact, for NEB regulated pipelines, the new proposed regulations include additional power to the NEB in case a pipeline operator is seen as not adequately dealing with an incident, the NEB has the authority to assume control.

For the transmission pipeline industry, the pipeline operator is far better placed to manage a spill than the Ministry, because it is familiar with the pipeline, its spill contingency plan and has direct control over the technical and financial resources needed to respond. Locally-based company staff have relationships with local first responders who are available to assist. Above all, the company has the greatest motivation to stop the incident and bring the pipeline back into compliance and service as soon as possible.

4.3. Continuous improvement

CEPA member companies recognize their critical duty to safety and protection of the environment. We are committed to an incident rate of zero and are continually advancing pipeline industry practices and technologies regarding the protection of the environment and human safety. This is why we established the CEPA Integrity First® Program.

The program has been developed by the industry as a management system approach that enables CEPA members to strengthen the pipeline industry's performance, communication and engagement by jointly developing and individually applying best practices and reporting on our performance record.

As part of CEPA Integrity First®, our member companies have made the following commitments:

Pipeline Integrity

- We strive for zero incidents by applying strict standards and systems in designing, constructing, operating and maintaining our pipelines.
- We maintain and use detailed information and records to make informed decisions that support our pipeline integrity program.
- We identify, evaluate and manage risks and hazards to protect the public, the environment, and the integrity of our pipelines.
- As CEPA member companies, we are committed to continual improvement and we share lessons learned to support the ongoing safe operations of our pipelines.

Emergency Management

- We regularly assess pipelines and rights-of-way and apply risk-management practices to minimize adverse impacts to people, property or the environment in an emergency situation.
- We strive to meet or exceed all new and existing regulations applicable to our operations and to monitor our compliance.
- We educate and work closely with local emergency response agencies and community members to address their needs and concerns in the event of an emergency.
- We have emergency response plans in place that follow an internationally recognized emergency response system (Incident Command System).
- We have the equipment, resources and highly trained emergency response personnel necessary to respond effectively in any emergency.
- We regularly review our emergency response plans, conduct drills and share lessons learned with our peers to continually improve our response capabilities.

4.4. CEPA Recommendation

The transmission pipeline industry benefits from strong government oversight, cost recovered by industry. Additional funding mechanisms for the Province's Environmental Emergency program should not be applied to the transmission pipeline industry.

Due to the capacities and expertise found within transmission pipeline companies and the strong regulatory oversight provided by the OGC and the NEB, we do not support the levy of additional funds to support the Ministry's enhanced Environmental Emergency program. Alternatively, we believe that funds should be allocated to an Industry Steering Committee to ensure the most optimal and efficient use of funds.

5. Conclusion

In closing, the guiding principles of British Columbia's Policy Intentions Paper mirror the transmission pipeline industry's commitment to excellence in emergency response and pipeline safety. The central objective of safeguarding the environment and human health is paramount to both industry and government.

Application of the approaches set out in the Intentions Paper to onshore pipeline facilities will require significant modifications in order to fully meet the desired principles. Our industry has proven to be a safe and reliable form of energy transportation and takes full responsibility for emergency response and remediation efforts in the event of a release. This strong track record is complemented by strict government oversight provided by the OGC and NEB, both cost recovered by industry. Furthermore, CEPA and our members have demonstrated they are willing and able to take a leadership role in further strengthening the provincial preparedness and response regime with the establishment of a multi-stakeholder Industry Steering Committee. The implementation of new requirements and responsibilities, currently proposed in the Intentions Paper, would create duplication resulting in inconsistent and inefficient spill response and preparedness within the pipeline industry.

For these reasons, we believe that the BC Ministry of the Environment should consider our recommendations, as outlined in this document. If acted on, our recommendation would help create a more effective and efficient preparedness and response regime in BC. Thank you for taking the time to review our comments and we look forward to continuing our working with the Ministry on this important initiative.

Appendix 1 Land Based Spill Preparedness and Response in British Columbia Response Form (April 2014)

Ministry Intention 1: Preparedness, Response and Restoration Requirements

1. General comments:

1.1. Do you have any general comments about the proposed requirements?

Harmonization across jurisdictional boundaries is important for all parties to ensure that there are clear requirements, resulting in better protection of the environment, human health and safety and ensuring that Canadian companies remain competitive in the global market. CEPA members are concerned that non-harmonized and duplicative requirements will create uncertainty and inefficiencies. These inefficiencies increase as jurisdictions continue to develop and implement differing reporting and regulatory systems. Consistency, based on recognized standards and systems, is critical to strengthening performance across all jurisdictions nationwide.

In an increasingly competitive global market to access energy resources, the development of harmonized regulations and standards that allow Canadian natural resources to access global markets is critical. Anticipated production growth in the Western Canadian Sedimentary Basin, and the associated economic benefits attributable to a growing energy sector in Canada, will be constrained significantly if additional pipeline capacity is not built to access new markets.

1.2. Are there any gaps in the preparedness, response or restoration requirements identified by the Ministry? Do you feel that any of the proposed requirements are unnecessary or duplicate existing regulations? Please be specific.

Individual transmission pipeline companies have active spill prevention programs that are mandated by federal or provincial legislations in addition to programs that are followed through commitments to industry best practices. Transmission pipeline companies are subject to strict regulations regarding incident preparedness, response and restoration. There are existing comprehensive requirements that govern the individual companies regarding training level requirements of employees as well as exercising and testing requirements. These regulations address response expectations that govern equipment and personnel levels for response and response time guidelines. There are also existing regulatory requirements for the auditing of emergency response plans specific to the transportation corridors that address the effectiveness of proposed response tactics and strategies.

1.3. Are there some requirements that you feel should be a priority for the Minister? If so, which ones?

Transmission pipeline companies should not be subject to measures that are required to address other transporters not otherwise captured through regulations. Other energy transportation industries, that lack equipment, regular exercises, cooperative agreements and other tools that the transmission pipeline industry has at its disposal, could benefit from enhanced requirements. Our industry can develop a sustainable effective spill preparedness and response program that meets regulatory and public expectations without the development of additional regulations.

2. Who should lead development of geographic response plans?

CEPA believes that continued sharing of learnings and best practices should be formalized through an industry led initiative and, as an organization, we are willing and able to take a leadership role. The focus should be on sharing risk assessments with regulators and active information exchange in order to better understand areas of risk.

The framework for geographic response plans is already in place within the transmission pipeline industry with internal geographical plans already a part of existing emergency plans. CEPA members have also agreed to the establishment of the Mutual Emergency Assistance Agreement. The

agreement formalized the practice of resource sharing and will remove legal barriers and strengthen the capabilities of our members' emergency response capabilities. In order to maximize effectiveness, the agreement includes a regional inventory of resources available and requires companies to work within Incident Command System protocols, which outline how multiple companies collaborate in response to an emergency. CEPA members will also be conducting a joint emergency response exercise later this year to demonstrate our industry's commitment toward greater collaboration and cooperation among pipeline operators.

3. Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response. Do you have any comments or suggestions for the Ministry with respect to evaluating the ability of companies (or the proposed provincial preparedness and response organization) to meet legislated requirements?

Pipelines are a highly regulated industry. Both the National Energy Board and BC Oil and Gas Commission review and audit operator's emergency response plans and frequently participates in regulatory mandated exercises to ensure they are comprehensive and effective. Individual companies also have active spill prevention programs that are mandated by federal and/or provincial legislations in addition to programs that are followed through commitments to industry best practices. These include:

- CEPA's joint emergency response exercise
- Mutual Emergency Assistance Agreement

The transmission pipeline industry has a strong track record with respect to very low spill rates and responsible emergency response and remediation efforts in the event of a release consistent with the polluter-pay principle. We believe that industry can demonstrate a strong track record of addressing the risks to the environment and to public safety through our policies, skills training and specialized capabilities that promote prevention, a culture of safety, emergency response capacity and a commitment to restoration following a spill. Our industry takes lessons from exercises very seriously and incorporates learnings to improve plans.

4. Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?

CEPA supports BC Environment's intention to enhance local engagement through Geographic Response Plans that reflect input from local communities, First Nations and other stakeholders, and for the BC Oil and Gas Commission to collect, store and publish spill data.

Through the Mutual Emergency Assistance Agreement, CEPA has mandated the application of the Incident Command System (ICS) to ensure coordinated involvement from all stakeholders, including First Nations. ICS is a protocol that outlines how multiple companies collaborate in response to an emergency, and keeps the lines of communication open with stakeholders, government agencies and First Nations. It is used by emergency responders to be efficiently and effectively organized in case of an emergency. In the context of an industry led steering committee, CEPA and its members will do our part to further strengthen First Nations participation.

- 5. Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.
- 5.1. Do you have any comments about including spill response times in legislated requirements?

CEPA and its member companies are actively engaged in an initiative to establish best practices for incident response times. This will establish a benchmark for the industry that recognizes the different variables that need to be considered in establishing appropriate response times (e.g. location, land

use, product transported, time of day, etc.). A clear practice for CEPA members is anticipated in the Fall of 2014.

CEPA and its members have also agreed to the Mutual Emergency Assistance Agreement signed by CEPA members in November 2013. The agreement formalized the practice of resource sharing and will remove legal barriers and strengthen the capabilities of our members' emergency response capabilities. In order to maximize effectiveness of responses to emergencies, the agreement includes a regional inventory of resources available and requires companies to work within Incident Command System protocols, which outline how multiple companies collaborate in response to an emergency. CEPA member companies will also be conducting a joint emergency response exercise later this year.

5.2. What response actions would you recommend attaching time requirements to (e.g., cascading levels of response action)?

CEPA believes that the Canadian Standards Association (CSA) should be the appropriate technical organization to engage in establishing world leading standards for spill preparedness and response in BC. The importance of standards to an effective regime is recognized and CEPA is working with CSA and other stakeholders, including the OGC, on the development of CSA Z246.2 as a national standard for emergency response.

In addition, CEPA is working on a comprehensive approach that incorporates multiple response phases and will be introduced as an industry practice in the Fall of 2014.

5.3. What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?

We do not support a more formal process addressing time requirements as it should be fit for purpose (and not one size fits all) and led by appropriate regulatory agencies in collaboration with industry. Response times and required actions may be different depending on the mode of transportation (e.g. pipeline, rail, truck) and the type of product that is transported. CEPA believes that the Canadian Standards Association (CSA) should be the appropriate technical organization to engage in establishing appropriate and effective requirements regarding response times.

6. Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. How should significant impacts on parks, public beaches, etc. be dealt with to ensure satisfactory outcomes?

CEPA does not support punitive policies within restoration strategies. Alternatively, an approach that allows the greatest degree of flexibility, with a focus on desirable outcomes, should be pursued. Such an approach would ensure a return to a productive environment and that there is no net loss to the affected area. The application of offsets, when approaching restoration and reclamation, can also help produce desired outcomes.

CEPA members have a demonstrated track record of appropriate restoration of the environment subsequent to a spill without any financial consequence borne by the public. This has always included consideration for loss of public use, repair of public and private property and other effects resulting from a spill incident. Legislative requirements can be a hindrance in this context and not advancement.

Ministry Intention 2: Provincial Preparedness and Response Organization

1. Do you have any comments or suggestions regarding establishment of a provincially regulated preparedness and response organization?

From a transmission pipeline industry's point of view, the establishment of a government-led, or regulated, industry funded spill response organization is neither necessary nor optimum. Cooperative organizations have proven to be an effective vehicle for prompt availability of response equipment, technical training, and the development and maintenance of contingency plans to complement the

extensive expertise, equipment and financial support for prevention, emergency response and recovery that pipeline and railway companies maintain in-house.

We see significant value in an industry driven and self-sustaining Industry Steering Committee (ISC) to enhance coordination and communications between transporters, governments, host communities, and providers of land based oil spill prevention, response and recovery systems which include cooperatives such as the Western Canadian Spill Services Ltd. (WCSS) and the Western Canada Marine Response Corporation (WCMRC). Both the WCSS and the WCMRC are cooperative models that could be built upon to more efficiently and effectively address the Ministry's intentions. More information on the ISC can be found in our paper "World leading Land Based Spill Preparedness and Response in British Columbia: The Perspective of Large Liquid Hydrocarbon Transporters."

CEPA and its member companies have already come together as an industry to coordinate a more effective and efficient spill response regime. Effective January 1, 2014, CEPA members have agreed to abide by the Mutual Emergency Assistance Agreement to enhance their emergency response effectiveness by assisting each other in the event of a significant emergency within the member companies.

2. If the Ministry proceeds with the establishment of a provincial preparedness and response organization, what criteria, risk levels and other factors should be considered in determining the threshold for mandatory membership?

CEPA supports requirements that are based on risk assessment. The risk assessment model must consider the strong track record that the pipeline industry has with respect to very low spill rates and responsible emergency response and remediation efforts in the event of a release.

Across Canada, from 2002-2013 there has been an average of 3.75 significant failure incidents per year on CEPA member pipelines. Additionally, in 2013, 99.999% of oil and refined products transported via pipelines made it safely to market. It is also worth noting that none of the incidents involved serious injuries or fatalities. A combination of strong regulatory oversight and industry commitment toward ongoing performance improvements make the Canadian pipeline sector very safe.

3. Do you have any comments or suggestions about how local government, First Nations and other stakeholders should be engaged or integrated into the activities of the proposed provincial preparedness and response organization?

CEPA member companies have developed and continue to develop good working relationships with First Nations communities. Our industry and our project proponents take First Nations engagement very seriously and have programs in-place to include and engage First Nations people on various industry projects and ongoing operations.

Our proposal for Industry Steering Committee would provide coordination and communications with transporters, spill response and recovery service providers, governments, regulators, First Nations, local communities and other stakeholders. The Industry Steering Committee's terms of reference will reinforce the binding nature of the steering committees decisions and actions.

4. What industry based funding mechanisms should the Province consider in establishing a response organization? How should the Province ensure fairness and equity across all the industry sectors whose spills could impact provincial lands or resources?

CEPA member companies are sophisticated and well capitalized businesses, and are supportive of proposed federal legislation that will require companies operating major crude oil pipelines to have a minimum of \$1 billion in financial capacity to respond to leaks, spills and ruptures. We encourage the BC government to work with the Federal government to ensure no duplication and create pathways to build on this new regulation provincially. This funding requirement should address the degree of risk, insurance coverage, and recognize 'in kind' support such as structured awareness and education programs, robust equipment and personnel spill response capability provided by companies.

If the provincial government does move ahead with the establishment of a provincial response organization, we believe that any fees, levies or other charges for funding a provincial land based spill response organization should not be implemented prior to the establishment of federal requirements. Any funds must go directly towards enhanced response capacity and directed through the proposed Industry Steering Committee.

5. Do you have any comments about development of provisions that would enable local governments and/or First Nations to recover costs and fund immediate participation in a spill incident response?

CEPA supports the polluter pays principle. Our member companies have a strong track record of immediate response and appropriate restoration of the environment subsequent to a spill without any financial consequence borne by the public. This has always included consideration for loss of public use, repair of public and private property and other effects resulting from a spill incident.

CEPA does not support the imposition of a formulaic, punitive approach to loss of use considerations and pursuing such policies is not in the public interest. An effective regulatory regime should enable "fit for purpose" regulations, recognizing that transmission pipelines are different from other moves of energy transportation, with much different footprints and surface impacts. We believe the federal proposal requiring companies operating major crude oil pipelines to have a minimum of \$1 billion in financial capacity to respond to leaks, spills and ruptures is an appropriate requirement for the transmission pipeline industry.

Ministry Intention 3: Enhanced Provincial Environmental Emergency Program

1. Do you have any comments or suggestions regarding the Ministry's intentions to require industry funding of an enhanced Provincial Environmental Emergency Program?

CEPA supports a reasonable cost recovery model that incorporates a high level of certainty of process. However, direct industry funding to the BC Ministry of the Environment is neither optimal nor efficient. Careful consideration is necessary before any additional collection of funding is proposed in order to ensure no duplication of regulatory oversight, efficient use of capital, and no increase in the administrative burden on transmission pipeline operators.

2. What percentage of the cost of the Province's Environmental Emergency Program should be funded by general revenue (tax dollars) and what percentage should be funded by industries that pose a risk to the environment?

Transmission pipeline companies make significant contributions to the land based preparedness and response regime in BC and should therefore not be subject to direct industry funding to the BC Ministry of the Environment. Our companies contributions include; levies and fees paid to provincial and federal regulators, corporate and property taxes and 'in kind' support.

Regulatory oversight for transmission pipelines in BC is currently the responsibility of the NEB or the OGC. Both government agencies are funded through levies and fees paid by industry and work on a cost recovery model. In addition, the pipeline industry provides significant revenues to the BC government in the form of taxes. In 2013, CEPA members contributed a combined total of \$115 million dollars in corporate and property taxes in BC.

Our members also contribute to the land based spill preparedness and response regime through in-kind support such as structured awareness and education programs, robust equipment and personnel spill response capability provided by companies. Pipeline operators are trained and required to manage emergency situations. They are required to have emergency response plans in place by the regulator, whose role is to review and audit these plans. In the case of large incidents, pipeline operators use the Incident Command System (ICS). These and other "in kind" supports should be recognized by the Ministry.

3. Ensuring fairness and equity are important criteria for the Ministry in considering funding mechanisms. Do you have any comments or suggestions regarding fair and

equitable industry based funding mechanisms the Ministry should consider in establishing an appropriate level of funding for the provincial Environmental Emergency Program?

The BC Oil and Gas Commission can play a strong coordinating role to ensure all resources are used to maximum effect. CEPA would support efforts to strengthen that important role. However, we do not support any additional funding mechanisms for the Province's Environmental Emergency program that is applied to the pipeline industry. Additional funding and responsibilities of the Ministry of the Environment could result in duplication of regulatory oversight, inefficient use of capital, and an increase in the administrative burden on transmission pipeline operators.

Additional comments

1. Do you have any additional comments or suggestions for the Ministry regarding development of a world leading land based spill preparedness and response regime for B.C.?

As a starting point, we believe that the establishment of an Industry Steering Committee (ISC), as outlined in our paper, "World leading Land Based Spill Preparedness and Response in British Columbia", meets the Ministry's guiding principles. This document presents the perspective of a group formed through collaboration and composed of the Canadian Energy Pipeline Association (CEPA), the Railway Association of Canada (RAC), the Western Canada Marine Response Corporation (WCMRC) and Western Canadian Spill Services Ltd. (WCSS). The paper articulates a clear vision for a world leading, robust and continuously improving land based spill preparedness and response capacity in BC. It extracts maximum leverage and benefits from existing systems, organizations and capabilities, and it ensures seamless and effective implementation of evolving policies and regulations of other provinces and of the federal government.

Appendix 2 Natural Resources Canada, Pipelines: Prevention and Safety

PIPELINES: PREVENTION AND SAFETY

Priority	Action	Elements of a World-class Pipeline Safety System	From	То
Prevention	Transparency	Improve disclosure of publicly available pipeline safety documents	Limited	Public access
	Inspections	Increase the number of annual oil and gas pipeline inspections	100	150
	Audits	Increase the number of annual comprehensive audits	3	6
	Guidance	Allow the National Energy Board to provide guidance on "best available technology" as part of the pipeline review process	In practice	Explicit in law
	Enforcement	Apply Administrative Monetary Penalties for violations of the National Energy Board Act	None	\$25,000 to \$100,000 per day
	Inspection authorities	Strengthen and clarify inspection powers for orders and audits	In practice	Explicit in law
Preparedness & Response	Minimum financial resources	Require pipeline companies to have minimum financial resources to be prepared for an incident (set at \$1B for major oil pipelines)	None	\$1B for major oil pipelines
	Accessible cash	Require companies to have a minimum amount of cash on hand to respond quickly to incidents	None	Set amounts
	Repayment for cleanup costs	Compel repayment of spill cleanup costs incurred by federal, provincial, municipal governments or Aboriginal communities	No	Yes
	Incident response	Enable regulatory powers for taking control of response and cleanup	No	Yes
	Aboriginal participation	Develop strategy with industry and Aboriginal communities to increase participation in pipeline safety	No strategy	Increased participation in planning, monitoring and response
Liability & Compensation	Unlimited liability	Implement unlimited financial liability when companies are at fault or negligent	In practice	Explicit in law
	Absolute liability	Establish liability to a set amount regardless of fault or negligence (absolute liability)	None	\$1B for major oil pipelines
	Abandonment	Hold pipeline companies responsible for pipelines for entire lifecycle, including post abandonment	In practice	Explicit in law
	Financial backstop	Ensure resources are available for spill cleanup if a company is unable or unwilling (incapacitated) and recover costs from industry	No	Yes

Note: shaded area indicates action / element has already been announced.



PIPELINES: PRÉVENTION ET SÉCURITÉ

Priorité	Mesure	Éléments d'un système de sécurité des pipelines de classe mondiale	Actuel	Souhaité
Prévention	Transparence	Améliorer la divulgation des documents accessibles au public portant sur la sécurité des pipelines.	Accès limité	Accès public
	Inspections	Accroître le nombre d'inspections annuelles pour les pipelines pétroliers et gaziers.	100	150
	Vérifications	Accroître le nombre de vérifications intégrées annuelles.	3	6
	Conseils	Permettre à l'Office national de l'énergie de fournir des conseils sur les « meilleures technologies existantes » dans le cadre du processus de révision des pipelines.	En théorie	Mentionné explicitement dans la loi
	Application	Imposer des sanctions administratives pécuniaires lorsqu'il y a infraction à la Loi sur l'Office national de l'énergie.	Aucune	25 000 \$ à 100 000 \$ par jour
	Pouvoirs relatifs aux inspections	Renforcer et clarifier les pouvoirs d'inspection pour les ordonnances et les vérifications.	En théorie	Mentionné explicitement dans la loi
État de préparation et intervention	Ressources financières minimales	Exiger que les sociétés de pipelines aient des ressources financières minimales afin d'être prêtes en cas d'incident (seuil fixé à un milliard de dollars pour les grands pipelines pétroliers).	Aucune	1 G\$ pour les grands pipelines pétroliers
	Montants accessibles en espèces	Exiger que les entreprises aient accès à un montant minimal en espèces pour réagir rapidement en cas d'incident.	Aucun	Montants fixes
	Remboursement des coûts de décontamination	Exiger le remboursement des coûts de décontamination associés à un déversement assumés par les gouvernements fédéral, provinciaux et municipaux ou par les collectivités autochtones.	Non	Oui
	Intervention à la suite d'un incident	Favoriser les pouvoirs de réglementation afin de diriger des activités d'intervention et de décontamination.	Non	Oui
	Participation des Autochtones	En collaboration avec l'industrie et les collectivités autochtones, élaborer une stratégie pour accroître la participation aux mesures de sécurité touchant les pipelines.	Aucune stratégie	Participation accrue aux activités de planification, de surveillance et d'intervention.
Responsabilité et indemnisation	Responsabilité illimitée	Responsabilité financière illimitée lorsque les entreprises sont fautives ou négligentes.	En théorie	Mentionné explicitement dans la loi
	Responsabilité absolue	Établir un montant fixe pour la responsabilité, qu'il y ait ou non faute ou négligence (responsabilité absolue).	Aucune	1 G\$ pour les grands pipelines pétroliers
	Cessation d'exploitation	Tenir les sociétés de pipelines responsables de leurs pipelines pendant tout le cycle de vie de ceux-ci, y compris après la cessation de l'exploitation.	En théorie	Mentionné explicitement dans la loi
	Filet de sécurité financier	S'assurez de disposer des ressources nécessaires pour la décontamination si l'entreprise est incapable ou réticente (privée de capacité légale), et récupérer les coûts auprès de l'industrie.	Aucun	Oui

Note : Les zones ombrées indiquent que la mesure ou l'élément concerné a déjà été annoncé.



Canadian Energy Pipeline Association - Kai Horsfield

regime: Significant gaps

A_Text_Box: The Canadian Energy Pipeline Association supports seeking a comprehensive and effective world leading regime for land based spill preparedness and response, built on a philosophy of continuous improvement. However, transmission pipeline companies should not be subject to measures that are required to address other transporters that are not otherwise captured through regulations. Other energy transportation industries, that lack equipment, regular exercises, cooperative agreements and other tools that the transmission pipeline industry has at its disposal, could benefit from enhanced requirements. Our industry can develop a sustainable effective spill preparedness and response program that meets regulatory and public expectations without the development of additional regulations or requirements.

principles: Significant gaps

B_Text_Box: CEPA views the objectives of BC s second intentions paper as an initial step in addressing an important issue for the industry, the government of BC, and the BC public. The guiding principles mirror the transmission pipeline industry s commitment to excellence in emergency response and pipeline safety. The central objective of safeguarding the environment and Human health is paramount to both industry and government.

C1_1: Harmonization across jurisdictional boundaries is important for all parties to ensure that there are clear requirements, resulting in better protection of the environment, human health and safety and ensuring that Canadian companies remain competitive in the global market. CEPA members are concerned that non-harmonized and duplicative requirements will create uncertainty and inefficiencies. These inefficiencies increase as jurisdictions continue to develop and implement differing reporting and regulatory systems. Consistency, based on recognized standards and systems, is critical to strengthening performance across all jurisdictions nationwide.

In an increasingly competitive global market to access energy resources, the development of harmonized regulations and standards that allow Canadian natural resources to access global markets is critical. Anticipated production growth in the Western Canadian Sedimentary Basin, and the associated economic benefits attributable to a growing energy sector in Canada, will be constrained significantly if additional pipeline capacity is not built to access new markets.

C1_2: Individual transmission pipeline companies have active spill prevention programs that are mandated by federal or provincial legislations in addition to programs that are followed through commitments to industry best practices. Transmission pipeline companies are subject to strict regulations regarding incident preparedness, response and restoration. There are existing comprehensive requirements that govern the individual companies regarding training level requirements of employees as well as exercising and testing requirements. These regulations address response expectations that

govern equipment and personnel levels for response and response time guidelines. There are also existing regulatory requirements for the auditing of emergency response plans specific to the transportation corridors that address the effectiveness of proposed response tactics and strategies.

C1_3: Transmission pipeline companies should not be subject to measures that are required to address other transporters not otherwise captured through regulations. Other energy transportation industries, that lack equipment, regular exercises, cooperative agreements and other tools that the transmission pipeline industry has at its disposal, could benefit from enhanced requirements. Our industry can develop a sustainable effective spill preparedness and response program that meets regulatory and public expectations without the development of additional regulations.

C2: CEPA believes that continued sharing of learnings and best practices should be formalized through an industry led initiative and, as an organization, we are willing and able to take a leadership role. The focus should be on sharing risk assessments with regulators and active information exchange in order to better understand areas of risk.

The framework for geographic response plans is already in place within the transmission pipeline industry with internal geographical plans already a part of existing emergency plans. CEPA members have also agreed to the establishment of the Mutual Emergency Assistance Agreement. The agreement formalized the practice of resource sharing and will remove legal barriers and strengthen the capabilities of our members emergency response capabilities. In order to maximize effectiveness, the agreement includes a regional inventory of resources available and requires companies to work within Incident Command System protocols, which outline how multiple companies collaborate in response to an emergency. CEPA members will also be conducting a joint emergency response exercise later this year to demonstrate our industry s commitment toward greater collaboration and cooperation among pipeline operators.

C3: Pipelines are a highly regulated industry. Both the National Energy Board and BC Oil and Gas Commission review and audit operator s emergency response plans and frequently participates in regulatory mandated exercises to ensure they are comprehensive and effective. Individual companies also have active spill prevention programs that are mandated by federal and/or provincial legislations in addition to programs that are followed through commitments to industry best practices. These include:

CEPA s joint emergency response exercise Mutual Emergency Assistance Agreement

The transmission pipeline industry has a strong track record with respect to very low spill rates and responsible emergency response and remediation efforts in the event of a release consistent with the polluter-pay principle. We believe that industry can demonstrate a strong track record of addressing the risks to the environment and to public safety through our policies, skills training and specialized

capabilities that promote prevention, a culture of safety, emergency response capacity and a commitment to restoration following a spill. Our industry takes lessons from exercises very seriously and incorporates learnings to improve plans.

C4: CEPA supports BC Environment s intention to enhance local engagement through Geographic Response Plans that reflect input from local communities, First Nations and other stakeholders, and for the BC Oil and Gas Commission to collect, store and publish spill data.

Through the Mutual Emergency Assistance Agreement, CEPA has mandated the application of the Incident Command System (ICS) to ensure coordinated involvement from all stakeholders, including First Nations. ICS is a protocol that outlines how multiple companies collaborate in response to an emergency, and keeps the lines of communication open with stakeholders, government agencies and First Nations. It is used by emergency responders to be efficiently and effectively organized in case of an emergency. In the context of an industry led steering committee, CEPA and its members will do our part to further strengthen First Nations participation.

C5_1: CEPA and its member companies are actively engaged in an initiative to establish best practices for incident response times. This will establish a benchmark for the industry that recognizes the different variables that need to be considered in establishing appropriate response times (e.g. location, land use, product transported, time of day, etc.). A clear practice for CEPA members is anticipated in the Fall of 2014.

CEPA and its members have also agreed to the Mutual Emergency Assistance Agreement signed by CEPA members in November 2013. The agreement formalized the practice of resource sharing and will remove legal barriers and strengthen the capabilities of our members emergency response capabilities. In order to maximize effectiveness of responses to emergencies, the agreement includes a regional inventory of resources available and requires companies to work within Incident Command System protocols, which outline how multiple companies collaborate in response to an emergency. CEPA member companies will also be conducting a joint emergency response exercise later this year.

C5_2: CEPA believes that the Canadian Standards Association (CSA) should be the appropriate technical organization to engage in establishing world leading standards for spill preparedness and response in BC. The importance of standards to an effective regime is recognized and CEPA is working with CSA and other stakeholders, including the OGC, on the development of CSA Z246.2 as a national standard for emergency response.

In addition, CEPA is working on a comprehensive approach that incorporates multiple response phases and will be introduced as an industry practice in the Fall of 2014.

C5_3: We do not support a more formal process addressing time requirements as it should be fit for purpose (and not one size fits all) and led by appropriate regulatory agencies in collaboration with industry. Response times and required actions may be different depending on the mode of transportation (e.g. pipeline, rail, truck) and the type of product that is transported. CEPA believes that the Canadian Standards Association (CSA) should be the appropriate technical organization to engage in establishing appropriate and effective requirements regarding response times.

C6: CEPA does not support punitive policies within restoration strategies. Alternatively, an approach that allows the greatest degree of flexibility, with a focus on desirable outcomes, should be pursued. Such an approach would ensure a return to a productive environment and that there is no net loss to the affected area. The application of offsets, when approaching restoration and reclamation, can also help produce desired outcomes.

CEPA members have a demonstrated track record of appropriate restoration of the environment subsequent to a spill without any financial consequence borne by the public. This has always included consideration for loss of public use, repair of public and private property and other effects resulting from a spill incident. Legislative requirements can be a hindrance in this context and not advancement.

D1: From a transmission pipeline industry s point of view, the establishment of a government-led, or regulated, industry funded spill response organization is neither necessary nor optimum. Cooperative organizations have proven to be an effective vehicle for prompt availability of response equipment, technical training, and the development and maintenance of contingency plans to complement the extensive expertise, equipment and financial support for prevention, emergency response and recovery that pipeline and railway companies maintain in-house.

We see significant value in an industry driven and self-sustaining Industry Steering Committee (ISC) to enhance coordination and communications between transporters, governments, host communities, and providers of land based oil spill prevention, response and recovery systems which include cooperatives such as the Western Canadian Spill Services Ltd. (WCSS) and the Western Canada Marine Response Corporation (WCMRC). Both the WCSS and the WCMRC are cooperative models that could be built upon to more efficiently and effectively address the Ministry s intentions. More information on the ISC can be found in our paper World leading Land Based Spill Preparedness and Response in British Columbia: The Perspective of Large Liquid Hydrocarbon Transporters.

CEPA and its member companies have already come together as an industry to coordinate a more effective and efficient spill response regime. Effective January 1, 2014, CEPA members have agreed to abide by the Mutual Emergency Assistance Agreement to enhance their emergency response effectiveness by assisting each other in the event of a significant emergency within the member companies.

D2: CEPA supports requirements that are based on risk assessment. The risk assessment model must consider the strong track record that the pipeline industry has with respect to very low spill rates and responsible emergency response and remediation efforts in the event of a release.

Across Canada, from 2002-2013 there has been an average of 3.75 significant failure incidents per year on CEPA member pipelines. Additionally, in 2013, 99.99% of oil and refined products transported via pipelines made it safely to market. It is also worth noting that none of the incidents involved serious injuries or fatalities. A combination of strong regulatory oversight and industry commitment toward ongoing performance improvements make the Canadian pipeline sector very safe.

D3: CEPA member companies have developed and continue to develop good working relationships with First Nations communities. Our industry and our project proponents take First Nations engagement very seriously and have programs in-place to include and engage First Nations people on various industry projects and ongoing operations.

Our proposal for Industry Steering Committee would provide coordination and communications with transporters, spill response and recovery service providers, governments, regulators, First Nations, local communities and other stakeholders. The Industry Steering Committee s terms of reference will reinforce the binding nature of the steering committees decisions and actions.

D4: CEPA member companies are sophisticated and well capitalized businesses, and are supportive of proposed federal legislation that will require companies operating major crude oil pipelines to have a minimum of \$1 billion in financial capacity to respond to leaks, spills and ruptures. We encourage the BC government to work with the Federal government to ensure no duplication and create pathways to build on this new regulation provincially. This funding requirement should address the degree of risk, insurance coverage, and recognize 'in kind' support such as structured awareness and education programs, robust equipment and personnel spill response capability provided by companies.

If the provincial government does move ahead with the establishment of a provincial response organization, we believe that any fees, levies or other charges for funding a provincial land based spill response organization should not be implemented prior to the establishment of federal requirements. Any funds must go directly towards enhanced response capacity and directed through the proposed Industry Steering Committee.

D5: CEPA supports the polluter pays principle. Our member companies have a strong track record of immediate response and appropriate restoration of the environment subsequent to a spill without any financial consequence borne by the public. This has always included consideration for loss of public use, repair of public and private property and other effects resulting from a spill incident.

CEPA does not support the imposition of a formulaic, punitive approach to loss of use considerations and pursuing such policies is not in the public interest. An effective regulatory regime should enable fit for purpose regulations, recognizing that transmission pipelines are different from other moves of energy transportation, with much different footprints and surface impacts. We believe the federal proposal requiring companies operating major crude oil pipelines to have a minimum of \$1 billion in financial capacity to respond to leaks, spills and ruptures is an appropriate requirement for the transmission pipeline industry.

E1: CEPA supports a reasonable cost recovery model that incorporates a high level of certainty of process. However, direct industry funding to the BC Ministry of the Environment is neither optimal nor efficient. Careful consideration is necessary before any additional collection of funding is proposed in order to ensure no duplication of regulatory oversight, efficient use of capital, and no increase in the administrative burden on transmission pipeline operators.

E2: Transmission pipeline companies make significant contributions to the land based preparedness and response regime in BC and should therefore not be subject to direct industry funding to the BC Ministry of the Environment. Our companies contributions include; levies and fees paid to provincial and federal regulators, corporate and property taxes and 'in kind' support.

Regulatory oversight for transmission pipelines in BC is currently the responsibility of the NEB or the OGC. Both government agencies are funded through levies and fees paid by industry and work on a cost recovery model. In addition, the pipeline industry provides significant revenues to the BC government in the form of taxes. In 2013, CEPA members contributed a combined total of \$115 million dollars in corporate and property taxes in BC.

Our members also contribute to the land based spill preparedness and response regime through in-kind support such as structured awareness and education programs, robust equipment and personnel spill response capability provided by companies. Pipeline operators are trained and required to manage emergency situations. They are required to have emergency response plans in place by the regulator, whose role is to review and audit these plans. In the case of large incidents, pipeline operators use the Incident Command System (ICS). These and other in kind supports should be recognized by the Ministry.

E3: The BC Oil and Gas Commission can play a strong coordinating role to ensure all resources are used to maximum effect. CEPA would support efforts to strengthen that important role. However, we do not support any additional funding mechanisms for the Province's Environmental Emergency program that is applied to the pipeline industry. Additional funding and responsibilities of the Ministry of the Environment could result in duplication of regulatory oversight, inefficient use of capital, and an increase in the administrative burden on transmission pipeline operators.

F_textbox: As a starting point, we believe that the establishment of an Industry Steering Committee (ISC), as outlined in our paper, World leading Land Based Spill Preparedness and Response in British Columbia, meets the Ministry's guiding principles. This document presents the perspective of a group formed through collaboration and composed of the Canadian Energy Pipeline Association (CEPA), the Railway Association of Canada (RAC), the Western Canada Marine Response Corporation (WCMRC) and Western Canadian Spill Services Ltd. (WCSS). The paper articulates a clear vision for a world leading, robust and continuously improving land based spill preparedness and response capacity in BC. It extracts maximum leverage and benefits from existing systems, organizations and capabilities, and it ensures seamless and effective implementation of evolving policies and regulations of other provinces and of the federal government.

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The new CPPI.

Western Division

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July 17, 2014

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Re: Canadian Fuels Association Response to the Land Based Spill Preparedness and Response in British Columbia Policy Intentions Paper for Consultation (April 2014)

The Canadian Fuels Association appreciates the opportunity to participate in this stakeholder consultation and supports the government review of Land Based Spill Preparedness and Response in British Columbia. It is consistent with our members' commitment to safe handling of petroleum fuels that reflects best practices, including emergency preparedness plans and response capabilities. Canadian Fuels staff and our members have been very actively engaged in the Ministry led working groups and advisory group to inform the improvement opportunities for a land based spill preparedness and response regime in British Columbia.

The Canadian Fuels Association¹ is a national association of Canadian refiners and marketers of petroleum products. Our purpose is to serve and represent these sectors of the petroleum industry with respect to environment, health & safety and business issues. Canadian Fuels members have a long track record of leading edge industry performance and focus on continuously improving health and safety aspects for all facets of operations.

Our written submission includes the consultation standard form requested as an attachment. However, we want to highlight the key elements of Canadian Fuels national land spill preparedness and response program including preventative measures and also highlight key areas of input to the "Additional Technical Information" sections of the policy intentions paper.

¹ Canadian Fuels members: Bitumar Inc., Chevron Canada Limited, Federated Co-operatives Limited, Husky Energy Inc., Imperial Oil Limited, Irving Oil, North Atlantic Refining Limited, North West Redwater Partnership, NOVA Chemicals (Canada) Ltd, Parkland Fuel Corporation, Shell Canada Products, and Suncor Energy Products Partnership.

The Canadian Fuels scope is focused on the <u>Truck</u> transport of petroleum products. We currently have a mature national program in place based on three principles:

- 1. Prevention via our Professional Petroleum Drivers' Manual and Driver Certification program
- 2. Preparedness via our Land Transportation Emergency Response guideline for petroleum spills
- 3. Response via the Land Spill Emergency Preparedness Program with oversight provided by Western Canada Marine Response Corporation and Eastern Canada Response Corporation

Prevention

The Canadian Fuels *Professional Petroleum Driver's Manual*, produced by the petroleum industry in conjunction with various petroleum carriers, informs drivers about safe product handling practices. This guidance document contains information and guidelines that are standard throughout the petroleum industry. It represents the minimum level of professional knowledge and understanding that is required to safely deliver products. The document can be found at:

http://canadianfuels.ca/assets/upload/pdf/en/Driver%20Certification/Canadian%20Fuels%20Driver%20 Manual%20January%202013%20-%20ENG.pdf

<u>Preparedness</u>

The Canadian Fuels *Land Transportation Emergency Response Guideline for Petroleum Spills* outlines response scope, emergency response practices, response time guidelines, response equipment, and personnel capability requirements for petroleum truck deliveries of petroleum products. The document can be found at:

http://canadianfuels.ca/assets/upload/pdf/en/Driver%20Certification/LTER%20Guidelines%20-January%202013%20-%20June%2013-2013%20final.pdf

Response

Canadian Fuels supports the Land Spill Emergency Preparedness Program for truck transport of petroleum products and have engaged Western Canada Marine Response Corporation (WCMRC) and their eastern counterpart Eastern Canada Response Corporation (ECRC), to set up separately funded divisions responsible for the implementation and coordination of a Land Spill Emergency Preparedness Program. The preparedness program is funded by industry and truck transporters. Funding for activation of the program to respond to any release is covered by the responsible party. Additional information can be found at: http://wcmrc.com/land-spill-program/

Looking forward, Canadian Fuels supports the government review of Land Based Spill Preparedness and Response in British Columbia. However, the key challenge will be to understand and identify "gaps" as to whom and what is not covered for truck transport of fuels in British Columbia. In addition, any spill preparedness and response program should have a fundamental funding principle that is performance-based; where good performance is rewarded and bad performance has funding by the responsible

party. The Government's role in a new program should be to minimize redundancies and to ensure the "gap" parties are included in the program. Any new legislation should be targeted to close the "gaps". In this regard, Canadian Fuels offers the following input to the "Additional Technical Information" sections of the intentions paper:

I. Key Parties

We are generally in agreement with the points in this table, with the exception that the following needs additional clarification or should be removed in entirely ...

- When a spill occurs, the responsible party recovery responsibility is remediation and restoration of the environment and **restitution for losses incurred**. We suggest that restitution for losses incurred needs to be removed as it is too vague, is beyond regulatory mandate, and enters into the "civil damages" arena.
- Clarification is required on the implication that industry is responsible to fund the **provincial Environmental Emergency Program costs**. It is not clear what this program is or if it is necessary. It can be interpreted that this is Ministry work and therefore, the funding source should come from public sources and be broad based (i.e. taxation or perhaps fees).

II. Preparedness, Response, Restoration Requirements

We highlight the following points for your consideration...

- Unannounced drills are not effective and can be disruptive. We recommend that this point be removed.
- Clarification and understanding is required on the intentions for community readiness and on the scope and custodianship relative to staging of initial response equipment caches.
- Geographic Response Plans (GRPs) are excellent vehicles for risk assessment and emergency response scenario development. However, we need to understand the level of stakeholder engagement expected as this could get unwieldy and ineffective if becomes too localized.
- Restoration requirements, we suggest go beyond the regulatory mandate of health and environment protection and enter civil areas. Discussion is required to define end points and options to achieve the endpoints. Discussion on "monetary values for restoration" and 'intrinsic loss to communities" are civil issues and unique to each situation. It is not productive to establish public policy that will require challenges for compliance and enforcement.

III. Preparedness and Response Organization

Canadian Fuels supports a focused organization (steering committee) that recognizes existing industry response capacity and capability and increases the level of subscription to the existing preparedness regimes. The focus of the steering committee is "preparedness for a response". We see a role for the Ministry to be part of this steering committee. However, the following points are problematic...

- The need for a "fund" to cover costs when a responsible party is not able to be identified. There are alternatives for a responsible party to mitigate risks and the Ministry focus should be compliance for those parties to subscribe to a program to support releases that may occur from their operations.

- "Funds" to cover costs of "Provincial, Local, and First Nations" support to a response. This intention requires considerable clarification and understanding, especially, if the role of the province, local government, and First Nations is expected to go beyond public safety and service.
- This intentions paper is focussed on "oil pipeline and railways" modes of transport. It is critical that British Columbia's intentions are reconciled with the Federal Government Transportation of Dangerous Goods initiatives, directives, and regulations that have been announced, are under development, and é or being implemented nationally.

IV. Enhanced Provincial Environmental Emergency Program

It is not clear what the Ministry's intentions are in this section. It appears to suggest that industry should fund public policy work, compliance, & enforcement. The suggestion is that there is a need for additional Ministry staff to deal with the increased economic activity that comes from increased resource movement across the province (and potential for increased incidents). The increased activity will be positive for the province and will result in increased general revenues to the province from economic development and growth, directly and indirectly related to the resource development and movement. Revenues and costs accrue to the public purse through taxation and fees for all levels of government (Provincial, Local, First Nations). Canadian Fuels would like to discuss this intention further.

In closing, Canadian Fuels believes that industry would prefer to build upon existing industry programs, and that British Columbia should conduct an extensive situational analysis, to determine if indeed additional legislation and a response fund are required.

Please find enclosed the requested consultation response form for the policy intentions paper.

Yours truly,

John Skowronski

Director, Government & Stakeholder Relations

Email: johnskowronski@canadianfuels.ca

cc Mary Polak, BC Minister of Environment, email: ENV.minister@gov.bc.ca
Jim Hofweber, Executive Director, Environmental Management, email: jim.hofweber@gov.bc.ca
Canadian Fuels Members

Enclosure

Land Based Spill Preparedness and Response in British Columbia Response Form (April 2014)



Discussion Areas and Questions

The following discussion areas and questions are based on a policy intentions paper for consultation which can be accessed from the Ministry's Land Based Spill Preparedness and Response in British Columbia website.

Canadian Fuels Association – Response Form

A. British Columbia's Current Spill Preparedness and Response Regime In your view, do you feel that British Columbia's current spill preparedness and response regime is effective?

Answer: Quite effective

What are the reasons for your choice?

- 1. BC has an "Inland Oil Spill Response Plan" (July-2013) that defines the scope and structure of the provincial government involvement when responding to a major inland oil spill.
- 2. The BC Land Spill Symposium (March, 2013) provided the opportunity for industry sectors to describe their respective sector prevention, preparedness, and response programs. There is considerable industry capacity in place, that could be enhanced with a coordinated steering committee that includes transporters, shippers, MoE, response organizations.
- 3. Some industry sectors have provided additional information to the Ministry to demonstrate the capacity that currently exists for land spill preparedness and response.
- 4. Recommendations from Transport Canada related to Transportation of Dangerous Goods of Flammable materials will further enhance industry requirements for preparedness and response, while encourage increased Provincial oversight.
- 5. An area for improvement and a role for the Ministry is increased oversight (compliance & enforcement) that all transporters of hazardous materials can demonstrate a preparedness & response capability, either through their own program or through and industry funded program.
- 6. Existing legislation in the BC (Environmental Management Act & Emergency Program Act) provides for the principles of polluter pay, responsible party, and remediation of impacted lands.
- 7. There is opportunity to better inform and engage communities on the existing industry capability, based on risk, that exists for land spill preparedness and response. Geographic response plans are one method to inform communities; awareness programs such as TransCAER are another; the Federal TDG work includes a first responder awareness and training element to engage communities and first nations.

B. Protection of Human Health and the Environment – Meeting Ministry Principles

In your view, how effectively do the Ministry's intentions support the principles (described on page 4 of the intentions paper) guiding B.C.'s land based spill preparedness and response regime?

Answer: Quite effective

What are the reasons for your choice?

The Ministry's intentions and Canadian Fuels support of the seven principles are aligned. However, clarity is required on the principle of "Polluter pays for prevention, preparedness, response, & recovery". Clarity is required to determine roles and responsibilities for "public safety", "addressing loss of access to public amenities", recognition of alternative response measures to remedy impacts from a release, and defined endpoints for effective remediation. In addition, there is a bias to regulating "response standards" ar a very granular level which will be a challenge to implement and enforce as each event has unique conditions and require s flexible approaches.

C. Ministry Intention 1: Preparedness, Response and Restoration Requirements See intentions paper pages 5 and 13-14.

1. General comments:

1.1 Do you have any general comments about the proposed requirements?

Canadian Fuels is encouraged that avoidance of unnecessary duplication of regulatory oversight is a guiding principle, especially in light of the recent Federal Transport Canada work related to transportation of flammable materials. In addition, the outcomes from the Ministry Symposium (March, 2013) and output from the working groups during 2013 demonstrated the existing industry capacity for preparedness and response. An area for improvement is to engage the Ministry to support the existing capacity. The concept of an industry steering committee that includes governments, transporters, shippers, & responders will facilitaste the closure of gaps, such as those parties that do not have access to a robust preparedness & response program. For example, Canadian Fuels has a mature prevention, preparedness, and response program for the truck transport of petroleum products.

1.2 Are there any gaps in the preparedness, response or restoration requirements identified by the Ministry? Do you feel that any of the proposed requirements are unnecessary or duplicate existing regulations? Please be specific.

Clarity is required on the principle of "Polluter pays for prevention, preparedness, response, & recovery". Clarity is required to determine roles and responsibilities for "public safety", "addressing loss of access to public amenities", recognition of alternative response measures to remedy impacts from a release, and defined endpoints for effective remediation.

1.3 Are there some requirements that you feel should be a priority for the Ministry? If so, which ones?

Existing legislation and the BC Inland Oil Spill Response Plan provide the framework for the Ministry to provide oversight and be involved when responding to major inland oil spills. There is an opportunity for the Ministry improvement and a role for the Ministry is increased oversight (compliance & enforcement) that all transporters of hazardous materials can demonstrate a preparedness & response capability, either through their own program or through and industry funded program.

- 6. Existing legislation in the BC (Environmental Management Act & Emergency Program Act) provides for the principles of polluter pay, responsible party, and remediation of impacted lands.
- 7. There is opportunity to better inform and engage communities on the existing industry capability, based on risk, that exists for land spill preparedness and response.

2. Who should lead development of geographic response plans?

An outcome of geographic response plans is a thorough risk assessment of receptors in an area and provide local assurance that preparedness exists to respond when required. In addition, geographic response plans need to be tested from time to time to demonstrate capability and improve as required. Industry conducts awareness programs at a local level (ie. TransCAER) to inform on hazards, capability, and response. There is an opportunity for the Ministry to become engaged in this activity, through an industry steering committee.

3. Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response. Do you have any comments or suggestions for the Ministry with respect to evaluating the ability of companies (or the proposed provincial preparedness and response organization) to meet legislated requirements?

Unannounced drills are not effective due to the scope of the exercise. Purpose of the exercise is assurance of readiness to respond to scenarios that are part of the risk assessment. a preparedness program will include a regular verification process of response capability (ie. equipment resources, trained contractors, stewardship metric versus response guidelines, etc). Legislation that may be contemplated should consider that responsible parties have a preparedness and response program in place, that meets a minimum guideline and is verified. An Industry Steering Committee that includes the Ministry will provide assurance and oversight that capacity and capability exists.

4. Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?

Communities, First Nations, and other local stakeholders require assurance of appropriate response to unintended releases of hazardous materials and require local support for first response which may be beyond the scope of their skill and capability of local first responders. Local communities are focused on public safety rather than spill repsonse. Industry development of a preparedness & response plans risk assess geographic conditions to provide local assurance that preparedness exists, plans need to be tested from time to time to demonstrate capability and improve as required, and industry conducts awareness programs at a local level (ie. TransCAER) to inform on hazards, capability, and response. There is an opportunity for the Ministry to become engaged in this activity through teh industry steering committee.

5. Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.

5.1 Do you have any comments about including spill response times in legislated requirements? Spill response times are dependent upon the conditions of the incident. Each scenario will have a different set of conditions. Response guidelines are typically established against an evolving set of scenarios based on experience and appropriately risk assessed. Emergency response is a progressive process based on information that is gained as an event progresses. Legislation if required should be directed that responsible parties have preparedness and response plans in place or access to a regime that can provide the capability.

5.2 What response actions would you recommend attaching time requirements to (e.g., cascading levels of response action)?

Emergency response is progressive (ie. not static). Considerations in developing preparedness & response scenarios will include population density, nature of activities in the area, receptors that will be impacted, response capability. Response scope will cascade from the carrier, local support, response organization, contracted responders, third party support, based on local assessment of the release conditions.

5.3 What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?

Continuous improvement and stewardship of preparedness & response experiences will help to include unknown uncontrollable factors, eg. weather, in the scenarios. the industry steering committee, including government, will play a role to continuously improve preparedness & response needs based on review of incidents.

6. Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. How should significant impacts on parks, public beaches, etc. be dealt with to ensure satisfactory outcomes?

Each event requires to be assessed on it own circumstances. Existing regulations provide remediation for impacts to the condition that existed before the the release, taking into account land use and alternative solutions for remediation. "Satisfactory" is a subjective descriptive target and is not easily achievable. However, once a remediation plan is agreed to, end points need to be established for transparency.

D. Ministry Intention 2: Provincial Preparedness and Response Organization See intentions paper pages 7 and 15-16.

1. Do you have any comments or suggestions regarding establishment of a provincially regulated preparedness and response organization?

A provincially regulated preparedness & response organization would be redundant. Industry sectors have mature preparedness and response regimes in place. There is a role for the Ministry to become engaged in an advisory (steering) capacity with the various industry organizations to enhance participation in existing industry preparedness & response regimes, and share learning across sectors.

2. If the Ministry proceeds with the establishment of a provincial preparedness and response organization, what criteria, risk levels and other factors should be considered in determining the threshold for mandatory membership?

Criteria for mandatory membership could include the type of hazardous material transported (ie. toxic & persistent), releases that currently require reporting, modes of transport (taking care not to overstep jurisdictional boundaries), be a condition of business license application.

3. Do you have any comments or suggestions about how local government, First Nations and other stakeholders should be engaged or integrated into the activities of the proposed provincial preparedness and response organization?

Local government, First Nations, and other stakeholders need to be informed of hazardous material moving through their lands (ie. TranCAER) and participate in exercises for preparedness and response. In addition, they should have access to information when a release occurs (eg. First responders and Canutec). However, local first responders should not be expected to exceed their mandate to implement measures for public safety that they are appropriately trained.

4. What industry based funding mechanisms should the Province consider in establishing a response organization? How should the Province ensure fairness and equity across all the industry sectors whose spills could impact provincial lands or resources?

Industry sectors currently have in place preparedness & response regimes that are funded based on the sector needs. The Ministry needs to determine if all sectors have appropriate regimes in place and determine that responsible parties are able to demonstrate that they belong to an industry funded response organization and/or have the resources to support their own preparedness & response program when required. Fairness & equity across industry sectors should be performance based and risk assessed. Based on exposure scenarios, industry needs to determine the level of exposure that a release will have. Alternatives for coverage then need to be established. The Ministry role is to provide assurance through compliance and enforcement of existing regulations, that appropriate coverage is available by a responsible party.

5. Do you have any comments about development of provisions that would enable local governments and/or First Nations to recover costs and fund immediate participation in a spill incident response? Local governments and / or First Nations participation in spill incident response should not go beyond the level that they are trained to implement their role in public safety. However, funding, as is currently the case, should be broadly based, applied to the hazardous materials of concern, and funds collected should be spent on the intended outcomes (ie. not general revenues). Market based and performance based options should be the basis for funding. Canadian Fuels supports the Polluter Pay Principle and that the responsible parties that pose the increased risk should be those that fund the needs for increased government oversight, prevention, preparedness, and response capacity.

E. Ministry Intention 3: Enhanced Provincial Environmental Emergency Program See intentions paper pages 9 and 18-19.

1. Do you have any comments or suggestions regarding the Ministry's intentions to require industry funding of an enhanced Provincial Environmental Emergency Program?

Industry currently funds a preparedness and response program. The suggestion that industry provide funding to government to staff and administer a program is flawed. Government funding of programs rests with taxation and fees levied on the public and industry. However, funding, as is currently the case,

should be broadly based, applied to the hazardous materials of concern, and funds collected should be spent on the intended outcomes (ie. not general revenues). Market based and performance based options should be the basis for funding. Canadian Fuels supports the Polluter Pay Principle and that the responsible parties that pose the increased risk should be those that fund the needs for increased government oversight, prevention, preparedness, and response capacity.

2. What percentage of the cost of the Province's Environmental Emergency Program should be funded by general revenue (tax dollars) and what percentage should be funded by industries that pose a risk to the environment?

Industry currently funds prevention, preparedness, and response regimes. The responsible party (polluter pay) funds impacts from releases. Legislation insures that the polluter pay principle is directed to the responsible party. Government oversight (compliance, enforcement, policy development) is funded by general revenues. A mathematical formula is not an appropriate or relevant process to determine funding for the Province's Environmental Emergency Program. However, funding, as is currently the case, should be broadly based, applied to the hazardous materials of concern, and funds collected should be spent on the intended outcomes (ie. not general revenues). Market based and performance based options should be the basis for funding. Canadian Fuels supports the Polluter Pay Principle and that the responsible parties that pose the increased risk should be those that fund the needs for increased government oversight, prevention, preparedness, and response capacity.

3. Ensuring fairness and equity are important criteria for the Ministry in considering funding mechanisms. Do you have any comments or suggestions regarding fair and equitable industry based funding mechanisms that the Ministry should consider in establishing an appropriate level of funding for the Provincial Environmental Emergency Program?

Industry currently funds prevention, preparedness, and response regimes. The responsible party (polluter pay) funds impacts from releases. Legislation insures that the polluter pay principle is directed to the responsible party. Government oversight (compliance, enforcement, policy development) is funded by general revenues. A mathematical formula is not a relevant process to determine funding for the Province's Environmental Emergency Program. However, funding, as is currently the case, should be broadly based, applied to the hazardous materials of concern, and funds collected should be spent on the intended outcomes (ie. not general revenues). Market based and performance based options should be the basis for funding. Canadian Fuels supports the Polluter Pay Principle and that the responsible parties that pose the increased risk should be those that fund the needs for increased government oversight, prevention, preparedness, and response capacity.

F. Additional comments

Do you have any additional comments or suggestions for the Ministry regarding development of a world leading land based spill preparedness and response regime for B.C.?

The BC Inland Oil Spill Response Plan (July, 2013) defines the scope and structure of the provincial government's involvement when responding to a major oil spill. This is a good foundation document to become engaged with existing industry preparedness and response regimes through "steering committee" organization. In addition, the recent Federal Transport Canada work on TDG requirements for transport of flammable products will add an additional layer of preparedness & response to the existing industry regimes and also considers the needs of local first responders. Care needs to be taken to duplicate the Federal requirement qwith those of the Province. Canadian Fuels believes that there is tremendous synergy to incorporate the the Federal work into the provincial model (ie. Industry Steering Committee).

Land Based Spill Preparedness and Response in British Columbia Ministry of Environment - Environmental Emergency Program

The Ministry of Environment (the Ministry) is seeking comments from the public on intentions to strengthen British Columbia's land based spill preparedness and response regime. Land based spill refers to any spill impacting the terrestrial environment, including coastal shorelines, regardless of the source. The Ministry's policy intentions will help achieve the objective of effective and timely response to all spills, building on stakeholder consultations and targeted research conducted by the Ministry through 2012 and 2013.

A paper describing the Ministry's intentions and this response form, as well as further information, are posted on the Ministry's Land Based Spill Preparedness and Response in British Columbia website.

The Ministry is proposing a world leading land based spill preparedness and response regime that includes the following components:

- 1. Spill preparedness, response and restoration standards
- 2. A provincially regulated industry funded provincial preparedness and response organization
- 3. An enhanced Provincial Environmental Emergency Program

Comments are being solicited and will be carefully considered in the development of the Province's spill preparedness and response regime. Those interested are invited to submit comments on the Ministry's intentions – using the instructions and questions provided on this response form.

All submissions will be reviewed for inclusion without attribution in a consultation summary report to be made public following the consultation period. Please note that comments you provide and information that identifies you as the source of those comments may be publicly available if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

After review of consultation comments and further detailed program and policy development, the Ministry will draft any required regulatory changes for consideration by the Minister and/or Lieutenant Governor-in-Council and consult further with stakeholders during the design and implementation of changes that are advanced into policy or law.

If you have any questions or comments, check the website address above, or contact Cindy Bertram of C. Rankin & Associates who has been contracted to manage consultation comments, at:

Email: cindybertram@shaw.ca Mail: PO Box 28159 Westshore RPO, Victoria B.C. V9B 6K8

The Ministry welcomes submissions or comments in addition to this response form. Completed response forms or submissions may be returned by email or mail, or by directly submitting the web-based response form on the Ministry website

Comments to the Ministry should be made on or before July 25, 2014.

Thank you for your time and comments!

4299816

Last Update: Friday, 19 December 2014



Discussion Area and Questions

The following discussion areas and questions are based on a policy intentions paper for consultation which can be accessed from the Ministry's <u>Land Based Spill Preparedness and Response in British Columbia</u> website.

A. British Columbia's Current Spill Preparedness and Response Regime

In your view, do you feel that British Columbia's current spill preparedness and response regime is effective?

Significant gaps

What are the reasons for your choice?

- The current regime is not clear, does not effectively integrate multiple agencies in to a coordinated response, has suffered from significant staff and resource cutbacks within several key oversight agencies (Environment Canada, Fisheries and Oceans Canada, Coast Guard, etc.) concurrent with significant increases in the volume of a variety of hazardous substances being transported by truck, rail, and pipeline.
- There is currently no integrated plan to perform the baseline ecological mapping required to assess the
 potential impacts of spills, or to assess the success of recovery efforts. It is not clear who would perform
 these types of assessments across the various jurisdictions that may be impacted by a spill.
- There is a lack of communication between major jurisdictional stakeholders (Federal, Provincial, and Local Governments, First Nations, Industry) regarding specific roles in spill preparedness, response, and recovery. Local Governments are not funded consummate with increased risk of spill and impacts from projects being approved by senior governments, yet are expected to serve as eyes on the ground an first responders.
- With uncertain jurisdictional authority over many activities on City lands (pipelines, port activity, rail
 activity), local governments have limited ability to see that risks are addressed, nor can the Local
 Government ever fairly measure risk exposure, as information sharing may be limited for "security" or
 other reasons. There is no formal structure for Local Governments to see that these issues are
 addressed, even during the project review and approval processes.
- Local Governments are on the front line of public engagement, and are commonly asked by citizens to
 act as a liaison between citizens and other agencies (i.e. senior governments and industry). Currently,
 there is a significant gap between what the public expects in regards to engagement, consultation and
 disclosure, and what senior governments, oversight agencies, and industry are willing to share. Local
 Governments are neither informed nor funded to lead this engagement.

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B. Protection of Human Health and the Environment – Meeting Ministry Principles

In your view, how effectively do the Ministry's intentions support the principles (described on page 4 of the intentions paper) guiding B.C.'s land based spill preparedness and response regime?

Significant gaps

What are the reasons for your choice?

- The role of Local Health Authorities is unclear. The Protection of Human Health is fundamentally their responsibility.
- Risk Assessment is vital, and must be closely overseen but a regulatory agency with the resources
 and scientific expertise to understand complex risk situations. Proponents cannot be responsible for
 risk self-assessment.
- Risk is cumulative, and must be assessed as such. Multiple concurrent projects cannot be assessed
 independently, nor can risks be limited to immediate local effects, but must be assessed as part of
 larger ecosystem impacts.

C. Ministry Intention 1: Preparedness, Response and Restoration Requirements

- 1. General Comments:
- 1.1 Do you have any general comments about the proposed requirements?
 - General to the entire document, but in this section especially, a glossary is required. The document uses several words that may mean different things to biologists, contaminated sites professionals, first responders, and those working in emergency management. As such, it needs to be made very clear to all parties what is meant by words like:
 - Recovery: bringing impacted area back to normal pre-spill condition, or capturing and removing spilled materials?
 - <u>Restoration:</u> Replacing lost ecologic services? Preparing environmental media to naturally recover? Creating barriers between contaminants and receptors?
 - Remediation: Removal of spilled material from environmental media? Creating temporary or permanent barriers between contaminants and receptors? Re-introducing lost ecology?
 - Education of Local government first-response and emergency management staff is an important aspect of the PRO program. Local governments are simply not funded to address the new types of spill, human health, and environmental hazard being presented by these new large hydrocarbon- related activities, nor do the local taxes generated by these activities on Federally-regulated lands (Port, Railways, etc.) allow the Local Government to train up or equip up adequately. Local governments should not be required to go hat-in-hand to senior governments to receive these supports, but they should be delivered as part and parcel of Federal approval of these projects.

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- "Restitution" is a difficult issue, and one of fundamental importance when assessing new projects. Recovery of losses through the courts is not a viable approach for most residents or small business owners when the Polluter is a large multi-national corporation and multiple large multinational insurance / risk management corporations. Even for many local governments, attempted recovery of costs through the courts would be a financial risk that Cities would reluctantly impose on local taxpayers. Restitution responsibility cannot be outsourced to the (already overburdened) court system, but should exist in a separate legislation to be administered by an entity that answers to government and is accountable to the public. This includes the loss of access to a public amenity, and loss to third party businesses in the event of a major spill (i.e. fishers in the event of a major fish kill, farmer in the event of a loss of access to irrigation source, tourism agencies in the event of a loss of park usability).
- Local authorities and stakeholders need information on what the mandates and legislation will support
 verses what "could" or "may" take place. As an example, the list of functions of the PRO (p.15) can be
 seen as vital to the holistic process of dealing with the preparedness, response and recovery of a land
 spill and therefore if the PRO does not have these functions they should be assigned to another agency /
 provision who can take these roles and be monitored and assessed for progress and capability.
- 1.2 Are there any gaps in the preparedness, response or restoration requirements identified by the Ministry? Do you feel that any of the proposed requirements are unnecessary or duplicate existing regulations? Please be specific.
 - The requirements need to be specific and mandated by legislation, with assurance that there will be adequate funding and resources to see that requirements are met;
 - There must be an integrated and fully funded program of baseline data collection to understand the
 productivity and value of threatened ecological areas, the economic value of threatened resources, and
 the community value of ecological and infrastructure assets, such that risk assessment can be
 performed from a position of knowledge, and so recovery efforts have a baseline to measure against.
 - There is no mention of active wildlife rescue and recovery efforts in the event of a spill. The rescuing and care of oiled wildlife is not addressed, nor are wildlife control measures to prevent exposure to spilled products post-spill.
- 1.3 Are there some requirements that you feel should be a priority for the Ministry? If so, which ones?
 - Requirements are just that. The first priority of the Ministry should be to develop a more detailed and comprehensive plan with concrete actions, measurables, and draft legislation to allow for a fulsome and detailed consultation process with all stakeholders.
 - Identification of operational regulators legislative and profession driven mandates in regards to mitigation, preparedness, response and recovery.
 - Establishment of realistic, measureable, and comprehensive standards for response and recovery.
 "World Class" is not a measureable standard. As the goal is to protect one of the world's most important salmon rivers, one of the most important stops on the Pacific Flyway for migratory birds, some of the most valuable farmlands, forests, wetlands, streams, lakes and wildlife populations in the world, a "World Leading" response plan may be inadequate for our needs. In many areas, a social licence to

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operate will only come if protective measures far exceed those seen in other jurisdictions around the world.

- 2. Who should lead development of geographic response plans?
 - The lead for this program should be un-biased and committed with resources that are not literally or figuratively associated with the industry. They will need to have a clear model that shows that they are looking for real answers, have milestones and accountability;
 - The lead should be accountable to government and stakeholders, and must be provided with resources to integrate the concerns of local land users (residents, businesses,) First Nations traditional knowledge, Local Governments, Environmental NGOs (Stream keepers, local ecology groups, etc.), and senior government agencies (CWS, DFO, EC, FLNRO, MoE, MoH, etc.). Lead must have the scientific resources necessary to make assessments, evaluate the quality of data, and generate required data if gaps exist.
- 3. Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response. Do you have any comments or suggestions for the Ministry with respect to evaluating the ability of companies (or the proposed provincial preparedness and response organization) to meet legislated requirements?
 - Unannounced drills are capability-specific and can provide a level or realism to validate training and
 proficiency at a skill or function. These would be necessary to validate individual capabilities prior to a
 larger exercise such as a full scale exercise where multiple functions will be responding to one or more
 scenario events.
 - Unannounced drills can provide useful information and are needed to gauge readiness and ability to
 perform. They are however resource intensive and should not inhibit other capabilities such as
 responding to real events or performing daily critical tasks.
- 4. Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?
 - Planning a community should have full knowledge of the risk such as average exposure to particular hazards (type of hazard, typical amounts and frequency of transport through a community) and disclosure of risks and access to additional information regarding the incident should an event occur. Local Governments have advanced knowledge of local needs and resources, and can provide such if consulted.
 - Notification if a community is impacted, could be or perceived to be impacted by the public, agencies, stakeholders and or others the community should be notified to include but not limited to adjoining communities which will either possibly provide support and/or be possibly affected due to incident within the affected community.
 - Training identify resources that may be at the site prior to arrival of others and engage those
 individuals/response agencies so that there is clear understanding and continuity between first
 responders and others.
 - Local governments can provide significant support in local engagement as part of a large community consultation strategy.

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- 5. Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.
- 5.1 Do you have any comments about including spill response times in legislated requirements?
 - The public, affected communities, first responder agencies and levels of government should know what
 the spill response time are so that the hazard is known, response times and capabilities are known. This
 requirement should be legislated so that it is consistent and groups are held accountable to perform.
 This will allow expectations to be understood and can provide impacted groups with ability to plan and
 communicate.
 - There are local timing considerations for land-based spills: how long does a local government require to close a storm water outflow before spill enters critical habitat? What are local geographic conditions that can hamper timely response in specific areas? Overarching guidelines are vital to make the PRO accountable, and should form foundation of Unannounced Drill regime, however local response limitations must be addressed through local government consultation.
- 5.2 What response actions would you recommend attaching time requirements to (e.g., cascading levels of response action)?
 - A cascading level of response action appears reasonable and consistent with other types of response (i.e. a fire department may have a mandate to have received a call and be on site with x equipment within 3 minutes) as well as they are clearly defined by type of response, time of response and duties/roles to be accomplished. This would be then accompanied by information that provided context and or algorithms as to how each level is determined and who decides what the next level taken is.
- 5.3 What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?
 - Type of incident
 - Impact of incident (size, toxicity, impact type)
 - Geographical location and accessibility
 - Identify capability and gaps
 - Look at worst case scenario for a single event as well as multiple simultaneous events that may require resource prioritization and/or limitations.
 - Create a methodology of identifying, decision making, criteria and expected outcomes with reporting protocols/milestones/expected actions and accountability for performance and outcomes.
- 6. Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. How should significant impacts on parts, public beaches, etc. be dealt with to ensure satisfactory outcomes?
 - Engagement with impacted area

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- Capability to understand that this may not be the new normal may be a new normal or even an opportunity with stakeholder engagement and resources to improve the area;
- Public Engagement see Guidelines for Engaging the Public Post Disaster in Reference in Attachment 1;
- Ensure that the impacted groups are able to have reasonable time for discussion, planning and capability;
- Use best practices for community recovery post disaster;
- Clear, concise information with transparent planning / consultation and recovery process will provide understanding and clarify expectations.

D. Ministry Intention 2: Provincial Preparedness and Response Organization

- 1. Do you have any comments or suggestions regarding establishment of a provincially regulated preparedness and response organization?
 - The PRO would have to be resourced (staffing, funding) and provided with mandates and legislation to support the activities that are holistic in nature.
 - PRO would be independent and yet integrated and communicating with multiple Ministries that are stakeholders on this topic
 - PRO would need to involve communities/stakeholders/First Nations from development to implementation of the organization.
 - More than one PRO may be established for different types of polluting or dangerous substances or for different regions of the Province.
- 2. If the Ministry proceeds with the establishment of a provincial preparedness and response organization, what criteria, risk levels and other factors should be considered in determining the threshold for mandatory membership?
 - Membership should be mandatory for any organization that is responsible for the production, storage, or transportation of polluting substances at quantities greater than they can immediately clean-up in the event of a spill. Only if an organization managing quantities of material defined as "Dangerous Goods" can provide the same preparedness, planning, response, containment, clean-up, and remediation capability as the PRO would provide, should they be exempt from membership in the PRO by the legislation establishing the PRO.
 - Ministries that are stakeholders legislatively required or create legislation for or are affected by the outcomes. For example it may seem apparent however Ministry of Transportation amongst others should be included.
 - Authority for the regulation, production and transportation of products.

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- Stakeholder groups such as the International Association of Oil & Gas producers who have formed groups such as the Global Industry Response Group should be included or invited due to their knowledge, resources and capabilities. See Attachment 1 – References - Oil Spill Response: Global Industry Response Group Recommendations
- 3. Do you have any comments or suggestions about how local government, First Nations and other stakeholders should be engaged or integrated into the activities of the proposed provincial preparedness and response organization?
 - Research and academic institutions who can provide subject matter expertise and research prior to during and post incident.
 - Representation of multiple levels of government who participate and/or communicate to those they
 represent,
 - Local Governments should have a seat at the table for Strategic Advisory Committees or other ongoing consultation committee within the PRO.
 - Communities/First Nations should be aware of the organization and provided with education on capabilities, limitations, possible requirements for support or the provision of support, outlines of processes and timelines and given the opportunity to participate ad hoc in planning as appropriate.
 Communication should be clear and there should be a point of contact from the organization who can liaise, educate and communicate with stakeholders/communities and First Nations.
- 4. What industry based funding mechanisms should the Province consider in establishing a response organization? How should the Province ensure fairness and equity across all the industry sectors whose spills could impact provincial lands or resources?
 - What are the current funding mechanisms if an event were to happen today?
 - What funding mechanisms are the marine based incidents utilizing?
 - How is the Western Canada Marine Response Network Corporation funded?
- 5. Do you have any comments about development of provisions that would enable local governments and/or First Nations to recover costs and fund immediate participation in a spill incident response?
 - Provide a funding model that allows impacted areas to partake in response and recovery/restoration processes in a timely manner that may be hindered by available funding prior to receiving assistance;
 - For a local government, the up-front costs of preparedness for large hydrocarbon infrastructure is daunting, and an unacceptable burden on local government taxpayers;
 - The bulk of the cost for preparedness, equipment, training, drills, etc. is spent long before a spill event occurs, and much is (properly) directed toward reducing the risk and extent of spills. If all goes well, there should not be a "polluter". Can we call this "user pay" or another more representative term?

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E. Ministry Intention 3: Enhanced Provincial Environmental Emergency Program

- 1. Do you have any comments or suggestions regarding the Ministry's intentions to require industry funding of an enhanced Provincial Environmental Emergency Program?
 - How will this program relate to Emergency Management BC?
 - Which Minister will this agency report to?
 - Is this a standard of best practices for other provinces and/or industrialized nations?
 - What are the alternatives?
 - What are the requirements for Marine Based transportation funding models?
- 2. What percentage of the cost of the Province's Environmental Emergency Program should be funded by general revenue (tax dollars) and what percentage should be funded by industries that pose a risk to the environment?
 - Is this a standard of best practices for other provinces and/or industrialized nations?
 - What are the alternatives?
 - What are the requirements for Marine Based transportation funding models?
- 3. Ensuring fairness and equity are important criteria for the Ministry in considering funding mechanisms. Do you have any comments or suggestions regarding fair and equitable industry based funding mechanisms that the Ministry should consider in establishing an appropriate level of funding for the Provincial Environmental Emergency Program?
 - Is this a standard of best practices for other provinces and/or industrialized nations?
 - What are the alternatives?
 - What are the requirements for Marine Based transportation funding models?

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F. Additional Comments

Do you have any additional comments or suggestions for the Ministry regarding development of a world leading and based spill preparedness and response regime for BC?

 There is little talk of Federal responsibility. It needs to be made succinct that Trans-provincial pipelines, marine tanker traffic, and railways (the three major components of hydrocarbon transportation that this model is meant to address) are federally regulated activities. Local governments, and arguably Provincial governments, should not foot the bill unless transfers from the Federal government are available to directly cover these costs

Background and Area of Interest

Work for a government regulatory agency:

Please describe (e.g., federal, provincial, municipal): The City of Richmond, British Columbia

Thank you for your time and comments.

Please remember to return this response form to the Ministry on or before July 25, 2014.

If you wish, you may also provide contact information on the following page. This information will be compiled separate from responses and used to inform respondents of posting of the summary of comments and subsequent actions of the Ministry related to land based spill preparedness and response.

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Contact Information

If you wish to receive further information concerning the Ministry's review to strengthen B.C.'s land based spill preparedness and response regime, please provide your contact information – **including an e-mail address** – below.

All submissions will be reviewed for inclusion, without attribution, in a consultation summary report to be made public following the consultation period. Please note that comments you provide and information that identifies you as the source of those comments may be publicly available if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

Contact Name: Lesley Douglas

Business or Organization Name (if appropriate): City of Richmond, BC

Email: Idouglas@richmond.ca

Mailing Address: 6911 No.3 Rd. Richmond, BC V6Y 2C1

Thank you once more for your time and interest in B.C.'s land based spill preparedness and response regime. If you have any further questions, please contact Cindy Bertram at: cindybertram@shaw.ca

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Daniel James Sinclair -

Incidence Command, HSSE Specialist, Certified Emergency Response Technician

MINISTRY INTENTIONS KEY CONSULTATION QUESTIONS – PREPAREDNESS, RESPONSE, AND RESTORATION REQUIREMENTS COMMENTS:

Who should lead development of geographic response plans?

The (MOE) Ministry of Environment should lead the geographic response plan in conjunction with qualified Incidence Commanders in the province. This should include (IC) Incidence Commanders with Emergency Response Certified Technician status or above with on the ground experience dealing with many Emergency Response callouts and the pitfalls of remote areas, Fire IC, Police IC, (EMT) Emergency Medical Personnel IC, and Government regulatory bodies in different regions and different departments ie) First Nations, Ocean and Fisheries etc.

Reason: As BC has many areas not readily accessible, utilizing IC's in different jurisdictions would help facilitate a more feasible response plan in specific areas. Knowledge of access, special concerns, personnel availability, Air, ground transport, logistics, all may be better planned having input from each area. This approach would facilitate a much better geographic response plan and identify major gaps in an Emergency Response situation that could be much better prepared with alternative resources where and when necessary.

Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response.

Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?

There are very few regular training and field exercises done for emergency response land based spills. WCMRC. Is one of the very few that does regular emergency response water based training exercises.

As we all know, there are requirements for the oil and gas industry, rail, and others to hold regular emergency response training sessions. I have personally been involved in numerous Kinder Morgan Mock drills on the Fraser River and others. A mock emergency response of any significance is an expensive proposition for all downstream service providers. Many would be involved if the costs were not so prohibitive in putting together a true field exercise. Alternative in house safety teams and emergency response departments should be responsible for putting together a series of lectures, safe work procedures and practices in Emergency Response situations varying in scope and risk.

When on an ER their Current training certificates should be provided by the service provider for viewing at any time by the Chief Safety Officer, Ops or IC on all aspects that provider is onsite for.

As those in the upstream rely heavily on downstream service providers that do hazardous materials abatement, handling, transport, etc. on a day to day basis in a calculated safe environment without an emergency element, it is imperative that the service providers that are highly trained in these areas add to their training regimes an element of organizational abilities under an Emergency Response callout.

All service providers' key personnel during an emergency response should be required to attend at least one upstream Mock ER once per year and to show training sessions to their respective companies pertaining to that ER. This should be part of an audit on all downstream Service providers. Each aspect of the ER should be broken down into what individual roles might be during an ER callout along with appropriate PPE and other concerns. All workers should be trained on aspects of the ICS system and what their individual role would be. Audits should be done by independent IC's and signed off bi annually not annually. There are not that many truly qualified service providers so the audits would not be difficult to do on a regular basis and service providers could hire independent IC's to do the audits and sign off on them.

As for comments regarding First Nations involvement in an Emergency Response:

Unless individuals of First Nations heritage are fully trained on an ER they should be treated as all general public, land owners or observers. There is rarely a place for anyone of any ethnic background on an ER unless appropriately trained. As with all major ER, a Liaison officer is appointed and certainly special attention must be given to those with people, property, etc involved. Special attention to pertinent details before, during and after the ER is necessary. During the preplanning stage and remediation stage, First Nations along with other stakeholders should definitely be involved. All stakeholders should have knowledge of what occurs during the ER stage and who the pertinent service providers are as well as their qualifications to get the job done.

Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.

Do you have any comments about including spill response times in legislated requirements?

If the geographic regions are well laid out and the potential risk is assessed in all regions, this will help determine the response times for Service providers to respond in a timely manner.

What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?

To provide a service to a major spill or other type of emergency in certain areas of British Columbia can be difficult in a "timely manner". A timely manner must be determined by how fast the closest team of service providers can effectively get to the

scene and effectively carry out the ER. There are not adequate amounts of qualified service providers in the province to effectively carry out a serious ER such as a major pipeline breach beside an ocean or river in a perceived timely manner, 27,000 km of coastline is a long way to travel even for a jet. I believe that the MOE has to look at effective methods of getting qualified service providers to all potential sites under ER conditions with a full ICS ready to go at a moment's notice. This should be a government paid for, independent providers IC trailer available for immediate dispatch to any site by air or ground within minutes of a call with every document, telecommunications device and plan ready to go for all call out service providers. The Independent Incident Commanders should be well versed on all service providers, their qualifications, contracts, personnel, etc. The Independent IC's should be acquainted with qualified service providers by doing audits bi annually and being involved with their training.

In conclusion

Identify qualified available independent Incident Commanders, Emergency Response Technicians, ER Specialists and Corporate service providers.

Pay a monthly retainer to the independent IC's to be on standby in the event of an ER. This decreases the "timely Response". Most independent IC's are not just IC's. They have other jobs that may or may not allow them to leave for an ER. I recently had an upstream company desperately searching for an independent IC to handle a spill. Once an IC is involved, the IC can put together a rapid response team that can move in a "timely manner" That time could then be regulated.

Essentials

Having Contracted Independent Incidence Commanders identified in the province. By doing the geographic mapping and having it at the disposal of the independent IC's, IC's being in constant communication with Qualified Service providers, Sourcing of Qualified Service Providers in the province as well as appropriate equipment providers.

Auditing providers qualifications and readiness,

Being involved in providers training

Identifying and reporting actual "timely response of providers.

Once this is done, government regulations may be possible. I do not believe this can be done now unless upstream companies are made to pay major fees to set up service providers in all areas of the province or there are government paid Independent IC's on 24/7 call. Actual service providers cannot afford to maintain offices and equipment in many areas of the province on the Possibility of an ER making a timely response difficult to regulated.

Appropriate Time elements can only be attached to areas where service providers are available. Appropriate Timely Response can be calculated. In many instances this is not possible depending on availability and location of responders and remoteness of the incident. Most would not be considered Timely Response. This is definitely a major GAP in the ER process.

Time Elements that should be regulated

Spill Reporting

Appropriate shut downs if available ie) pipeline sections, power etc

Independent IC availability and Response times, numbers, locators etc.

Activating IC and Response Team

Contact with appropriate Service Providers

Contracting appropriate Service Providers

Response times of Service Providers

Contact with appropriate stakeholders

Training upstream, downstream, IC, other.

ICS Knowledge

Auditing of ICS in both upstream and downstream

Auditing of teaching programs pertaining to ER

Auditing of preparedness, response, remediation

Response Post-mortem requirements.

Disseminating information learned from Response to upstream and downstream providers through official means.

Community readiness on potential risk, mitigation, response plans.

Provincial Preparedness and Response Organization

First and foremost the PPRO should have at least one person in the organization qualified at a minimum level of Emergency Operations Qualifications and 5 years actually working on ER callouts. Ideally, with certifications as an Emergency Response Technician level or higher with at least 5 years actually working in the field including Hazmat, oil spill response and not just government officials that do not have the above qualifications.

Any organization, company, person or persons, group, association or other that could potentially create a potential for an Emergency Response being activated should be registered with the PPRO

Each organization should be assessed a "level of Risk" Low, moderate, High,

"level of Risk" severity

"level of Risk" Environmental impact

assessment

Organizations above low risk with low severity of damage to people, property or environment should be optional. Organizations above this should be mandatory.

Industry based funding:

Fully equipped Incidence Command Mobile Units strategically placed throughout the province.

Incidence Commander standby retainer for qualified IC's

Fully equipped Emergency Response Trailers strategically placed throughout the province.

In the event of rail or pipeline, fully equipped Emergency Response Trailers strategically place along the rail or pipeline.

Set up an industry based fund to cover the above.

Any incident costs would be covered by the organization that caused the spill.

Funding

25% of funding should be contributed by the Government for key personnel ie) Incident Commanders retainer fees.

The IC is an Independent and is impartial, acting in the interest of the most efficient, effective and timely ER, mitigating risk to all stakeholders and service providers. The appropriate retainer keeps the IC's on standby and secures for the government that a highly skilled and qualified person can take control of any ER in the province. The company responsible for the incident must pay the IC during an incident at an appropriate rate that makes up for a person of their qualifications on standby during the year.

There are very few Qualified Incidence Commanders with experience to handle Hazardous Materials, Oil Spills on land or water, acts of terrorism, WMD's, etc. As we all know there are a few qualified service providers.

It is necessary to identify those that are independent and available in Canada that are not working for Service Providers or Emergency Services such as police, fire, Armed Forces.

100% by those that cause the incident Except the IC standby fees which should be covered by the Government to maintain an appropriate level of preparedness with qualified persons.

This is a new concept retaining EMERGENCY RESPONSE INDEPENDENT INCIDENT COMMANDERS FOR 24/7 AVAILIBILITY and one that is more than timely given a 60% rise in crude oil moving across BC in the last year.

If Ms. Polak would like to discuss this further please feel free to give me a call.

Daniel James Sinclair

Incidence Command, HSSE Specialist, Certified Emergency Response Technician (Hazardous Materials, WMD)

David G McRae

regime: Not effective at all

A_Text_Box: The focus really needs to be more on the PREVENTION OF SPILLS. Most rules and regulations will never prevent spills, much like our criminal laws do not prevent crime, but do provide an avenue for punishment. Jail or monitory. Response times through out the province will very wildly and at best achieve only a 10% to 15% retrieval of spilled product. The one shining aspect of a fast, prepared response would be the possible reduction of the spill size and control or removal of associated hazards. The current regime is ineffective because most big corporations find it less costly to pay into a cleanup fund (or pay a fine) than to practice good spill prevention methods.

principles: Significant gaps

B_Text_Box: Far too many people are not aware of all the health hazards contained in fossil fuels and their byproducts. As the unsuspecting people of Mayflower and Kalamazoo found out the hard way.

C1 1: If only requirements could prevent spills!!

C4: In this day and age, with vast fossil fuel exports on the horizon, a total province wide culture of SPILL PREVENTION of all sorts need to be developed. Starting with the schools and moving into the corporate board room and all points in between.

C5_3: For a response time to be appropriate and effective it would have to be immediate. It would appear that it can not be both.

C6: I find the thought of a (RESPONSIBLE PARTY) providing a alternate opportunity to the public after a dilbit or condensate tanker spill reaches the inland shores of B.C. just plain absurd! There is NO SATISFACTORY OUTCOME!!! It's like a company telling us that if you don't like breathing the polluted air that we are creating in your town, you can move elsewhere. If a (RESPONSIBLE PARTY) is allowed to replace a polluted park or beach with an alternate park or beach, where will it end?? Repeated polluters should not be allowed a license to continue polluting.

D1: In addition to provincial response organizations, the B.C. government should consider the value of safety training for volunteer watchdog organizations. These trained and qualified people should then be allowed on spill sites to observe, collect and record spill data for the public record. To date it has been the practice of fossil fuel companies not to release in a timely manner the cause and amount of their unintended releases. A.k.a. spills

D2: Among many, the following things to consider

- 1. The average daily volume of product being transported
- 2. The average distance product is shipped through B.C.
- 3. The toxicity of the shipped product.
- 4. Is the shipped product highly flammable or explosive.
- 5. How easily assessable would possible spill sites be?
- 6. The speed at which a spill could grow or move from point of origin.

(down stream)

- 7. Time needed to get all needed resources to spill site.
- 8. Does the shipper operate on congested routes.

D3: The establishment of trained municipal volunteer groups to act as industry watchdogs. If industry is allowed deceive and or cover up their flaws the more dangerous they become to human health and environment.

D4: Like all underwriters and insurance company's do. Look at who presents the biggest environmental risk to the province. Who and what spill will consume the most resources as opposed to those spill that are easy to deal with.

D5: Due to the toxic nature of most spills, only those trained in spill response should be asked for immediate assistance. The spill vapors will have long term deleterious effects on all those who do not have proper gear and the knowledge to use it. A established fund for cost recovery and compensation to those who have suffered losses due to the spill would be needed.

E1: To use terms such as (enhanced or world class) in the spill response program only serves to cheapen and sully the whole program. If one puts a dollar into their bank account it could be said that they have enhanced their account. Just what is the true value of WORLD CLASS spill response when compared to WORLD CLASS SPILL PREVENTION?? There is far too much unnecessary transportation of hazardous liquid petroleum products around the world now. Condensate for one.

E2: There should be "0%" funding by general revenue (tax dollars) and the percentage funded by industries should be related to the size, duration and impact of their potential environmental emergency response needs.

E3: Deffer back to question D4.

F textbox: What part of the world are you thinking of leading?

env community group: yes

env community group desc: Douglas Channel Watch,

other interest: yes

other_interest_desc: concerns with the acidic levels in our oceans. all things are connectec.

contactname: David G McRae

DonMar Consulting Limited - Donald Watson

regime: Not effective at all

A_Text_Box: I find that in most instances the legislation is targeted at "reacting" as opposed to proactive planning, training and enforcement. We need to work closer with the stakeholders in each community and hamlet to Audit all critically sensitive areas, correlate local committees to HRVA and to support their needs with instructors and equipment.

principles: Significant gaps

B_Text_Box: Again I feel the order for the principals needs to be adjusted so each community is empowered prior to any incident. When the incident happens it is too late to train, Inform etc.

C1 1:

Through my experience in Emergency Response Planning, I find that the stakeholders hold the key. If the community is on board and participates at all levels of planning and legislation, then your chances of success increase dramatically.

Local communities can work with local industries to prepare, react and restore if they are both working on the planning.

C1_2: Redundancy exists throughout all legislation. The key here is to implement the traditional "KISS" principal. Lay out which legislation trumps other legislation, the proper way to proceed with planning and response. In general create a clear direction for the stakeholders to follow.

C1 3:

Significant Spill Occurrences that happen inland BC occur, on highways, rail lines, pipelines or site specific industries or town sites. By having stakeholders in each community participate in the Risk Audits; it will solidify the support of the community working with the Provincial Government

C2:

As Identified in A Hazard Risk Vulnerability Analysis, you can rework this document to help identify the members for a local Spill Response committee. Proper planners and instructors need to assist these committees in developing these plans.

- C3: I specialize in site specific planning, I find that there needs to be "Encouragement" for site specific industries. Legislation and regulations are only as strong as the enforcement. Fines are not the answer, the presence of auditors and educators can help encourage the companies.
- C4: Like any other community the First Nations people must be part of the committees that approve the risk audits and overall response plans. I believe the First Nations peoples can be used as inspectors, auditors and patrol critical areas that have been identified in the risk audits.

C5_1: Response times are just Benchmarks that may or not be met during an incident. The focus should be identifying through the risk audits, critically exposed areas, then, through consultation do proactive planning and mitigation to these areas. Placing equipment, inspections and patrols are just a few ways to address a potential occurrence.

C5 2:

This type of response timing is outlined in various emergency response planning books and courses. The real answer is how quickly and with what resources can the closest response group react to a spill occurrence. Again this will be identified in the Community Committee planning.

It is important to note that each community will have its own response time problems.

C5_3: As stated above the response times are based on local response capabilities such as personnel, equipment and geographical terrain. Let the area dictate response time recommendations.

C6:

Proactive implementation and placement of mitigation measures and equipment.

Once the risk areas have been identified. (I.E Placing a 10-15 inch boom at the moth of small fish producing areas in a high risk area.)

D1: I understand that the provincial government has restrictions in personnel and funding for a project like this.

I believe that coordinators are needed that have experience in organizing and helping establish local committees as well as having the background to lead the local committees through the RISK Audit and planning process.

D2: THIS has to be determined by each community and provincial authority.

D3: I believe my comments above cover who I believe should be involved. Stakeholders
Government
Industry experts
Trainers

D4:

Each Risk audit will identify critical areas and each area will require various levels of funding. So there is no general formula ,just recognition of one communities greater need than another.

D5: Do not reinvent the wheel. Establish similar funding based on need.

E1: The idea always has merit. However the monies usually flow into General Revenue and gets misdirected to other "PET" programs. Industry can budget additional costs, but will be reluctant unless the monies are dedicated to a specific program; overseen buy a group representing all concerned communities and provincial representation.

E2:

Let the analysis drive the level of contribution. Where is the risk generated from? Industry or Government?

E3: NOT as of yet.

 F_{textbox} : Be careful with the title "World Leading". Words are cheap. If you make the commitment then completing the project is mandatory. Not just another political promise until the next election.

other_interest_desc: I run DonMar Consulting Limited (Emergency
Response Planning, BCP, ETC)

contactname: Donald P.Watson

orgname: DonMar Consulting Limited

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Georgia Strait Alliance comments on the Ministry of Environment's Policy Intensions Paper on Land Based Spill Preparedness and Response in BC

July 25, 2014

Via email to: cindybertram@shaw.ca

About Georgia Strait Alliance

Georgia Strait Alliance (GSA) is a non-profit citizens' organization that works to protect and restore the marine environment and promote the sustainability of the Strait of Georgia, one of Canada's most atrisk environments, and its adjoining waters and communities. Founded in 1990, GSA has over 1000 members and supporters who work collectively to address root causes of threats to the Strait and find solutions that protect it. Our interest in this review relates to protecting the Georgia Strait's marine and shoreline environments, and the communities and economies that depend on them, from the impacts of an oil spill, particularly in light of current proposals to dramatically increase shipments of diluted bitumen through the Strait.

Introduction

Thank you for the opportunity to comment on the Ministry's plans to strengthen BC's spill preparedness and response regime. Repeated warnings in recent years from studies carried out by both the federal and provincial government and by other experts, and comparisons with other jurisdictions such as Washington State, have highlighted the gaps in preparedness that urgently need to be addressed.

We are pleased to see steps being taken towards long-overdue enhancements to and regulation of BC's spill preparedness and response regime, and towards finding additional funding and capacity for the Provincial Environmental Emergency Program. We support many of the guiding principles outlined in the Intensions paper, and want to applaud in particular the emphasis on meaningfully involving communities, First Nations and local governments, reducing financial and other barriers to their full participation, and recognizing the direct risks and costs they face in the event of a spill. However, the extent to which these intensions can be fully realized remains to be seen – as the Ministry acknowledges, many of the details of the proposed changes have yet to be developed and/or released – and will in large part depend on the nature of the proposed Provincial Preparedness and Response Organization (PRO). Our key concern is the lack of discussion of the governance of the PRO, which will determine whether it is essentially an industry body that risks lacking public trust and legitimacy, or one that is wholly transparent and accountable to the citizens of BC.

Preparedness, Response and Restoration

Preparedness and response planning must be based on comprehensive risk assessments that take into account all of the environmental, social, economic and community impacts of an oil spill, including as these may persist for decades after the incident.

We support the creation of geographic response plans, a process which should be led by the Ministry rather than industry, and should include meaningful involvement from, and benefit from the expertise of, communities, First Nations, local government and non-profit organizations. The Prince William Sound Regional Citizens' Advisory Council, an entity with ongoing government funding that allows citizens to work together to identify and address gaps in spill prevention and preparedness, provides an example to be emulated in BC. Finally, First Nations should be involved in geographic response planning on a government-to-government basis rather than being treated as one of many non-government stakeholders.

We support the requirement of environmental damage assessments and restoration activities, and recommend the American Natural Resource Damage Assessment process as a model to follow. Such a process recognizes that natural resources such as beaches and habitats provide valuable services to society. Legislation should require the responsible party to fully compensate for losses to ecological services, and fund restoration and enhancement of the damaged environment. The collection of comprehensive baseline information would be essential to ensure best possible restoration and adequate compensation.

We urge the Ministry to create legislated spill response times, equipment requirements and workforce capacities. In addition, we recommend the following specific response standards¹:

- Oiled wildlife. Wildlife response capability should include hazing, capture, assessment, rehabilitation and release of oiled birds and mammals. Oiled wildlife tactical response should be delivered by qualified workforce primarily from BC's wildlife rehabilitators groups.
- Workforce capacity. Response standards should focus on oil spill workforce capacity to respond to a specific amount of oil spilled.
- *Oily waste management*. Response standards should not be based on a time-frame for holding temporary oily wastes, but specify holding capacities.
- Definition of 'oil'. Documents guiding response standards should ensure that the definition of 'oil' includes all types of oil that pose an environmental or health risk if spilled. All forms of heavy oil should be explicitly referenced including diluted bitumen, synthetic crude/bitumen blends etc. Standards should require preparing for and responding to spills of all types of products carried by vehicles and vessels travelling through BC and alongside our coastline.

¹ Recommendations adapted from: EnviroEmerg Consulting, 2008, <u>Major Marine Vessel Casualty Risk and Response Preparedness in British Columbia</u>. (part funded by Georgia Strait Alliance)

We believe a dedicated spill fund is needed for BC. Canada's existing funding and damage compensation regime is nowhere near strong enough to deal with the costs of a major oil spill, which could leave taxpayers liable for covering costs in the billions – and the proposed expansion to federal compensation funding remain inadequate. A separate provincial fund should be established, funded by industry, to top up the federal funds available, and support activities not included in the federal regime. The provincial fund should be inclusive of all environmental consequences of a spill (not just oil pollution), and of the economic losses that businesses, property owners and governments may suffer as a result of a spill.

Provincial Preparedness and Response Organization (PRO)

Overall, we see the benefits of a single, BC-wide, industry-funded and provincially regulated response organization that centralizes resources and can ensure consistency and best practices in planning for and responding to a spill. In particular we want to highlight our support for the PRO's provision of 'in the moment' funding to local governments and First Nations, to ensure up-front costs are not a barrier and they have the financial and other resources necessary to fully participate in planning for and responding to a spill.

However, we are concerned that the governance of a potential PRO is not discussed in the document. In our view, if the Ministry were to proceed with establishing a PRO, while industry must fund and might lead the operational elements of the PRO, ultimately the organization must be accountable to the public. One way to facilitate this would be to establish a governing body for the PRO that includes equal participation and voting rights for industry, provincial and local government, First Nations, and community and non-profit representatives.

Enhanced Provincial Environmental Emergency Program

We are entirely supportive of the Ministry's overall intention to strengthen the Provincial Environmental Emergency Program, and of the specific enhancements proposed. We see a particularly strong need to increase the program's ability to provide liaison and training support for First Nations, local government, communities and other stakeholders.

The program's funding and staffing is markedly lower than comparable jurisdictions, such as Washington State, and is long overdue for additional resourcing. We believe that industry rather than taxpayers should be responsible for the majority of this funding; otherwise, the 'polluter pay' principle is rendered hollow.

Additional comments

Oil spills cross international boundaries, and we recognize that effective response must involve joint planning, research, and training operations to overcome trans-boundary challenges. We recommend

that thorough consideration be given to the recommendations set out by the Pacific States/British Columbia Oil Spill Task Force in their 2011 report on transboundary oil spill response.²

We are concerned about the lack of discussion of volunteer management in the intensions paper. Emergent volunteers are a reality in any major spill, and could be a major resource. Ensuring that these concerned citizens do not fall through the gaps between the many overlapping players involved in responding to a spill, and that plans are in place for managing, communicating with and making meaningful use of emergent volunteers, must be a priority.

Finally, we would like to highlight that BC's inadequate response capacity for spills of diluted bitumen and other heavy oils requires particularly urgent attention. The best available technology for responding to oil spills depends on the oil remaining on the surface of the water, and bitumen may submerge over time in certain marine environments – and there is no known technology that can remove bitumen from the ocean floor. Bitumen is also known to be highly resistant to chemical dispersants, which in any case also carry under-researched risks to the marine environment. Investment in research and development into methods to improve recovery rates of bitumen on the surface of the water, and to identify technologies to recover submerged bitumen, should be a high priority for a potential PRO.

Conclusion

Thank you for considering our comments on the Ministry's plans to strengthen BC's spill preparedness and response regime. Our support for additional preparedness and response measures discussed above is intended to address the threats we face from current levels of marine oil tanker traffic. The most effective way to prevent additional oil spill risk is to avoid further increases in tanker traffic on BC's west coast. Therefore, in addition to improving BC's spill response regime in order to lessen the risk we currently face, we urge the Province of BC to clearly state its opposition to both the Kinder Morgan and Enbridge pipeline projects, and deny any permits that may be sought of the Province to allow for their construction.

² Pacific States/British Columbia Oil Spill Task Force, 2011, <u>Stakeholder Workgroup Review of Planning and Response Capabilities for a Marine Oil Spill on the U.S./Canadian Transboundary Areas of the Pacific Coast Project Report.</u>



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July 9, 2014 File No.: 0420-20

Via Email: env.minister@gov.bc.ca

Honourable Mary Polak
Minister of Environment
PO BOX 9047 STN PROV GOVT
Victoria BC V8W 9E2

Dear Minister Polak:

Re: Policy Intentions Paper on Land-Based Spill Preparedness and Response (April 2014)

On behalf of the Islands Trust Council, we urge the Ministry of Environment to adopt provincial spill preparedness and response measures that will:

- establish higher standards for land-based spill preparedness and response (including for marine spills affecting coastal shorelines and provincial resources);
- develop effective rules for restoration of the environment following a spill; and,
- ensure effective government oversight and coordination of industry spill response.

The Islands Trust Council has been advocating to senior governments about oil spill issues since 1979 and has many concerns related to oil spill preparedness and response. Even a small oil spill within the Islands Trust Area could have devastating impacts on the abundant biodiversity of the region and could significantly affect species already at risk, as well harm the livability and economic well-being of local communities.

The Islands Trust Policy Statement, a statutory document founded in extensive community consultation and approved in 1994 by the then Minister of Municipal Affairs, encourages provincial and federal agencies to ensure safe shipment of materials hazardous to the environment. Council urges the Province of British Columbia to address the long-standing deficit in oil spill prevention, preparedness and response capacity in our region related to existing risks. Council also urges the Province not to facilitate new oil spill risks, such as from heavy-oil pipeline projects.

The comments below are provided based on our assumption that many of the provisions in the policy intentions paper will apply equally to the marine environment where the Province of British Columbia is the owner of the seabed. If there is any doubt in this matter, we strongly urge the Province to extend the provisions to the marine environment whenever possible.

.../2

1. Spill preparedness, response and restoration requirements

1.1 Spill Fund

We are concerned that the April 2014 intentions paper is missing the concept of a provincial spill fund. In a 2012 resolution to the Union of BC Municipalities convention, the Islands Trust Council urged the Province to secure on-going revenue from industry for a sustained increase in provincial spill prevention, preparedness, mitigation, and response resources and to establish a permanent BC spill response fund. At that time we found BC's fund to be zero, compared to Washington State's and Alaska's spill response funds of US \$7 million and US \$50 million, respectively.

We do not consider the existing nor proposed expanded federal spill funds adequate to address the needs of British Columbia. A provincial spill fund should also be available to quickly fund activities in British Columbia that are not covered by the existing federal oil spill fund, such as spill prevention through the removal of derelict vessels, cleaning up non-petroleum spills and removing spilled shipping containers.

1.2 Resource Damage Assessment Process

We support the creation of a resource damage assessment process for British Columbia, with triggering thresholds consistent with the spill reporting requirements. Spills into water should be treated as especially significant. We recommend the <u>approach taken in Washington State</u>, where anyone responsible for spilling oil into state waters is liable for damages resulting from injuries to public resources.

We recommend using a formula model (similar to Washington State) for the small to moderate spills and a full-blown research model for major spills. Our staff has suggested that either the Habitat Conservation Trust Fund model or the federal Environmental Damages Fund model of distributing funds to impacted communities would likely be appropriate for our island communities. In addition to being required to restore habitats, spillers should be required to provide compensation for loss of public use in our communities.

In the initial days of a spill, the collection of time sensitive and perishable environmental indicator data in a scientifically-defensible way can be critical to measuring the success of the clean-up and to defending decisions about the amount of compensation and restoration needed. We suggest that the Province provide training and support services (e.g. chain of custody documentation, equipment caches) that would enable coastal residents to contribute their citizen science skills to this aspect of the spill response regime.

2. Enhanced provincial environmental emergency program

2.1 Core Funding

For years, the Islands Trust Council has advocated for substantially more core funding and increased community-engagement capacity for the provincial environmental emergency program. At the time of our resolution to the 2012 Union of BC Municipalities convention, we found that BC had 14 staff responsible for province-wide spill prevention, preparedness and response, compared to Washington State's and Alaska's staffing levels of 70 and 146, respectively.

Honourable Mary Polak July 9, 2014 Page 3

With additional capacity, the provincial staff could develop geographic response plans in partnership with communities, undertake logistical planning, participate in incident command posts during spill responses, and direct shoreline clean-ups and assessments. The Province could also use its enhanced capacity to work with local governments and communities to anticipate how they would deal with the consequences of a major spill (e.g. accommodations, volunteer management, food provision, transportation of workers, ferry system impacts, etc.). We also believe the Province should collect funding to flow through to local governments in recognition of the public services they provide after an oil spill.

2.2 Geographic Response Plans

The Islands Trust Council has been requesting geographic response plans for the Islands Trust Area since June 2011. Washington State's geographic response plans include response strategies tailored to individual beaches, shores, and waterways and are meant to minimize impact on sensitive resources threatened by a spill. We recommend the Washington State Geographic Response Plans model as it identifies sensitive natural, cultural or significant economic resources and then describes and prioritizes response strategies that could minimize injury to sensitive natural, cultural, and certain economic resources at risk from oil spills. We think it is important that these plans are created by government rather than industry to ensure transparency, accountability and an open, inclusive process that builds and sustains community capacity. Geographic response plans can contain sensitive information that should be held by a government source. We're impressed by the extent of community involvement in the geographic response plans developed for the US side of the Salish Sea. Our communities deserve the same opportunities, and our shorelines deserve the same protection.

3. Provincially regulated preparedness and response organization

3.1 Provincial oversight

We support the creation of a provincially-regulated preparedness and response organization. In the event of land based spills, it would be much more efficient for local governments to deal consistently with a provincially monitored and certified preparedness and response agency whose staff are known by provincial staff and who have British Columbia based expertise, rather than different companies every time there is a spill. Our years of research and advocacy about oil spills have taught us that on-going engagement and good communication channels build the trust that is essential to a quick and effective spill response.

We think it is appropriate that the new provincial preparedness and response organization operate with a secure source of on-going funding from industry and oversight from an enhanced provincial environmental emergency program. We request that the Province structure the agency to include local governments and First Nations representatives on regional boards.

3.2 Mandatory Participation

In our opinion, in order for the new provincial preparedness and response organization to be effective, the Province needs to establish a mandatory membership structure that will ensure that there are sufficient members representing all industry sectors that present a spill risk. A reasonable threshold for establishing whether companies must be members could include a formula that factors in the persistence, toxicity and quantity of the products they ship.

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In conclusion, we applaud the Ministry of Environment for developing the policy intentions paper. To compensate for the decades of underfunding and under-regulation, we encourage you to be bold in establishing a robust regime that will support British Columbia's economy and environment well into the future. We hope the Province will work with the Union of BC Municipalities as well as consult with local governments on the details of this land-based spill initiative.

Thank you for considering this submission to your consultation process. Please note that the Islands Trust's support for this long-overdue initiative to improve the BC spill prevention and response regime should in no way be construed as lessening the Islands Trust Council's opposition to oil pipeline projects that increase oil exports through BC's marine waters.

Sincerely,

Sheila Malcolmson

Chair, Islands Trust Council

cc: Trust Area MLAs: Gary Holman, Saanich North and the Islands

Don McRae, Comox Valley

Doug Routley, Nanaimo – North Cowichan Nicholas Simons, Powell River – Sunshine Coast

Michelle Stilwell, Parksville - Qualicum

Jordan Sturdy, West Vancouver - Sea to Sky

Islands Trust Area First Nations:

Snuneymuxw First Nation
Qualicum Indian Band
Tla'amin First Nation
Tseycum First Nation
K'omoks First Nation
Tsawwassen First Nation
Hul'qumi'num Treaty Group
Chemainus First Nation
Halalt First Nation
Lyackson First Nation
Penelakut First Nation

Lake Cowichan First Nation

Cowichan Tribes

Tsawout First Nation
Tsartlip First Nation
Pauquachin First Nation
Nanoose First Nation
Songhees First Nation
T'Sou-ke First Nation
Malahat First Nation
Esquimalt First Nation
Musqueam Nation
Sechelt First Nation
Squamish Nation
Tsleil-Waututh Nation

Te'mexw Treaty Association

San Juan County Council

Bowen Island Municipal Council

Association of Vancouver Island Coastal Community members

Islands Trust Council

Cindy Bertram, contractor to Ministry of Environment consultation process

Islands Trust website



Comments in response to the Province of British Columbia, Ministry of the Environment's second intentions paper on land-based spill response.

Over the past several years, public trust and confidence in the ability of the oil industry to prevent and remediate spills has been sharply eroded. Lack of transparency on the part of both industry and regulators has led to unprecedented scrutiny by the media and public interest groups and a growing sense that no level of government is adequately prepared to deal with the potentially devastating consequences of spills and explosions.

Living Oceans' examination of the regulatory regime leads us to conclude that there are serious gaps and that both regulators and the industry itself are struggling to find appropriate approaches to regulating the transport of unconventional fuels in larger volumes than ever before. We accordingly welcome this initiative on the part of the Province of British Columbia to enhance its land-based spill response regime and we are pleased to offer the following comments on the second intentions paper.

Our comments are focused primarily on the transport of oil; and that term should be taken to include the entire range of hydrocarbons being transported, or planned for transport, in the Province today. Although these comments may inform an appropriate regime for other hazardous substances, we do not purport to have reviewed the regulation of other substances.

Regaining Public Trust

The most important goal of an enhanced regulatory regime should be regaining public trust and confidence in the industry's ability to transport oil safely and government's ability to respond to the inevitable accidents. In our view, the only way to do this is to establish a spill response regime which is transparent and understandable and includes the public in both oversight and implementation.

The model we prefer is that established by the U.S. *Oil Pollution Act* (OPA) of 1990. Following the Exxon Valdez spill in March 1989, regulators understood that there would be no social licence for Alaska's oil industry if it continued to be perceived to be operating unsafely and below regulatory standards. The lives and livelihoods of Alaskan citizens had been too deeply traumatized for them to be able to trust that either government or industry was capable of safeguarding their interests. In the new regime established by the OPA, citizen oversight of the industry was instituted for Cook Inlet and Prince William Sound.

Living Oceans believes that such oversight is an essential, missing part of the regime proposed by British Columbia. The legacy of mistrust that arguably began for B.C.

residents with the Exxon Valdez has been compounded by more recent disasters such as the Kalamazoo River pipeline leak, the Lac Mégantic derailment and the Deepwater Horizon well blowout, all of which exposed the fact that neither response technology nor regulatory regimes have kept pace with the industry's growth and diversification. The public has come to understand that the interests of First Nations, landowners, fishermen and other stakeholders are put at risk without full disclosure or adequate safeguards.

The citizen oversight model established by the OPA seeks to regain public trust by involving the public and stakeholders in the development, implementation and oversight of spill prevention and response measures. The composition of the Alaskan citizen advisory councils is described on the website for the Cook Inlet Citizen Advisory Council as follows:

Groups of interest represented on the Cook Inlet RCAC Board of Directors include Alaska native organizations, state chamber of commerce (tourism), environmental groups, recreational groups, commercial fishing groups, and aquaculture associations. In addition, Cook Inlet RCAC includes ten ex-officio members (non-voting) who represent the U.S. Coast Guard, Alaska Department of Environmental Conservation, Alaska Department of Fish and Game, Alaska Division of Homeland Security & Emergency Management, Environmental Protection Agency, U.S. Forest Service, Bureau of Land Management, U.S. Department of Interior, Bureau of Ocean Energy Management; Alaska Department of Natural Resources, and the National Oceanic and Atmospheric Administration (NOAA).

The success of the Cook Inlet and Prince William Sound citizens' advisory councils lies in the participation of citizens with local knowledge, armed with full disclosure concerning the industry's activities. The Boards of Directors can propose new spill prevention and response measures and monitor and supervise their implementation. Their active involvement lends strength to the regulatory regime in both substance (by tailoring measures to protect specific, local resources) and public perception (in that the veil of secrecy under which the industry had operated has been lifted).

This model should be adapted for the Province of B.C. to establish regional citizens' advisory panels at a scale that allows for meaningful, local engagement and in locations where the transportation of oil and other hazardous substances poses the greatest risk—including port cities/towns, pipeline and railway routes, tank farm, refinery and terminal locations.

Robust oil spill response will require a much more knowledgeable public, full involvement of local emergency management resources and local plans that identify priorities for spill response and resources available to be deployed. It is impossible to do this effectively on a province-wide basis without the full participation of the public.

The intentions paper correctly, in our view, notes the critical importance of public disclosure and input, but fails to include the public at the vital, early stages of planning for prevention and response.

Part A: Effectiveness of the Current Regime

The current spill preparedness and response regime of B.C. is not effective enough to deal with the challenges posed by the movement of unconventional fuels through this province. Our reasons for asserting this are more fully explained below, but include:

- Insufficient access to reliable information concerning the risks posed by the transport of unconventional oils, including both the very light and the heavy products now being or proposed to be transported through B.C.
- Insufficient public education, which puts health and safety of both the population and the environment at risk;
- Lack of local, geographic area response plans
- Centralized and inadequate caches of response equipment
- Lack of response equipment suited to the nature of the oils being transported
- Lack of co-ordination among the various levels of government charged with aspects of response
- Lack of training and co-ordination of emergency response personnel at a local level
- Inadequate facilities, equipment, personnel and training to deal with impacted wildlife
- Inadequate facilities, equipment, personnel and training to deal with oil spill response waste products and recovered oil
- Shortage of trained personnel to respond effectively to large spills
- Lack of clear standards for restoration and remediation
- Uncertainty and inadequacy of compensation for losses consequent on a spill
- Failure of the federal government to regulate effectively in the areas of rail and pipeline inspection, maintenance and operational safety

B. Protection of Human Health and the Environment – Meeting Ministry Principles

Living Oceans supports the principles articulated by the Ministry, but observes that they fall short in the following areas:

- a) clearly articulating the need for polluters to compensate members of the public for damages, including both personal injury and economic loss. Existing legal regimes for seeking such redress are slow and costly and will be beyond the means of many who are directly impacted by spills.
- b) assuming that government oversight will instill public confidence.

- c) suggesting that risk-based response planning is viable, in that the scientific and operational information required to assess risk is unavailable. Little scientific information exists to accurately predict the behaviour of unconventional, light or heavy oils and operational information (such as the scheduling and content of trains, or the condition of a 60-year-old pipeline with a history of ruptures and leaks) is unavailable. This leaves us with the unfortunate need to plan for worst-case scenarios.
- d) in espousing the avoidance of duplication, the Ministry's intentions place unwarranted reliance on federal regulation, particularly of rail and pipeline transportation. Living Oceans would prefer to see the Province leading with regulatory standards that create incentives to improve on federal standards.
- e) suggesting that public transparency and accountability begins with a spill. As observed above, it is vital that it begin at the planning stage, through full public involvement.

In general, the Ministry's intentions *support* the articulated principles, but we observe that this is a very different matter from attaining a level of prevention and preparedness that could be considered "world leading". It should be recalled that Norway took about 30 years to achieve a satisfactory preparedness and response regime; it did so by fully involving local authorities in planning, conducting public education and specific training of fishermen and other local boat owners in spill response. Today, if a spill occurs, the country has some assurance that everyone knows how to react and what to do.

As our U.S. guests at the Ministry's initial workshop for this initiative told us, we have a long road ahead of us in the pursuit of world-leading standards and systems. Their advice was clear: if we want to get there any time soon, we will require tough regulatory and legislative action. The "soft" approach described in the intentions paper had been tried, they said; and it failed.

B.C. is not as able as an American state to regulate in a comprehensive manner, given the variety of federal components in the jurisdiction over transportation of hazardous substances. However, it can and should incent better performance by classifying known or reasonably presumable risks—such as DOT 111 rail cars; transport of condensate and unrefined bitumen products; or aging infrastructure—and assigning higher cost burdens to those industries continuing to use them. This could be done by a combination of structured fee schedules for membership in the land-based spill response organization and additional penalties for spills, over and above response costs.

We must also note that the exclusion of gaseous spills from consideration in this process is insupportable, in a province where inflow/outflow wind patterns and inversions are so common. Human health is placed directly at risk of exposure to carcinogens and neurotoxins when gaseous spills occur; and while no cleanup may be possible, there is certainly a need for monitoring and warning regimes for the chemicals released and the compounds that will form. There is also a need for public education, to prevent unnecessary exposures to gaseous spills.

Living Oceans' view is that the Province's conditions of approval for pipeline and tanker projects in B.C. cannot be met in the near future, as regards spill preparedness and prevention. The planning, resourcing, training and public education required to achieve world-leading standards will require many years of work and a great deal of money.

Gaps in the Proposed Regime

1) Insufficient access to reliable information

The Province's submissions to the Joint Review Panel for the Enbridge Northern Gateway project make it abundantly clear that it is aware that federal review processes are not providing information of a quality that is reliable for assessing risk and planning for response. For example, the absence of any geohazard assessment for that project renders attempts to assess its risks to provincial resources meaningless. The response regime should include stipulated information requirements for risk assessment, together with a significant premium (fines or increased costs of response organization membership) for industries that fail to comply.

2) Insufficient public education

B.C. citizens have enjoyed the luxury of not having to know about the risks of major oil spills due to the tanker ban, the voluntary exclusion zone for tankers and the relatively small volume of oil that was ever transported through the province or along the coast. Nonetheless, on those occasions when spills did affect us, the record is replete with examples of the public putting itself at greater risk in an effort to help protect the environment.

An adequate spill response regime will have to devote considerable resources to teaching the general public how to avoid unnecessary exposure. Education on 'shelter in place' procedures, evacuation measures and the dangers of attempting spill remediation without adequate protective gear needs to be undertaken.

Untrained and unprotected volunteers attempting to respond to an oil spill, particularly a spill of diluted bitumen, will put themselves at extraordinary risk of serious injury. They may also do more harm than good; for example, some types of terrain such as marshes or mud flats can be remediated most effectively by nature if left untouched but will become more severely polluted if disturbed by humans.

3) Lack of geographic area response plans

Detailed geographic area response planning needs to be undertaken by First Nations and local governments throughout the province, with support from the provincial and federal governments. Standardized planning templates must be developed and communities encouraged and assisted to identify local resources and prioritize their protection. The human and physical resources that could be deployed to assist, if training were provided, should be identified. Once that planning has been completed and training needs identified, a training programme should be developed and implemented.

The area response plans envisaged by the intentions paper are not clearly spelled out and do not appear to contemplate this level of detail.

The type of plans we advocate are a map-based strategies that can save time during the critical first few hours of an oil spill response. They show responders where sensitive areas are located and where to place oil spill protection resources. ... These strategies can be specific about where to stage equipment, store oily wastes, locate a command post, find a facility for a wildlife care, and more. GRP development engages coastal communities with industry and its Response Organizations (contractors), and government agencies to foster trust and confidence. Such plans are able to reflect the social, economic and cultural values that may need to be referred to under emergency situations, where time and opportunity for dialogue is not available.

4) Centralized and inadequate caches of response equipment

Again, more detail is needed to say whether or not the paper indicates adequate intentions. The critical factors to be addressed with respect to response equipment is its suitability for dealing with spills of heavy oil in freshwater environments; and procurement and placement of sufficient equipment to deal with spills in a timely manner.

5) Lack of response equipment suited to the nature of the oils being transported The experience of the Kalamazoo River spill suggests that, whatever equipment may be deployed, removal of bitumen oils from freshwater environments is exceptionally challenging and it is quite possibly impossible in fast-moving or deep rivers. Given that projects currently proposed for the transport of diluted bitumen put at risk the province's most productive salmon rivers and streams, this is a serious and potentially expensive shortcoming of the existing and proposed regimes that cannot be overcome at present.

The proposed regime should anticipate the potential for serious and irremediable impacts on salmon, with attendant impacts on First Nations, fishermen, the general public and the ecosystems of B.C. It is difficult to imagine how one would propose to compensate for such losses; but the compensable portions of the losses should be paid promptly upon application and proof of loss, from an industry-funded claims fund created for the purpose.

6) Lack of co-ordination among the various levels of government

The intention to address this issue is expressed, albeit mostly in terms of avoiding trenching on others' jurisdiction or duplicating areas of regulation. The Regional Response Team approach to co-ordinating jurisdiction can work, but requires co-operation and funding from the federal government that has not been forthcoming. An essential feature of a world-leading response regime would be the participation of the senior level of government and its close co-ordination with provincial authorities.

7) Lack of training and co-ordination of emergency response personnel at a local level Plans for the Kinder Morgan TransMountain Pipeline Expansion make it clear that reliance is to be placed on local authorities to deal with emergency management. B.C.'s

cities, towns and rural areas are ill-equipped, to differing degrees, to shoulder this responsibility. It is naive to assume that the entire burden of response could be borne by the new response organization; it could never maintain the level of service needed to cope with the needs of the public during a major spill event in a rural area, much less within Metro Vancouver. Local first responders need training, equipment and drilling to be prepared for such events. This will be an exceptionally costly undertaking and, we expect, the most difficult one for which to secure funding from either industry or the federal government.

- 8) Inadequate facilities, equipment, personnel and training to deal with impacted wildlife Oiled wildlife response facilities in B.C. are wholly inadequate to handle a large spill. Facilities, equipment and training of personnel should be funded through levies on industry.
- 9) Inadequate facilities, equipment, personnel and training to deal with oil spill response waste products and recovered oil.

Plans for dealing with oil response waste products have not been well elaborated by proponents of pipeline and tanker projects; it is assumed that these are "taken away for incineration". To suggest that such waste would be burned without identifying facilities capable of doing so safely, or planning for the recovery of energy from them, is irresponsible in the extreme. The provincial regime must contemplate the potential for dealing with large volumes of contaminated oil, response products and soil, bearing in mind that the wastes of a ship-sourced oil spill, potentially much larger than a land-based spill, might also need to be dealt with. Funding to create a facility or facilities capable of dealing safely with these wastes needs to be identified.

10) Shortage of trained personnel to respond effectively to large spills

Whether land-based or ship-sourced, a major spill has the potential to affect thousands of miles of shoreline in this province. Cleanup in the event of a major spill will require a workforce numbering thousands of trained individuals; and experience has shown that few who answer the call to a cleanup are able or willing to remain long on the job. Recruiting, training and deploying a workforce of sufficient size to respond to a spill in a timely manner is a responsibility currently assigned by the federal regime to the response organization, which in turn subcontracts the duty. There is no evidence that personnel requirements can be met and this will remain an issue for the proposed provincial system. It may not be an issue capable of satisfactory resolution.

11) Lack of clear standards for restoration and remediation

It is proposed that such standards will be elaborated. In setting standards, it is often the case that qualifiers of economic feasibility or 'reasonableness' are employed, with the result that remediation is less than successful. The provincial regime should set science-based standards for remediation, with measurable targets, monitoring and enforcement. All associated costs of remediation should be borne by the polluter.

12) Uncertainty and inadequacy of compensation for losses consequent on a spill

As mentioned above, resorting to the court process to obtain redress for losses consequent on a spill will prove to be a significant barrier to many impacted British Columbians. We believe that a claims fund dedicated to compensation for economic loss and personal injury should be established and funded through levies on industry. That fund should be tasked and resourced to process claims quickly, providing interim and final payments to ensure that losses are stemmed as quickly as possible, but that long-term losses may be recognized and compensated as well.

13) Since federal jurisdiction is not being meaningfully exercised or funded at the moment, the new provincial regime should be less concerned with duplication than with finding effective means of exercising provincial jurisdiction to leverage change at the federal level.

Funding the System

The concept of_the Polluter pays is a great step into the right direction, so long as the government and/or citizens' advisory group remains firmly in control of what the money is spent for—i.e., remediation objectives and spill preparedness standards are set and monitored by the regulator. This argues in favour of two separate approaches to spill preparedness and response: 1) establishing a response organization such as the one proposed and 2) establishing a fund to pay for administration of oversight of the whole regime, with sufficient resources that it can step in and finish the job of remediation where the polluter's response is deemed inadequate; and to deal with claims for compensation.

The US Oil Pollution ACT of 1990 provides an example, in which a fund was created by imposing on every company a levy per barrel of hazardous substance transported. As we know, oil owners in Canada have been paying an additional levy of CAD\$1.45 per barrel on oil transported by Kinder Morgan on its TransMountain pipeline over the past decade, to build a fund for infrastructure improvement. In much the same way, a fund can be built to deal with the proper administration of a response regime and the timely and adequate payment of compensation claims.

Lois Eaton

From: sewbike4@gmail.com [mailto:sewbike4@gmail.com]

Sent: Thursday, July 17, 2014 5:51 PM

Subject: WWW Form Submission

regime: Not effective at all2

A_Text_Box: Where are they located? How many are in each location? What is the time line between spill identification, communication to response teams, assembly of equipment and humans, travel to the spill, assessing what needs to be done, and then doing it? The oil will not sit idly on the surface waiting for all of this to happen. There is no world standard effective response. The story that there is a world standard effective response is a farcical pipedream.

principles: Not effective at all2

B_Text_Box: There is no effective support principles that will save the environment once a spill has happened. There are only principles of governments and corporations pretending they are doing something so the public will not be extremely upset. Well the public is extremely upset just anticipating a spill, before it even happens ... which it will eventually.

- C1 1: They are criminally inadequate
- C1 2: Time, knowledge of what to do no one really knows).
- C1_3 : Yes the top priority is stop the madness before it begins. The only way to responsibly address a spill is to make sure it NEVER happens.
- ${\tt C2:}$ Lead development of geographic response plans by not developing the pipelines in the first place.
- C3: Yes, my suggestion is face reality. Nothing you do will make you ready for a disaster which could have been avoided. If the government and its cohort corporations were teenagers, acting in such a willfully destructive manner, the keys to the car would go, options for staying out late would go, and favorite dinners would be a thing of the past.
- C4: Learn the meaning of consultation before you proceed. Proceed with due haste.
- C5_1: Spill response times need a HUGE financial penalty to perpetrators (most likely the owner of the oil and the pipelines) if not addressed within 1/2 hour of the spill occurring. That is the legislation. If they do not pay the fine their operations will be shut down.
- C5_2: You have made this life crisis into a paradox of a business 101 exercise. It won't work, please understand that. There is no response time or plan that will actually make a difference for anything over 15% of the spill.
- C5_3: Abandon the pipelines before they are laid. Huge, crippling fines for any companies involved in a disaster, sufficient to hurt them

so they will ponder what havoc they are creating and others will not want to do the same thing in Canada and BC.

- C6: There are no satisfactory outcomes. Your consistency in these pie in the sky questions only emphasizes the lurking disaster.
- D1: We are a huge, rugged province. If there is a blizzard how fast with the response teams arrive? Can you not see this will not work in the most perfect of conditions which are a rarity in BC.
- D2: Workers lives must be safequarded, from all the contaminants.
- D3: The reason the general citizenry and First Nations are against the pipelines is because we all know there is no feasible response to a disaster. Head in the sands thinking represented in the belief that a set of rules, or procedures will make it okay is insanity. Guidelines for saving a drowned child are useless. The child is dead.
- D4: The entire cost of spills should be totally borne by the corporations profiting, the oil companies and the pipeline owners. The public does not want the pipelines because a spill will be a disaster. To ask how much the public should pay is completely rude.
- D5: Yes, the corporations pay the full price as that is the price of them doing business. The cost of building the pipeline, extracting the oil, mixing it with chemicals to make it flow is not the total cost of their product. The cost of a spill, the cost of adding carbons to the air, the cost of people's health living near their operations or a spill. These are the costs of their products. This should not even be a question.
- E1: Are you crazy, of course the industry must pay for it. I thought the whole thing in BC was user pay. Well let them pay.
- E2: NO General tax dollars. I am not willing to pay for a disaster I spoke against and about which I was ignored. I am not paying for a corporation to protect their bottom line by avoiding their responsibilities. I will not be creating the spill, so I will not be paying for the clean up.
- E3: Industry pays. Period, end of story that is the only fair and equitable approach. They want the profit, they pay the damage.

F_textbox: Your attempt to parse this situation into plausible scenarios for a solution does not result in plausible solutions. There aren't any. If your teenager tired to negotiate with you for the keys to the car when you knew he/she was going to a party where there could be drinking by saying to you, in the unlikely event that I have an accident, total the car and cause harm to others, I will be willing to wash the kitchen floor for a week. Would you consider this a reasonable situation. It is very similar, only the teenager would be causing less harm with more of an involvement in doing something on the other side of the disaster. Please be real.

other_interest_desc: I AM A BC CITIZEN. That is a huge area of interest. How rude that this is not listed as an area of interest.

contactname: Lois Eaton

address: 591 Tamarack Drive, Qualicum Beach, BC

Lucy McRae

regime: Not effective at all

A_Text_Box: First of all I take exception to the description of this policy intentions paper - "World leading" land based spill preparedness and response system for B.C.

"World Leading" is just another fancy description that has no basis in reality. A person would have to know and understand all other WORLD WIDE spill response systems in order to comprehend the meaning in these two little words.

As I live in Kitimat and have done so all my life I am unaware of what spill response is already in place and it is unlikely that any ordinary citizen would know this. So in order to respond to this first question a outline or summary of what is already in place would have been helpful but I can't seem to find that other than a statement of: B.C. s Environmental Emergency Program covers the inland areas and coastal shoreline of B.C. an area of 947,800 km2 with a coastline of 27,000 km. The program s sixteen fulltime staff include ten response officers stationed in seven communities across the province.

This seems like a ridiculous low number of staff and response centres and where are these present response centres located?

principles: Significant gaps

B_Text_Box: Again I take exception to the wording of the "INTENTIONS" "This paper is intended to address gaps in the overall framework in order to ensure that any significant spill in British Columbia will have world leading response and recovery irrespective of the source, location or extent."

response and recovery recoperative of the source, rocation of extent.

What exactly is "SIGNIFICANT SPILL"? and what is "WORLD LEADING" RESPONSE?

This could be "1 cup of bitumen" as significant spill if it were in a very small stream? and World Leading response could be - "we'll keep an eye on it?" as the rest of the world would just ignore it as insignificant.

- C1_1: The overall requirements could be better explained in regard to how Salt water Coastal spill responses and land based spill responses would overlap at the Coastal shorelines of BC?
- $C1_2$: I like the fact that it appears from the intentions paper that this is a combined effort with all regulators taking part. At least I would assume that this is the case. My only question is who is taking the Lead in the coordination effort and is there any duplication in that?
- C1_3: I believe that ensuring that response teams can act quickly
 without impediment of funds or distance should be a priority especially
 in areas that the Ministry knows will have higher traffic of

transportation of goods subject to higher risk of spills ie. pipelines, rail and transport highway and ocean tankers.

The areas of the Province that will have higher volumes of liquid petroleum products being transported should most certainly have priority in staffing of both officials and response teams.

- C2: I firmly believe that each Community in BC needs to have an Emergency Response Coordinator in place who can work with the Provincial Team in setting up geographic response teams. This Emergency Response Coordinator should be a Provincially paid person (from funds put in place from the fee's charged to transport companies etc.) who oversees all emergency response within a Community including spill preparedness and response as well as any other Emergency response, forest fire evacuations, Flooding evacuations, Earthquake and tsunami response, evacuations due to Industrial accidents etc. This Coordinator may have a paid or volunteer team and an office. As Climate Change moves forward this will be absolutely necessary to have this position within Individual Community Structures.
- C3: Again if each Community had a Provincially paid Emergency Response Coordinator, this person would be responsible for working with Fire Departments, Police Departments, Ambulance and Health Centres and the Companies to ensure that all of the Drills, Training and Field Exercises are of the "World Leading Standard".
- C4: It should be the Community Councils (including First Nations) and Local Environment groups and those who have a vested interest such as: search and rescue teams, hunting and fishing guides, outdoors groups etc. who are consulted with throughout the process on how to proceed and set up Emergency Spill response resources. They are the ones who can best advise on what is already in place in their community and what other resources are already available in the way of Emergency response. The biggest stumbling block however is how these groups are properly consulted with as often times groups are overlooked in the coordination of meetings to consult. An advertisement in the local paper is not good enough. Individual invitations to consult must be strived for.
- C5_1: In the case of where I live several years ago, there was a fuel truck that went over an embankment spilling the contents, it was several weeks before there was any initial response to removing the truck and then it was months before the actual cleanup was complete. There was no information to the public throughout this process and in fact there is only one road in and out of my small town. We had to be subject to single lane traffic for a very extended time period as well as being kept in the dark about any potential environmental effects of this spill.

There should be far better communications with the public and especially with environmental groups so we can determine if everything that could be done was being done and in fact if the cleanup was effective and if there was harm done to the nearby creek and/or any wildlife.

C5_2: Response times must improve and in fact if delays are because of funds not being available or insurance claims not kicking in in a timely manner this must change.

Response to a significant spill near any source of water must be set to an emergency level and responded to immediately.

 $C5_3$: The season of the year should also be given some consideration. As we are undergoing warmer and drier conditions added fire hazards will increase the effects of a spill involving a petroleum product. There may need to be additional crews standing by who can respond to this type of situation.

In addition where there are pipelines traversing heavily snow laden territory it may become additionally difficult to respond to a spill with crews and equipment and those pipeline companies may need to have additional crews and equipment in remote areas during those times. Response would be very limited in areas that receive 40 feet of snow during a season and are extremely mountainous with limiting weather conditions.

- C6: Significant damage, significant impacts....no damage is acceptable. Nothing less than 100% cleanup can be considered successful. A satisfactory outcome would be parks and public property be returned to its pre-damaged state in a timely fashion. Not being usable by the public for years is not an acceptable, satisfactory outcome.
- D1: Any Provincially regulated preparedness and response organization must be fully paid for out of a fund set aside and paid for by the Companies, Corporations and private Transportation companies involved that would be responsible for any spills or accidents. Under no circumstances should private tax paying individuals have to pay toward the setting up of this type of organization. The big fossil fuel companies earn enough profits that they should be held 100% liable for any and all operations costs.
- D2: There should be a mandatory membership irregardless of any thresholds. If any products are being transported that could cause damage to the environment and would create a need for response and cleanup it should be mandatory from the time this program is instituted, otherwise there is no point in this entire exercise.
- D3: I don't see any controversy about this it should be automatic. After all the consultations leading up to the proposed provincial preparedness and response organization it should already be apparent who needs to be involved, if it is not apparent then you have not done your job!
- D4: An Industry based funding mechanism that could be considered in establishing a response organization would be to look at the bigger corporate structures and follow their example in how they pay their resource people. If a set amount of money is needed and you know how much that is then you would appropriately charge industry a percentage based on the need. In setting an amount fairness would be based on the amounts of product that are being shipped or transported annually by each company or industry and that would determine the fee structure

needed. So if the response organization needed x number of dollars to set up then that number of dollars would be equally paid by business and after that the yearly fees could be set once established.

D5: Once a response organization is set up and yearly or monthly fees have been set, the next step would be to determine how to deal with industry or companies that are in arrears or unable to pay the fee's. After a year or two of operation it will become apparent how the funding structure is working and if it is working well then obviously an additional fund could be set up to help with recovering cost over runs or to fund immediate concerns. Otherwise the funding has to come from the initial fee's that would be set. In time the fee's may be relaxed somewhat to reflect the actual costs of running this program. I believe consultations with Industrial Insurance Agencies would be helpful in determining what level of funding needs to be in place at the start.

E1: As I have said throughout this comment session, funding must come from Industry right from the get go. I am aware that the tax payer is probably paying for this entire consultation and study on getting this enhanced Provincial Environmental Emergency Program set up and after that it should be 100% funded by the instigators of any need for this organization.

E2: 0% of the cost should be funded by tax payers. Tax payers have already been funding this program and once it is established it should be 100% funded by the Offender just like any other insurance need. They need to pay the insurance that their product will safely get to their end user and if something happens along the way funds need to be in place to insure that an immediate response and cleanup will take place regardless of who is at fault.

E3: Users pay, this way it does not differentiate whether it is a large Company with expensive lawyers or the little Mom and Pop business, the cost will be born equally with the tax payer not left to pay. And we all know this means in the end the consumer will pay. It does not matter who is responsible. We need to ensure that the response and cleanup happens and we all know that the Industry is not going to monitor themselves and set it up so it is now time for the public to insist on an action to be in place and the Industry is going to have to be the ones to bear the cost.

 $F_$ textbox: The sooner the better, but it must be done right from the start otherwise it will be far too difficult to enforce. Every reasonable effort must be taken to ensure that concerns from all parties are satisfied at the same time tax payers cannot keep being held liable for these big fossil fuel companies mistakes.

env community group: yes

env_community_group_desc: Environmental Group - Douglas Channel Watch Kitimat, BC

other interest: yes

other_interest_desc: As a member of the retired Community of BC I am concerned about rising costs of taxes to the ordinary citizen and rising costs of climate change.

contactname: Lucy McRae

orgname: Douglas Channel Watch

Myriad Consulting Inc. - Andy Ackerman

A: We have a lot of challenges including lack of funding, lack of staff in MOE and EMBC, geography and a public expectation that everything will be dealt with immediately. There is also jurisdictional issues between the federal and provincial government that still need to be sorted out.

principles: Adequate

- B: The oil and gas industry in the North East already have requirements for ERP's for not only the main company but also their contractors. Why re-invent the wheel?
- C1_1: I agree with the principles as long as BC is committed to providing more resources towards staffing, training, etc. A lot of companies already have requirements through NEB and OGC for continuous training and exercises. I also noted that you mentioned ICS. You should also require BCERMS and that all communities are required to training their EOC staff on a regular basis. BCERMS should also be mandatory for all companies operating in BC as provinces are still not consistent in their approach to ICS and this can be confusing for companies based outside of BC.
- ${\tt C1_2}\colon$ If you look the NEB and OGC requirements, you will see that a lot of this already exists in BC.
- $C1_3$: Yes, as I stated above, more staff, training, exercises, etc. We already have very overworked EP staff who are expected to deal with major oil and gas in BC. The big question is that is BC ready for the next 10 years.
- ${\tt C2:}$ OGC and MOE should be the primary leaders and then the companies themselves.
- C3: Yes, use the NEB and OGC requirements that already exist.
- C4: Communities should be trained in BCERMS but leave the spill response issues to the experts.
- $C5_1$: As long as they are practical. Don't forget, we live in a province that has many geographic challenges. When the Queen of the North sank, some groups thought that the response should have been in a couple of hours. Not real or practical.
- C5_2: 1. Communications with nearby residents and communities.
- 2. Notification to regulators.
- 3. Actual responding.
- C5 3: Location and type of incident.
- C6: Sometimes, this is not possible. I think that clean up should occur as quickly as possible but reality at times is that the impacted area will not be available as quickly as people think it should be. We can't build another park or public beach.

D1: These already exist so building on that model will work.

D2: I think that any company transporting goods by rail, truck, pipe, etc. should have to be belong.

D3: They should certainly be consulted. Perhaps some kind of facilitated round table with key leaders or representatives and experts should be included. And please don't include Greenpeace, etc. Keep the emotion out of it.

D4: I like the models that you mentioned in your report. These "co-ops" are industry funded and work well.

D5: Good luck with this one. The current model used by EMBC works. At times, major companies will pay some of the bills but please don't leave it to the local communities to try and recover costs. They don't have the time or resources or political or regulatory clout to do this. Use the ICBC model- if you don't pay, you lose your right to operate in BC.

E1: Keep this with government who can collect taxes, etc. from the companies. Otherwise, you get into the fox watching the hen house situation. Government needs to keep control of the PEEP so that it is independent and viewed as neutral.

E2: All of it. Government collects the taxes, royalties, etc. and then provides funding to PEEP.

E3: See my comments above. Quit trying to get out of paying for something that is clearly a provincial government responsibility.

F: Use the tools and models that already exist and properly fund the program. Industry will co-operate as long as you provide good leadership.

other interest: yes

other_interest_desc: I am a consultant that trains Emergency Management. I also spent 37 years working in the Ministry of Environment.

contactname: Andy Ackerman

orgname: Myriad Consulting Inc.

submit form: Submit Form

Northern Health Authority - Dr. Sandra Allison

Hello,

I had a brief email discussion about this document.

My questions were regarding completing the communication loop and improving transparency. It would be apparent from this document that the spill reporting process is covered adequately; what I felt was missing was any commentary on spill notification and spill registry. I believe that greater increases in transparency by industry will build trust in the population. To gain that trust, it would be imperative for the industry, including OGC, to report, notify and register spills of any magnitude.

On a population level, mapping spills geographically to better understand the cumulative impacts of multiple spills on a discrete population would be a great development. Although these points may not be within the sphere of influence of this document, or the work that you are undertaking, I do think these would be steps in the right direction.

Thanks kindly, for the opportunity to comment, and the good work you are doing, Sandy

Sent from my iPad --

Dr. Sandra Allison MPH CCFP FRCPC Chief Medical Health Officer Northern Health

Northwest Fuels Limited - Gary Ainscow

regime: Significant gaps

A_Text_Box: WCMRC does a good job on the water side but inland has no proper structure in place. Significant gaps depending on where in the province a spill happens.

principles: Quite effective

B Text Box: A good set of principles

- $\overline{\text{C1}}_{-1}$: Most of the oil companies and their wholesale marketers have detailed plans that we drill to regularly.
- C1_2: There used to be training and spill supply trailers in most communities through the Hwy 16 corridor supplied by CPPI(Canadian Fuels). Everybody did training bi-annually and used the spill trailers to train to so that if needed they were ready. I imagine this was everywhere in the province? This system went away about eight or ten years ago and left a lot of gaps.
- C1_3: Mandate one company to oversee readiness. Build common standards for training and readiness Build teams of volunteers across the province and supply training drill, drill, drill. It's the key to being effective.
- C2: WCMRC, they have the structure in place already. I've worked with them lots because of our coastal operations. They are an incredible asset. We drill together yearly and just finished a huge exercise in Prince Rupert at the Petro-Canada Marina.
- C3: We do them regularly
- C4: Volunteer in training but get paid in a real situation
- C5_1: Absolutely, it is the one thing I don't like about the federal legislation. Time is critical in a real situation.
- C5_2: Depends on resources available. There is no point legislating quick response times if resources need to be shipped in from long distances.
- $C5_3$: Levels would need to cascade if the spill was in sensitive areas like rivers etc...
- C6: Could create a board with members from different user groups to collectively decide a strategy on a case by case situation.
- D1: WCMRC is the only way I can see to go.
- ${\tt D2:}$ Anybody who moves dangerous goods by rail or pipeline. All truck carriers who haul bulk fuel in the province or through the province.
- D3: There should be a group of mostly volunteers in every community that train and are ready to respond. This could be organised by someone like WCMRC under the jurisdiction of Emergency Management BC.
- D4: User based with pipeline and rail taking the lead here followed by trucking companies.

D5: Once a spill or event happens then it is usually covered by insurance which in my experience are willing to pay for quick action that mitigates long term damage. It's cheaper to throw lots of resources at the problem quickly and get it under control than it is to do remediation afterwards.

E1: I agree to a point but Emergency Management BC is an asset that every person in BC should support.

E2: I would need more detailed information to give a good answer here.

E3: Some of this cost should come from new monies based on taxes already coming in from oil. This is a very heavily taxed industry already.

F_textbox: Don't reinvent the wheel. Use existing systems like WCMRC have and ask for volunteers in every community. People will come out and train.

trans sector: yes

marine sector: yes

contactname: Gary Ainscow

orgname: Northwest Fuels Limited

Northwest Fuels Limited - Gary Ainscow (2)

Good morning,

If I can be of any further assistance please feel free to let me know. I have been in the fuel delivery business for fifteen years now and have done extensive training in emergency response. Partly because of my job but also because I love the outdoors and spend a lot of time in the rivers and ocean in my spare time. I believe we need industry and jobs but need to take all precautions available to avoid spills and mitigate any damage should a spill happen. It is something I am passionate about and don't mind spending some time on.

Cheers,

Gary Ainscow General Manager Northwest Fuels Limited February 15, 2013

The Honourable Terry Lake Minister of Environment P.O. Box 9047 Stn Prov Govt Victoria, British Columbia V8W 9E2

RE: Response to the proposed Land Based Spill Preparedness and Emergency Response Plan for British Columbia

Dear Minister Lake,

Thank you for providing us with an opportunity to respond to the Ministry of Environment's proposed Land Based Spill Preparedness and Emergency Response policy intentions paper.

The Railway Association of Canada (RAC) is the trade association representing 54 freight and passenger railways in Canada. Our freight membership in British Columbia consists of three Class I carriers - the Canadian National Railway, the Canadian Pacific Railway, and the Burlington Northern and Santa Fe Railway Company - as well as three short line carriers - Kelowna Pacific Railway, Kettle Falls International Railway and the SRY Rail Link.

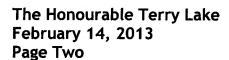
Collectively, the Canadian railway industry has and continues to demonstrate that their efforts to prevent spills, and manage them when they happen, have produced exceptional results.

Rail-related dangerous goods non-accidental releases in Canada have declined by more than 70 per cent since 2002 and 99.98 per cent of dangerous goods shipments in North America are incident-free. In 2012, while moving more that 70% of the service freight in Canada, there was only one incident involving a federally regulated railway and a dangerous goods release to the environment. Exemplary performance like this can only be attributed to a commitment to safety backed by a world-class emergency response preparedness system that reflects best practices and internationally recognized approaches to address rail-related spills and accidental releases.

As you may already be aware, the current regulatory framework for railway safety encompasses both federal and provincial legislation, regulations, rules and standards that provide the structure in which railway companies can operate safely. Some 34 Canadian

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¹FRA, <u>RR Safety Statistics Annual Report</u>, 1997-2009, Table 6-1. FRA, <u>Accident/Incident Bulletin</u>, Table 26. AAR Analysis of FRA Train Accident Database. Carloads from ICC/STB Waybill Sample, 1995-2009.



railways - including the two major freight-carrying railways, CN and CP, and more than 30 short line companies - have interprovincial or Canada-U.S. operations and are therefore regulated by federal law.

As such, several federal statutes play a role in the regulation of railways, the most important of which is the *Railway Safety Act*, together with the regulations and rules made pursuant to it. Other federal legislation affecting railway safety includes: the *Transportation of Dangerous Goods Act*, the *Canadian Transportation Accident Investigation* and *Safety Board Act*, the *Canada Labour Code* and the *Canada Transportation Act*.

More specifically, the *Transportation of Dangerous Goods Act* applies to <u>all</u> railways in Canada, prescribing various requirements for ensuring the safe transport of dangerous goods including the preparation for and dealing with spills and accidents in the event that they occur. In addition to their responsibilities to maintain rail lines and equipment so that their operations are carried out safely, shippers and railways are required to maintain Emergency Response Plans and up-to-date contact information.

Under this framework Transport Canada is responsible for overseeing all aspects of railway safety and the Transportation Safety Board leads all aspects of accident investigation. Canadian federally regulated railways work in conjunction with these organizations to allocate the appropriate resources to address all aspects of rail land based spills across Canada. From this perspective, establishing an additional entity in British Columbia to address spills caused by federally regulated railways would be redundant and could lead to an inefficient use of the resources required to mitigate environmental damage caused by rail incidents.

The railway industry, therefore, is not supportive of the ministry's intention to establish a provincially regulated industry-funded spill response organization to oversee spills issues and address incidents in British Columbia.

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²The *Transportation of Dangerous Goods Act* sets out specific requirements for the handling and transportation of dangerous goods, including their transportation by rail. It provides a framework for the prevention of incidents and accidents involving dangerous goods and for the appropriate response in the event of an incident or accident.

³The Canadian Transportation Accident Investigation and Safety Board Act governs accident and incident reporting and investigation for all modes of transportation under federal jurisdiction, including rail.

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Furthermore, the RAC and its members are not supportive of the principle that strives to achieve a net environmental benefit in the event that there is a release to the environment. As responsible corporate citizens with a deep commitment to sustainability, we are fully committed to restoring the environment to its condition prior to an incident or spill and will implement environmental monitoring programs to ensure that remediation efforts restore the valued ecosystem components of an affected area. In all cases the effect of a spill will either be fully restored and/or affected parties will be mitigated.

I would also like to take this opportunity to underline that Canadian railways have, for many years, proactively enhanced all aspects of operational safety including the protection of employees, the public, and the environment. Safety is an inherent part of railway culture that extends across railway organizations and into their operations and includes the handling and transporting of dangerous goods.

For example, Canada's Class I railways are partners of Responsible Care®, the Chemistry Industry Association of Canada (CIAC) and the American Chemistry Council program to identify and eliminate harm throughout the entire life cycle of their products. Railways participate in safety focussed initiatives such as the Transportation Community Awareness and Emergency Response (TransCAER®) program which helps communities prepare for and respond to possible transportation incidents related to dangerous goods. Canadian Class 1 railways are also members of the Transportation Emergency Assistance Program (i.e. TEAP® III) which establishes criteria that CIAC member companies must meet for road and rail emergency preparedness and response.

In addition to these initiatives, Canadian railways assemble customized response teams from the railways, relevant industries (e.g. the chemical industry), emergency response service providers, and local public security agencies to work with the Canadian Transport Emergency Centre to quickly assess risks, protect the public and remediate any negative impacts to the environment. As well, the RAC's Dangerous Goods Team works with communities, railways and shippers to improve safety in the transportation of dangerous goods even further through multiple outreach and education initiatives. We also provide support to the Justice Institute of British Columbia's Dangerous Goods Emergency Response Training Program.

The province of British Columbia may require an initiative to address spills and emergency response for some sectors, but not for the railway sector. Our existing model

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is built on world class expertise, trained employees, leading edge technologies, and an existing network of professionals who have the training to address rail-related incidents. This model allows us to respond to incidents immediately and remediate effectively. Furthermore, the RAC and its members are of the opinion that there should be a nationally consistent approach to land based spill preparedness and response.

We are prepared to work with the Ministry of the Environment to strengthen its processes and approaches to plan for and respond to land based spills and we look forward to future opportunities to exchange information, lessons learned and best practices.

Please do not hesitate to contact Mike Lowenger, Vice President Operations and Regulatory Affairs at (613)-564-8088 or at mikel@railcan.ca for follow up and next steps.

Sincerely,

Michael Bourque President & C.E.O. January 24, 2014

Jim Hofweber
Executive Director
Environmental Emergency Branch
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Jim.hofweber@gov.bc.ca

RE: Response to the proposed Land Based Spill Preparedness and Emergency Response Plan for British Columbia

Dear Mr. Hofweber,

The Railway Association of Canada (RAC) and its members operating in British Columbia (BC) continue to support the Ministry of Environment's efforts to strengthen the province's emergency preparedness and response regime. Rail safety is a major priority for the rail industry and we are committed to identifying new approaches and opportunities to enhance rail safety in Canada.

Canada's rail safety regime has benefits from a strong partnership between railways and all levels of government, one that includes a robust series of programs and outreach initiatives to ensure that communities are well-informed and prepared to react quickly in the event of an incident¹. Under this modern and enviable safety regime, Canadian railways and their regulators have been collaboratively delivering industry-leading safety performance for many years: the Canadian Pacific Railway and CN are consistently the safest Class 1 freight railways in North America; approximately 99.997 per cent of all dangerous goods shipments are incident-free; and in 2012 there were fewer than 2 accidents per million train miles in Canada.

Railways operating in BC have invested a considerable amount of time and energy to review the province's Land Based Spill Preparedness and Emergency Response regime and would like to put forward a series of comments to the Ministry before it releases its second Intentions Paper in 2014.

The comments below are summarized into four thematic groupings: Spill Preparedness and Prevention; Environmental and Natural Resources Recovery; Spill Response Standards; and Environmental Emergency Program Funding and Governance.

¹ Appendix A includes the RAC's response to the first discussion paper and its presentation from the symposium held on March 26th, 2013.

Spill Preparedness and Prevention

Canadian railways own, operate, and maintain their railway network, including the railway right of way where the vast majority of main-track incidents occur. Our contribution to the province's tax base is substantial with over \$95 million paid in provincial fuel, property, and other taxes in 2012, with additional contributions flowing to the province from the federal fuel excise tax on locomotive diesel fuel. Also, as outlined in our initial submission and discussed at great length at the symposium held in March 2013, and at Working Group and Advisory Committee meetings, railways have a long and credible history of working directly with the first responder community to strengthen emergency preparedness and response efforts through TRANSCAER® and other industry and corporate initiatives². The federal Minister of Transport's recent release of Protective Direction 32 is another step forward to enhancing the emergency preparedness and response capacity of communities across Canada³.

With this in mind, Canadian railways are supportive of the government's efforts to enhance spill preparedness capacity and coordination within BC by developing a value-added, self-sustaining and industry-driven Preparedness and Response Organization (PRO) group similar to the Western Canada Marine Response Corporation. In the event that there is a demonstrable risk to the public, railways will continue to work with and support the efforts of Emergency Management British Columbia (EMBC). We do not support a Ministry-led or directed initiative.

Under this framework, the creation of a new Strategic Oversight Body (SOR) is not required. Incident response, including the management of resources to address incidents, should continue to remain firmly with railways and not with the PRO or other entity. A voluntary subscription and self-sustaining model that is commensurate to a carrier's level of risk and the programs and initiatives it has in place to address risk would need to be negotiated between the parties subscribing to the PRO.

Railways also support the Ministry's proposal to develop a series of Geographic Response Plans (GRP) that reflect input from local communities, First Nations and relevant stakeholders. The railways have already compiled GRPs for some areas and are willing to provide the Ministry with the relevant data to ensure that there is commonality and mutual understanding of industrial operations and response capacities throughout the province. Data requirements would need to be developed by industry stakeholders and the Ministry. However, the following elements need to be embraced before moving forward:

² In 2013 the RAC, in cooperation with 11 railways, delivered 113 TRANSCAER® events with more than 2,000 participants across Canada. Railways also deliver TRANSCAER® events without RAC support.

³ Protective Direction 32 was issued on November 20th, 2013. Available at: http://www.tc.gc.ca/eng/mediaroom/backgrounders-protective-direction-no32-7428.html

- New GRPs should be prioritized and assets allocated based on an agreed-upon formula of exposure and risk;
- GRPs need to be practical and drive value to emergency response efforts, therefore a
 reasonable standard for these plans needs to be established and mutually-agreed terms
 between the Ministry and the railways need to be negotiated;
- GRPs need to recognize that railways maintain the authority to control their right of way, including the ability to restrict access to property and maintain safety and security protocols at all times; and
- Community engagement efforts should focus on collecting accurate and useful data for emergency response planning and not resource allocation, response capacity, or funding for local response activities.

We are also supportive of Ministry efforts to formalize requirements to confirm that carriers have the capacity and capability to respond to Tier II spills⁴. The Ministry should assess whether a carrier has: identified qualified contractors; provided staff with the appropriate credentials for completing remediation activities; and the sufficient capacity to respond to incidents (e.g. equipment in proximity to railway infrastructure). At this time, it is expected that the Minister of the Environment (or a representative on their behalf) would certify that a railway has fulfilled provincial requirements.

In principle, railways support the development of a guideline or similar resource that outlines: the general conditions for implementing non-conventional response techniques; advanced permitting for specific methodologies or remediation techniques; and the type and level of subject matter expertise required to assist with remediation efforts.

And lastly, railways report their incident data directly to a suite of federal organizations such as the Transportation Safety Board (TSB) and the Canadian Transport Emergency Centre. Collectively this data provides an exceptional level of detail for determining what has happened in BC. Introducing an additional reporting requirement to the Ministry will create an unnecessary and redundant administrative burden on railways and would add little value to enhancing preparedness or remediation activities.

Environmental and Natural Resources Recovery

Ministry efforts to clarify the parameters for remediation, restoration, and recovery activities could be a step forward in comparison to the current approach which is largely ad hoc. However, we strongly encourage the Ministry to recognize that there is a need to develop separate different requirements for spills involving hydrocarbons and spills involving other dangerous

⁴ As per www.ipieca.org/system/files/publications/TieredResponse.pdf

goods. In comparison to most dangerous goods carried by rail, hydrocarbons behave differently when interacting with the environment. Therefore, a unique series of parameters should be developed to clarify remediation, restoration, and recovery goals for this commodity.

The railways reaffirm their commitment to work with the Ministry to identify the best approach for determining remediation and restoration efforts, either through a generic formulaic model for spill incidents or an Environmental Damages Assessment model.

Regardless of the approach, remediation efforts should be driven by the potential risk that a spill poses to the environment and its valued ecosystem components, including Native and non-Native communities. Railways will continue to compensate for financial loss as a result of a spill, but they are opposed to any requirement to compensate for loss of use and or enjoyment.

Spill Response Standards

The railways are supportive of the Ministry's intentions to develop a guideline to clarify spill response standards. However, railways express their concern that federal and provincial requirements may differ, therefore we strongly encourage the Ministry to refer to Transport Canada's requirements for Emergency Response Assistance Plans so that there is alignment and consistency across the country.

Similarly, railways support the government's intentions to formalize the Incident Command System approach for Tier II spills through regulation (or guidance) as well as its intentions to identify qualifications and competencies for spill responders. We recommend the Ministry to adopt internationally recognized and best practices standards (e.g. National Fire Protection Association Standards) rather than develop standards that are unique to BC.

Introducing a schedule for reporting and data-sharing over the course of the remediation project, including a requirement to submit a project close out report, is also supported. Similarly, introducing a voluntary debrief process could add value providing that it is based on confidentiality, and the sharing of information and best practices, and not a politicized forum for determining liability or fault.

Although we respect the Ministry's desire to better understand how a responsible party will implement spill response and monitoring work within a specified timeframe, we are opposed to a regulatory requirement that presents a "one size fits all" approach to addressing this issue. As an alternative, we encourage the Ministry to consider developing or adopting a planning standard that is based on reasonableness and is cognizant of BC's vast geography, terrain, population density and inclement weather conditions.

Similarly railways are opposed to the government's intentions to have a government or external organization address inquiries related to loss by individuals, companies or wildlife.

However, developing a reporting system to communicate relevant information to the public would be a positive step forward and the railways are willing to work with the Ministry to determine in what situation this will be a function of the Ministry, the railway or the PRO.

Environmental Emergency Program Funding and Governance

As previously discussed, railways operating in BC pay a considerable sum of taxes and that the government also receives revenue through the federal excise tax on locomotive fuel. Furthermore, the existing regulatory framework and risk mitigation programs implemented by railways ensure that the risk associated with moving dangerous goods in BC by rail is minimal.

With this in mind, railways do not support the government's proposal to receive additional funding for the Environment Emergency Program or for a government-led PRO. Rather, funding to increase the Environment Emergency Program's level of involvement should come from government revenue with industry stakeholders working together to strengthen the existing public and private preparedness and response organizations.

At this time, the railway industry is not convinced that a contingency fund for quickly allocating monies to implement spill response and recovery actions is required. Canadian railways continue to be responsible corporate citizens, utilizing their relationships with local first responders, municipalities (including First Nations), contractors and government agencies to ensure that spills are addressed as soon as possible and that affected areas are restored to their previous condition. As previously mentioned, the railways support the government's efforts to develop a coordinated inter-industry self-sustaining PRO program based on a voluntary registration fee or model that considers a sector's risks and the programs and strategies it has in place to mitigate them.

It is important to note that the insurance regime for dangerous goods movements in Canada is currently under review by the federal government. In the 2013 Speech from the Throne, the Governor General stated that railway companies must be able to bear the cost of their actions, and that his government would require shippers and railways to carry additional insurance so they are held accountable⁵. The Minister of Transport is expected to lead this review and initiate a process that addresses risks and liabilities posed by the movement of dangerous goods in the imminent future. Furthermore, the Canadian Transportation Agency is in the process of completing a review to determine the adequacy of railway third-party liability insurance.

Railways firmly believe that the development of any funding regime to support emergency response needs to be national in scope, and inclusive of relevant stakeholders, including shippers

⁵ The 2013 Speech From the Throne is available at: http://speech.gc.ca/

and carriers. It must also recognize that a coordinated regulatory framework is required to effectively address the risk and liability associated with moving dangerous goods in Canada. Transportation law, taxation, safety standards, environmental protection, and municipal planning are only some of the key elements to be reviewed to ensure that a comprehensive solution is put forward.

Conclusion

Railways operating in British Columbia are supportive of the Ministry's efforts to improve the coordinated response to land based spills, and collectively the Working Groups have identified several means of achieving this outcome. These include: increased coordination of emergency response capacity and the development of Geographic Response Plans for locations along transportation corridors, especially in corridors with multiple modes of transportation.

The railways do not support developing organizations and or funding regimes that increase the provincial government's involvement in spill preparedness and response. Industry has developed a strong reputation and record of addressing environmental incidents and mitigating losses incurred by the public.

We look forward to working with you on this initiative over the course of this year.

Please do not hesitate to contact me if you have any immediate questions or comments.

Regards,

Mike Lowenger, P. Eng.

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Vice-President Operations and Regulatory Affairs

Railway Association of Canada

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de fer du Canada

July 25th, 2014

Cindy Bertram c/o of Jim Hofweber **Executive Director Environmental Emergency Branch** PO Box 9342 Stn Prov Govt Victoria, BC, V8W 9M1 Jim.hofweber@gov.bc.ca

RE: Land Based Spill Preparedness and Emergency Response - Intentions Paper for Consultation (April 2014)

Dear Mr. Hofweber,

The Railway Association of Canada (RAC) and its members with operations in British Columbia (BC) appreciate the Ministry of Environment's commitment to coordinate with relevant stakeholders to strengthen the province's emergency preparedness and response regime.

We are pleased with the renewed direction presented in the second intentions paper and would like to acknowledge that the majority of the stated intentions and guiding principles align with the railway sector's position and its unwavering commitment to enhance the safety of its operations.

Although we have deep concerns with some of the proposed intentions and principles, we are supportive of the government's efforts to enhance safety across the dangerous goods supply chain in BC. However we would like to underline that a nationally consistent approach is required to address the management of dangerous goods transportation in Canada.

In parallel to working with Ministry staff and other industry partners through this initiative, it is important to note that the railway sector has worked tirelessly with other governments and members of the dangerous goods supply chain to enhance emergency preparedness and response capacity in Canada for crude oil and other flammable liquids.

Over the course of this year a number of initiatives have emerged to establish a stronger emergency preparedness and response regime for railway incidents in Canada. Therefore it is important that the Ministry's efforts acknowledge these initiatives and integrate them into their strategy for managing dangerous goods in BC.



Our comments with respect to the Ministry's intentions paper are briefly summarized below and we have included an additional overview of several government and industry-driven initiatives for your consideration. Our previous submissions have been appended for your review.

Comments on the Intentions Paper

Preparedness, Response and Restoration Requirements

The RAC and its members are supportive of the Minister's intentions to develop a certified regime that recognizes the existing federal regulatory framework for transporting dangerous goods by rail and trust that the Ministry will also recognize best practices applied by industry in the field.

With this in mind, we urge the Ministry to adopt a risk-based approach that recognizes the risk posed by a prospective carrier as well as the existing suite of mitigation measures it has in place to reduce risk exposure to Canadians and or the environment.

In the context of railway operations in BC, this should reflect best practices such as participation in the Chemistry Industry Association of Canada's Responsible Care® program, a commitment to delivering TRANSCAER® events, exchanging information with communities about dangerous goods, corridor assessments and sensitivity mapping, and the appropriate allocation of equipment, resources and qualified personnel and contractors to provide mitigation services in accordance internationally recognized standards.

We trust that railway emergency preparedness and response efforts align with the Ministry's intentions related to developing emergency preparedness, response and restoration requirements.

In principle, we are supportive of the proposed preparedness requirements and welcome an opportunity to provide you with additional information about our current programs and best practices that align with them. As referenced in our previous submissions and at the Symposium organized in Vancouver of March 2013, railways continue to maintain effective programs dedicated to emergency preparedness and response.

With respect to the proposed response requirements, formalizing spill reporting and the use of the incident command unit management system in the field are welcome additions. However, and as suggested in our previous submission, response time requirements should be limited to planning purposes only and not to specific incidents. Incidents should be evaluated on a caseby- case basis with consideration given to the complex set of factors (e.g. natural disasters, extreme weather events, location, etc.) that can influence an emergency responder's ability

to arrive at the scene quickly. Furthermore, requirements for training and qualifications for on scene responders should be prioritized and risk-based and cognizant of organizations with centralized and regional response capacity. It is also important to note that railways report all releases to a number of federal government organizations and respond to incidents through an Incident Command Unit structure.

Lastly, the proposed restoration requirements are welcome however we are not supportive of a formulaic model to determine the monetary value of restoration activities for smaller or less complex spills. Railway response efforts are consistent regardless of the quantity spilled and any type of formulaic model can potentially discourage smaller carriers (of any mode) from reporting their incidents.

Provincial Preparedness and Response Organization

We suggest that the Ministry support the establishment of an Industry Steering Committee that can provide a one-window approach for coordination and communication with federal and provincial regulators and stakeholders¹. This would provide greater assurance that oil spill prevention and emergency preparedness requirements and efforts in British Columbia are well coordinated, effective and sustainable, as well as consistent with federal government requirements.

That being said, the RAC and its members support in principle the government's intentions to develop an industry-driven and self-sustaining Preparedness and Response Organization (PRO) that will provide emergency response assistance when required or when instructed to by a spiller.

Legislation in this case should enable the PRO and its mandate and should not be overly proscriptive in terms of PRO activities or funding. Furthermore, proper consideration should be given to existing entities and/or other organizations that can provide assistance in this context. Multiple PROs or strategies to address incidents related to specific commodities should not be ruled out at that this stage or superseded by a newly established PRO. A summary of the recently constructed and highly complementary initiative with the LPG Emergency Response Corp. is provided below for your consideration.

With respect to the Ministry's intentions to enable financial access through the PRO to the province, municipalities or First Nations, terms and conditions for access to these funds should

March 17 2014.

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¹ Concept initially outlined in the paper titled "World-Leading Land Based Spill Preparedness and Response in British Columbia" developed by Canadian Energy Pipeline Association and Railway Association of Canada in cooperation with the Western Canada Marine Response Corporation and Western Canadian Spill Service, Ltd.

be negotiated with industry to ensure that funds are allocated efficiently and to the right activities.

Enhanced Provincial Environmental Emergency Program

The RAC and its members continue to oppose the Ministry's intentions to develop a separate fund to maintain an efficient and enhanced emergency response program within the Ministry. The argument that emergency preparedness and responses costs are solely borne by taxpayers does not reflect the fiscal reality in which railways operate, nor does it recognize the considerable amount of tax that railways pay to the province directly and through the Federal Gas Tax Fund, as noted in our previous submission. Any type of funding regime to support emergency response should be national in scope and inclusive of all relevant stakeholders.

Key Initiatives

Amendments to the *Transportation of Dangerous Goods Act* (January 2014) - includes a new requirement for shippers to document the sampling method they use to classify crude oil for transportation by rail as well as additional requirements for consignor certification and a new tank car standard for Packing Group I and II materials.

Mutual Aid Agreements to Emergency Response Capacity (March 2014 - ongoing) - mutual aid agreements between railways and shipper organizations provide greater assurance that supply chain members are prepared and well-equipped to respond to accidents involving the release of crude oil or other hydrocarbons. In March 2014, CN and Canadian Pacific signed a mutual aid agreement to improve their ability to respond to accidents involving dangerous goods by agreeing to share emergency response resources and equipment. Similarly agreements are currently being developed between the RAC and Canadian Energy Pipeline Association for operations in BC and between the RAC, the Canadian Association of Petroleum Producers and Canadian Fuels Association.

<u>Protective Direction 33 (April 2014)</u> - this directive requires shippers and importers of several petroleum products to develop Emergency Response Assistance Plans (ERAP) in accordance with Section 7 of the *Transportation of Dangerous Goods Act*. To meet these new requirements the RAC and a consortium of shipper associations are working with the Flammable Liquid Preparedness and Response Organization to support the development of shipper ERAP submissions by providing key deliverable response elements and preparedness management processes, as well as to maintain, share, educate and continuously improve response processes and operational response performance.

In response to this direction, an industry taskforce consisting of the Railway Association of Canada, the Canadian Association of Petroleum Producers (CAPP) and the Canadian Fuels Association is working diligently to develop an industry-led solution to enhance emergency preparedness and response capabilities for rail incidents involving flammable liquids.

The objective of this initiative is to develop and maintain an enhanced spill and fire emergency response capability for rail incidents, involving flammable liquids across Canada through the design and implementation of an emergency preparedness and response organization. In June, the taskforce identified the LPG Emergency Response Corp². as the most suitable organization to assist shippers in their efforts to meet the direction's requirements and enhance emergency preparedness and response capacity across Canada.

Furthermore, the organization is intended to support shippers' ERAP submissions by providing key deliverable response elements and preparedness management processes. In addition, this organization will work to maintain, share, educate and continuously improve response processes and operational response performance.

<u>Protective Direction 34 (April 2014)</u> - this directive enhances the safe transportation of dangerous goods in Canada by prohibiting the use of older tank cars (i.e. CTC 111, DOT 111 or AAR 211 specification) that do not meet specific structural requirements (e.g. non-normalized steel).

<u>Canadian Training Coalition for Transportation Incidents (May 2014)</u> - as a follow up to the federal Minister of Transport's General Policy Advisory Council, this new Coalition³ aims to train first responders to transportation incidents involving flammable liquid fires including crude by rail and other liquid hydrocarbons and ethanol in a cooperative and efficient system.

Conclusion

Railways operating in BC have invested a considerable amount of effort into working with all governments, railway customers and other members of the transportation supply chain to ensure that products move across North America safely and without harm to the public or the environment.

² The LPG Emergency Response Corp. has a proven program providing not for profit LPG ERAP support to hundreds of organizations over the past 14 years and is now creating new capacity and infrastructure to cover the flammable liquids identified in Transport Canada Protective Direction No.33. Accordingly, the LPGERC is well positioned to deliver the needed implementation required to support Member Emergency Response Assistance Plan (ERAP) submissions.

³ Coalition members include: the RAC, CN and Canadian Pacific (CP), the Canadian Association of Petroleum Producers (CAPP), the Canadian Fuels Association (CFA) and the Canadian Association of Fire Chiefs (CAFC).

Canadian railways are best-in-class performers within their industry year over year, ensuring that 99.998 per cent of all dangerous goods shipments arrive at their destination without a release caused by an accident and that there are fewer than 2 accidents per million train miles in Canada alone. Our commitment to improving our performance is exceptional and is evidenced by our participation in the key initiatives described above. Please do not hesitate to contact me if you have any immediate questions or comments.

Regards,

Mike Lowenger, P. Eng.

Vice-President Operations and Regulatory Affairs

Railway Association of Canada

Discussion Areas and Questions

The following discussion areas and questions are based on a policy intentions paper for consultation which can be accessed from the Ministry's Land Based Spill Preparedness and Response in British Columbia website.

Railway Association of Canada – Response Form

A. British Columbia's Current Spill Preparedness and Response Regime In your view, do you feel that British Columbia's current spill preparedness and response regime is effective?

Answer: Significant Gaps

What are the reasons for your choice?

The capacity and ability to respond to significant incidents within the province varies depending on the sector/industry involved and the geographic location of the incident. Canadian railways continue to implement mature programs related to emergency preparedness and response and are well equipped to respond effectively in the unlikely event of an accident. That being said, the process initiated by the Ministry of Environment has fostered the spirit of continuous improvement and collaboration and has encouraged railways to work with other industry partners to develop mutual aid agreements and enhance their approaches to developing geographic response plans in British Columbia (BC).

B. Protection of Human Health and the Environment – Meeting Ministry Principles

In your view, how effectively do the Ministry's intentions support the principles (described on page 4 of the intentions paper) guiding B.C.'s land based spill preparedness and response regime?

Answer: Adequate

What are the reasons for your choice?

As evidenced by the presentations made at the Symposium and the work completed over the course of the year by the Advisory Committee and Working Groups, provincial and federal governments have a strong regulatory foundation in place and industry stakeholders have a number of robust programs and best practices in place to reduce risk and support their commitment to transporting dangerous goods safely.

C. Ministry Intention 1: Preparedness, Response and Restoration Requirements See intentions paper pages 5 and 13-14.

1. General comments:

1.1 Do you have any general comments about the proposed requirements?

The railway industry supports the Ministry's efforts to clarify requirements for preparedness, response and restoration. However harmonization across Canada is essential to ensure a consistent approach to managing the transportation of dangerous goods in all provinces and territories. In this way we encourage the Ministry to avoid duplication and work with existing regulatory requirements and best practices established by industry.

1.2 Are there any gaps in the preparedness, response or restoration requirements identified by the Ministry? Do you feel that any of the proposed requirements are unnecessary or duplicate existing regulations? Please be specific.

Canadian railways move dangerous goods in accordance with a suite of federal regulatory requirements, including new provisions put forward by the Federal Minister of Transport for moving crude by rail. Moreover industry best practices for emergency preparedness and response are in place and new collaborative arrangements are emerging to enhance the efficiency and effectiveness of response efforts associated with derailments and specific commodities such as crude oil and flammable liquids. Our previous submissions and contributions to the inter-disciplinary Working Groups outline existing requirements and corresponding programs implemented by railways operating in BC and across Canada.

With respect to developing requirements to address the loss of access to public amenities, the current regulatory system provides a number of channels for resolving disputes related to compensation. Moreover railways maintain an unwavering commitment to restore the environment to its previous condition. Without proper consideration, a new process for addressing loss of use could be abused.

1.3 Are there some requirements that you feel should be a priority for the Ministry? If so, which ones?

The Ministry should support the development of an Industry Steering Committee to further discuss its proposed requirements and to ensure that any potential duplication is avoided.

2. Who should lead development of geographic response plans?

A set of standards should be developed for geographic response plans (GRP) through consultation with the Ministry, industry and other relevant stakeholders such as local authorities and First Nations. Once the standards have been developed, companies and or their respective industry associations should be required to meet them on a regular basis. The level of collaboration with First Nations and communities should be determined in the consultations regarding the development of GRP standard. GRP standards need to be developed so that they can evolve strategically over time (e.g. Basic standards = Control points, Enhanced standards = Basic + general environmental sensitivities, Comprehensive standards = Enhanced + detailed environmental and cultural sensitivities). Should gaps be found in the coverage,

then the Ministry should assume responsibility for addressing them should they feel that a sufficient risk is present.

It is important to keep in mind that railways develop their respective geographic response plans in accordance with the commodities that they move and take into account multiple variables such as proximity to communities and environmentally sensitive areas. They also include details related to response efforts such as availability of equipment, contractors, incident command, etc. This responsibility should continue to rest with railways.

3. Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response. Do you have any comments or suggestions for the Ministry with respect to evaluating the ability of companies (or the proposed provincial preparedness and response organization) to meet legislated requirements?

Unannounced drills are an unnecessary burden on the regulated community. Drills should be intended to train and to learn within a controlled setting. Significant resources and costs are associated with mobilizing people and equipment to respond to incidents and drills should not be set unannounced. Regardless of how any single event transpires, the next event may present an entirely different set of challenges.

4. Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?

Communities should consider participating in TRANSCAER® events and should register their respective Emergency Planning Officials with CANUTEC so that they can receive additional information about dangerous goods transported through their respective communities.

As previously mentioned, consultations regarding the development of GRP standards should determine when and how local officials and or First Nations should be engaged in the development of GRPs and subsequent steps related to emergency preparedness and response.

- 5. Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.
 - 5.1 Do you have any comments about including spill response times in legislated requirements?

There are too many variables that can influence how quickly a response can be mobilized. Rather that legislate response times, consideration should be given to developing response times for planning purposes. Target times could be based on an excepted average arrival time with due consideration to weather and other factors such as the geographic location of the hypothetical incident (i.e. urban vs. rural/remote location) and the type of commodity. Furthermore the government should define "response" through legislation and or policy prior to setting standards in this area.

5.2 What response actions would you recommend attaching time requirements to (e.g., cascading levels of response action)?

A clear definition of a "response" needs to be established before response actions and or associated requirements can be established.

5.3 What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?

The Railway Association of Canada and its members do not support a one-size-fits-all approach to establishing response times. Rather, proper consideration needs to be given to the multitude of variables that can affect an organization's ability to mobilize resources and respond effectively. As previously stated a clear definition of a "response" needs to be developed before standards can be introduced.

6. Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. How should significant impacts on parks, public beaches, etc. be dealt with to ensure satisfactory outcomes?

Canadian railways have a proven track record of restoring affected areas to their previous condition, without additional costs borne by the public and or government. Legislative requirements in this context can provide a hindrance to restoring affected areas rather than a catalyst for achieving optimal outcomes. As previously mentioned, the current regulatory system provides a number of channels for resolving disputes related to compensation.

D. Ministry Intention 2: Provincial Preparedness and Response Organization See intentions paper pages 7 and 15-16.

1. Do you have any comments or suggestions regarding establishment of a provincially regulated preparedness and response organization?

The Minister should consider drafting legislation that will enable the development of a PRO in British Columbia (similar to the Federal Government's approach under the Canadian Shipping Act which led to the creation of the WCMRC). Afterwards industry should be tasked with developing the appropriate strategies and or response efforts to respond to spills related to specific commodities or to dangerous goods in general. In this way the PRO should be driven by industry and not government. Proper support and consideration should also be given to the development of an Industry Steering Committee to ensure that efforts in British Columbia are consistent with efforts across Canada and complimentary to existing arrangements or strategies already in place.

2. If the Ministry proceeds with the establishment of a provincial preparedness and response organization, what criteria, risk levels and other factors should be considered in determining the threshold for mandatory membership?

Membership should be risk-based and considerate of the dangerous goods moved by each relevant carrier. Consideration should also be made to the existing strategies and programs in place and investments made to reduce risk and respond effectively.

3. Do you have any comments or suggestions about how local government, First Nations and other stakeholders should be engaged or integrated into the activities of the proposed provincial preparedness and response organization?

Emergency preparedness activities and response efforts should include First Nations and local authorities as required. The PRO once established would be well placed to play a coordination role with relevant stakeholders.

4. What industry based funding mechanisms should the Province consider in establishing a response organization? How should the Province ensure fairness and equity across all the industry sectors whose spills could impact provincial lands or resources?

Funding should be limited to covering direct operating costs of the PRO as per the WCMRC model. Industry funding allocations should be determined on a risk-basis and cognizant of existing programs, initiatives and insurance requirements for each carrier.

5. Do you have any comments about development of provisions that would enable local governments and/or First Nations to recover costs and fund immediate participation in a spill incident response?

Canadian railways are privately owned and self-funded companies that maintain adequate levels of insurance as determined by the Canadian Transportation Agency and or provincial government equivalents. When necessary, Canadian railways reimburse local governments and First Nations through corporate claims processes and or legal remedies as required.

- E. Ministry Intention 3: Enhanced Provincial Environmental Emergency Program See intentions paper pages 9 and 18-19.
- 1. Do you have any comments or suggestions regarding the Ministry's intentions to require industry funding of an enhanced Provincial Environmental Emergency Program?

As stated in previous submissions and over the course of this initiative, Canadian railways do not support the Government's proposal to collect industry funding for an enhanced Provincial Environmental Emergency Program. Rather the cost of the EEP should be borne by the provincial government and a system should be in place to ensure that the polluter pays principle is adhered to and that relevant stakeholders maintain the appropriate management systems and response programs to support emergency preparedness and response activities.

2. What percentage of the cost of the Province's Environmental Emergency Program should be funded by general revenue (tax dollars) and what percentage should be funded by industries that pose a risk to the environment?

The provincial government is responsible for determining the level of resources that are appropriate for the EEP. As mentioned in previous submissions, Canadian railways pay a substantial amount of taxes to the province and contribute financial resources and in-kind support to emergency preparedness and response initiatives in BC.

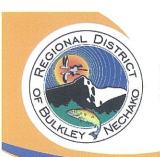
3. Ensuring fairness and equity are important criteria for the Ministry in considering funding mechanisms. Do you have any comments or suggestions regarding fair and equitable industry based funding mechanisms that the Ministry should consider in establishing an appropriate level of funding for the Provincial Environmental Emergency Program?

As stated in previous submissions and over the course of this initiative, Canadian railways do not support the Government's proposal to collect industry funding for an enhanced Provincial Environmental Emergency Program.

F. Additional comments

Do you have any additional comments or suggestions for the Ministry regarding development of a world leading land based spill preparedness and response regime for B.C.?

See written submission and our recommendations put forward in our paper titled "World-Leading Land Base Spill Preparedness and Response in British Columbia".



37, 3RD AVE, PO Box 820 BURNS LAKE, BC VOJ 1EO

OF BULKLEY NECHAKO

"A WORLD OF OPPORTUNITIES WITHIN OUR REGION"

June 25, 2014

Minister of Environment Honorable Mary Polak PO Box 28159 Westshore RPO, Victoria, BC V9W 6K8

Dear Minister Polak,

Re: Land Based Spill Preparedness and Response in British Columbia - Ministry of Environment Policy Intentions Paper for Consultation – April 2014

The Board of Directors of the Regional District of Bulkley-Nechako would like to express serious concern regarding the Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014 as follows:

- 1) The document was received by staff from the BC Association of Emergency Managers and not directly from the Ministry of Environment; the Union of BC Municipalities sent the information out on May 28th, the deadline for submission was June 26th, which did not leave sufficient time for Regional District staff to prepare comments for the Regional District Board.
- 2) One of the key issues noted in the document is "a larger role for communities". Local governments. First Nations and stewardship groups are to play a significant role in spill preparedness and response - from acting as first responders, to providing valuable information about local ecological sensitivities. Local government and First Nations face direct risks and costs in the event of a spill – and must have opportunity to be fully engaged in risk assessment, planning and preparation, communication, response and recovery, activities. Local government and First Nations in the region **DO NOT** have the capacity to provide these services. The following reflect concerns and request consideration of your Ministry:
 - a) local governments and First Nations within the region do not have the resources to prepare for and respond to hazardous material spills - reliance on local governments and First Nations is unacceptable without compensation and funding for planning, training, and response;

Re:

Land Based Spill Preparedness and Response in British Columbia - Ministry of

Environment Policy Intentions Paper for Consultation - April 2014

Date:

July 3, 2014

Page:

2

- b) there needs to be an assurance that emergency planning for hazardous material spills take into account the lack of capacity of rural first responders:
 - i) the services provided by fire departments within the region; fire protection, road rescue, wildland interface, and medical first response, is already much too onerous;
 - ii) hazardous waste material is extremely volatile and dangerous, the Provinces expectation that untrained volunteers are to respond is unacceptable;
 - iii) volunteer fire departments in the region are only trained to the 'Hazmat Awareness' level; and
 - iv) volunteer training is expensive and time consuming, volunteer turn over, creates the need for the provision of ongoing training which will be expanded by the Provinces intention for local government to respond to industry spills.
- 3) Although one of documents 'Guiding Principle' is "polluter pays for prevention, preparedness, response and recovery;" further along the document states "The system will be primarily funded by industry, while recognizing some governance responsibilities and costs should be borne by taxpayers through continued government funding." Given the spillers are industry and industry transporters, the cost of an emergency response **MUST** be borne solely by industry.

Local governments do not receive royalties/revenue compensation for commodities transported through their jurisdictions. Local governments and First Nations cannot support the burden of additional planning, training, exercises, and debriefings required to address potential industry disasters posed by transmission of dangerous goods on the highways, railways, and pipelines through our region.

Also, attached please find the Board of Director response to the questions posed by the Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014.

The Regional District of Bulkley-Nechako requests that you and your Ministry consider the issues identified. We look forward to meeting with you possibly at the Union of British Columbia Convention in September to discuss our concerns.

Sincerely.

Bill∕Miller Chair

CC

District of Fort St. James

Re: Land Based Spill Preparedness and Response in British Columbia - Ministry of

Environment Policy Intentions Paper for Consultation - April 2014

Date: June 25, 2014

Page:

District of Houston

District of Vanderhoof

Town of Smithers

Village of Burns Lake

Village of Fraser Lake

Village of Granisle

Village of Telkwa

Cheslatta Carrier Nation

Lake Babine Nation

Nadleh Whut'en First Nation

Nak'azdli First Nation

Nee Tahi Buhn Band

Saik'uz First Nation

Skin Tyee First Nation

Stellat'en First Nation

Takla Lake First Nation

Tl'azt'en First Nation

Ts'il Kaz Koh First Nation (Burns Lake Band)

Wet'suwet'en First Nation

Yekooche First Nation

Carrier-Sekani Tribal Council

Office of the Wet'suwet'en

Cariboo Regional District

Peace River Regional District

Regional District of Fraser Fort George

Regional District of Kitimat Stikine

Burns Lake Fire Rescue

Fort Fraser Volunteer Fire Department

Fort St. James Fire Department

Fraser Lake Fire Rescue

Granisle Fire Department

Houston Fire Department

Smithers Fire Rescue

Southside Volunteer Fire Department

Telkwa Fire Rescue

Topley Volunteer Fire Department

Vanderhoof Fire Department

Regional District of Bulkley-Nechako Response

I. Preparedness, response and restoration requirements:

- Implement clear effective standards for preparedness, response and restoration that all potential spillers will be required to meet;
- Sectors and individual companies that already meet high standards under regulatory authorities other than the BC Ministry of Environment intentions will be limited to increased obligations for coordination, collaboration and communications.

RDBN Comment

There needs to be an assurance that the other sectors and individual companies existing standards take into account the limited capacity of rural first responders. For example Canadian National Railway's Emergency Response Plan lists fire departments as initial responders to an event, however, in the Regional District of Bulkley-Nechako and partner municipalities the fire departments are only trained to the 'Hazardous Awareness Level' not in response. Reliance on local governments and First Nations is unacceptable without compensation and funding for training.

The following requirements will be addressed by Ministry of Environment:

- Preparedness requirements:
 - ✓ detailed spill response planning;
 - ✓ staging equipment and trained personnel:
 - ✓ drills and exercises:
 - ✓ community readiness; and
 - ✓ area-based planning/geographic response planning.
- Response requirements:
 - ✓ spill reporting:
 - √ response times for responders and equipment;
 - ✓ trained responders:
 - ✓ use of the incident command system;
 - ✓ additional response actions:
 - √ communications plans; and
 - ✓ sampling and monitoring.
- Restoration requirements:
 - ✓ environmental damage assessments:
 - ✓ restoration activities and plans:
 - ✓ addressing loss of access to public amenities; and
 - ✓ post incident reviews.

Ministry of Environment's – Key Consultation Questions: preparedness, response, and restoration requirements:

1. Who should lead development of geographic response plans?

Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014

Regional District of Bulkley-Nechako Response

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RDBN Comment

The development of geographic response plans should be led by the Province with consultation and input from local government, First Nations, and other stakeholders.

- 2. Unannounced drills, as well as regular training and field exercises, are tools for assessing preparedness and response.
 - a. Do you have any comments or suggestions for the Ministry with respect to evaluating the ability of companies (or the proposed provincial preparedness and response organization) to meet legislated requirements?

RDBN Comment

In order for the ministry to ensure a company is able to meet legislated requirements there should be an annual reporting structure that outlines the companies activities for example:

- i. description of all planning activities conducted;
- ii. description of staff and responder agency training held;
- iii. description of staff and responder agency exercises and drills held:
- iv. locations of nearest trained responding agencies;
- v. locations of nearest response supply stockpiles; and
- vi. an updated emergency response communications matrix.
- 3. Do you have any comments or suggestions on how communities (including First Nations) should be involved or consulted in plans or other preparation for spill response?

RDBN Comment

Regional Districts, municipalities and First Nations should be represented on the planning committee; this could be achieved by having one or two representative(s) appointed for each region which may be impacted by the movement of hazardous materials. The representative(s) would be responsible to ensure communications between the planning committee and other local governments or First Nations in the region they represent. The cost of the representative's time and expenses should be borne by industry and/or the province.

- 4. Timely and effective response is a critical element in limiting the impacts of a spill. The Ministry is considering legislated requirements that would include specified response actions and times.
 - a. Do you have any comments about including spill response times in legislated requirements?

RDBN Comment

In order to demonstrate how industry activities and outputs are expected to lead to the achievement of ultimate results, the development of a basic results chain is required. This results chain will help to ensure industries ability to clearly link their resources, activities and outputs to the required outcomes and ultimate results. Some suggested outcomes may be to:

Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014

Regional District of Bulkley-Nechako Response

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- i. establish minimum:
 - response times from first warning required to dispatch trained responders to site;
 - distance from trained responders to sites;
 - · distance between response supply and equipment caches;
 - time to dispatch information to provincial and local governments, and First Nations;
 - time to provide public information;
- ii. develop an information system that makes current information electronically available to local governments, First Nations, and first responders, for immediate identification of the materials involved in an incident, so the responders can determine the appropriate response actions and their ability to respond;
- iii. develop local agencies that are trained to provide a response within a minimum response time specific to the level of response required;
- iv. provide ongoing response planning and Standard Operating Guidelines for local first responders for limited response activities; and
- v. provide ongoing training for local first responder agencies, local governments and First Nations;
- b. What response actions would you recommend attaching time requirements to (e.g. cascading levels of response action)? RDBN Comment
 - A spill should be addressed immediately regardless of the level of response action required.
- c. What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?

RDBN Comment

- The provincial government should put significant financial penalties in place for spillers (companies/industry) not meeting response time requirements. This responsibility should not be borne by local governments and First Nations.
- 5. Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. How should significant impacts on parks, public beaches, etc. be dealt with to ensure satisfactory outcomes?

RDBN Comment

Industry should be mandated to return all properties to their previous condition, all hazardous materials should be removed, remediate soils, and vegetation reestablished in a set period of time.

When there is loss of trees and vegetation, and subsequent animal population, due to the damage of a spill there should be compensation

Regional District of Bulkley-Nechako Response

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to local government, First Nations, and other stakeholders, i.e. lumber harvesters, farmers, trappers, guide and outfitter businesses etc. that make their living off the land base. This loss will also affect provincial stumpage fees on trees, the trees should be replanted at the expense of the spiller.

II. Provincial preparedness and response organization

- Require all companies above a defined level of risk to fund and hold membership in a provincially regulated, industry led, non-profit Preparedness and Response Organization:
 - ✓ initial focus on oil and petroleum products by pipeline and rail, with other sectors added at a later date:
 - ✓ members below the defined level of risk may choose to become voluntary members of the organization;
 - ✓ The organization would:
 - ♦ be available to meet spill preparedness and response requirements on behalf of its members:
 - ♦ could be contracted by its members to respond;
 - ♦ would be open to non-members for additional fee;
 - could be hired by government to take over a response when responsible party is unable, unwell or unidentified;
 - financial access would available through the organization to assist the Province, First Nations and local government with costs incurred during spill response;

 - → more effective government oversight of spill contingency planning and response activities;
 - ✓ Consider extending provincial cost recovery mechanisms to local governments and First Nations who incur costs while responding to spills in their communities.

Ministry of Environment's – Key Consultation Questions: provincial preparedness and response organization:

1. If the Ministry proceeds with the establishment of a provincial preparedness and response organization, what criteria, risk levels and other factors should be considered in determining the threshold for mandatory membership?

RDBN Comment

Any organization that is responsible for the transportation of dangerous goods should be required to hold membership in the Preparedness and Response Organization.

There should be a sliding scale for the cost of membership depending on the volume being transported via highway, rail, or pipeline, the level of development, potential natural resources, and human impacts along the routes. Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014

Regional District of Bulkley-Nechako Response

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2. Do you have any comments or suggestions about how local government, First Nations and other stakeholders should be engaged or integrated into the activities of the proposed provincial preparedness and response organization?

RDBN Comment

Local government, First Nations, and other stakeholders should have representatives on the board and committees of the Preparedness and Response Organization at the expense of industry, these activities should not be funded by local governments and First Nations.

3. What industry based funding mechanisms should the Province consider in establishing a response organization?

RDBN Comment

Industry should pay based on volume of materials transported by highway, rail, or pipeline the level of development, potential natural resources, and human impacts along the routes.

- i. the funds should be used to:
 - · establish an effective communications system;
 - provide support for planning and development of Standard Operating Guidelines for first responder agencies;
 - provide training of first responder agencies;
 - provide supply and equipment caches required for response at locations that minimize response times; and
 - establish a response reserve with a minimum of the cost of a significant event, the amount could be established based on previous events.
- a. How should the Province ensure fairness and equity across all the industry sectors whose spills could impact provincial lands or resources?

RDBN Comment

As above

4. Do you have any comments about development of provisions that would enable local government and/or First Nations to recover costs and fund immediate participation in a spill incident response?

RDBN Comment

The Preparedness and Response Organization must reimburse local governments, First Nations, and other stakeholders for 100% of costs of an emergency response. There should not be any limiting criteria such as response supplies, staff regular and overtime costs etc.

III. Enhanced Provincial Environmental Emergency Program

To strengthen the Environmental Emergency Program the Ministry intends to establish a funding mechanism to ensure an effective, efficient, and enhanced program, shifting costs solely from taxpayers to include support from the oil and other industrial sectors that pose a risk to the environment and public safety. Regional District of Bulkley-Nechako Response

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RDBN Comment

As stated by staff in the 'Guiding Principles' given the spillers are industry and industry transporters, the costs should be solely borne by industry.

- ✓ The funding mechanism should:
 - → ensure adequate levels of annual funding;
 - ♦ be in keeping with polluter pays guideline;
 - ♦ be fair; and
 - → address the degree of risk and potential impacts associated with the different sources and types of spills.

Ministry of Environment's – Key Consultation Questions: provincial preparedness and response organization:

1. What percentage of the cost of the Province's Environmental Emergency Program should be funded by general revenue (tax dollars) and what percentage should be funded by industries that pose a risk to the environment?

RDBN Comment

Industry should contribute funding for 100% of the cost to the development of emergency programs based on the cost to develop plans and respond to hazardous waste spills for the Province, local governments, First Nations, and other stakeholders.

2. Ensuring fairness and equity are important criteria for the Ministry in considering funding mechanisms. Do you have any comments or suggestions regarding fair and equitable industry based funding mechanisms the Ministry should consider in establishing an appropriate level of funding for the provincial Environmental Emergency Program?

RDBN Comment

As stated above.

IV. Additional Technical Information

The Ministry of Environment's Environmental Emergency Program is the designated lead provincial agency for all spills in British Columbia. In the face of growing industrial activity across BC, the program requires additional staff and resources to ensure it can meet its legislated responsibilities ensure effective and timely response to spills – and provide appropriate government oversight when spills occur.

RDBN Comment

Local governments and First Nations will also require additional staff time and resources to ensure they can meet their legislated responsibilities and mount effective and timely response to a spill.

The Province has responsibility and legislated requirements to address matters of spill prevention, preparedness, response and recovery and protect the public, the environment, the economy and the social and cultural fabric of British Columbia from spills. Land Based Spill Preparedness and Response in British Columbia – Ministry of Environment Policy Intentions Paper for Consultation – April 2014

Regional District of Bulkley-Nechako Response

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RDBN Comment

The responsibility has also been downloaded to local governments who have very limited capacity (manpower and money) to provide the requirements to address these duties.

Enhanced capacity would allow the Ministry to provide enhanced planning and response support to local governments and First Nations as well as respond to industry requests for the Ministry to participate in joint planning projects, training exercises and debriefs.

RDBN Comment

Local governments and First Nations will also require additional capacity for enhanced planning, response support, training, exercises, and debriefs.

Increases in the movement of hazardous good through BC have placed a strain on the existing program staffing levels and budget. The Environmental Emergency Program requires additional capacity to address risks posed by a growing commodities sector.

RDBN Comment

Local governments and First Nations also require more capacity to address the risks posed by the increased movement of hazardous goods through their jurisdiction.

This approach recognizes that many of the hazardous material transported through the province do not generate royalties or other significant revenue for the Province to offset the costs incurred by the provincial Environmental Emergency Program in addressing the risks these materials present.

RDBN Comment

Local government and First Nations do not receive royalties on any commodities transported through their jurisdictions to offset costs incurred in addressing the risks. Local governments and First Nations are also limited in their capacity for the additional planning, training, exercising, and debriefing required.

Rocky Mountain Environmental Ltd. - Ron MacMillan

regime: Not effective at all

A_Text_Box: The Coast Guard admittedly is not prepared for a marine spill of the magnitude that could potentially occur in the future. Western Canada Marine Response is a "For Profit" organization that will(like all private industry) not mobilize until they clearly understand who will be footing the bill.

principles: Significant gaps

B_Text_Box: Without enforcement and inspection officers conducting routine assessments of the large (and many small to medium) potential spill offenders, the potential remains as high as it is presently. I see first hand just how many companies pay little regard to establishing proper handling, storage, and dispensing protocols.

 $C5_1$: Given the Geography of BC, response times may vary significantly. Of crucial importance would be immediate dispatch of men and material as the severity of most spills are seriously underestimated creating a more serious environmental impact.

D2: Product Volume
Frequency of movement (transport)
Demonstrated response plan- employee training- preventative measureshistory of compliance - attributable past incidents/accidents
Potential resources at risk (severity of spill damage)
Health hazards
persistence of potential spill in the environment

D3: Local government (particularly the smaller towns) should be encouraged to take a leadership role in ensuring their communities have or can assemble (through mutual aid) the resources to act as the first response in the jurisdiction.

First Nations, with appropriate training could be a very effective force as regional response agencies funded by the program.

- ${\tt D4:}$ Rates could be based on historical spill events for that industry and the potential resources at risk in the area of operation.
- D5: Yes, I would highly encourage it. Local government and First Nations have the most at risk and should be able to respond immediately and be reimbursed promptly from the industry contributions.
- E1: Yes, I totally agree. The tax payer should not be funding this at all. Taxpayers are already paying environmental fees and levies for everything they purchase on a daily basis right now.
- E2: The non "Act of God" component should be entirely funded by industry from producers, importers, transporters, distributors, right on down to our local gas stations and repair facilities.
- E3: Perhaps a levy based on volumes (tonnage) that are brought into or transit the province.

A significant hazmat tax applied to companies that do not demonstrate accountability. This may include an actionable emergency response plan coupled with appropriate internal equipment commensurate with the risk. Not to mention enforcement officers tasked with reviewing said companies compliance.

other_interest_desc: provider of oil spill response equipment to private industry and government

contactname: Ron MacMillan

orgname: Rocky Mountain Environmental Ltd.





25 July 2014

Ministry of Environment Government of British Columbia PO Box 9339 Stn Prov Govt Victoria BC V8W 9M1

Via email (cindybertram@shaw.ca)

Attention: Jim Hofweber, Executive Director, Environmental Emergencies and Land Remediation Branch

Re: Land based Spill Preparedness and Response in British Columbia – APEGBC's Comments on Policy Intention Paper

The Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) wishes to express its appreciation at being invited to comment on the Ministry of the Environment Policy Intention Paper on Land Based Spill Preparedness and Response in British Columbia. APEGBC welcomes the opportunity to assist the Province on this important initiative.

APEGBC unreservedly concurs with the need for world-leading practices for land oil spill prevention response and recovery systems to manage and mitigate the risks and costs of heavy oil pipelines and other land-based oil transfer systems. While it is understood that the Intention Paper does not contain a detailed description of the structure for the new regime, APEGBC believes that the Association, its members and licensees should be considered for inclusion in the system being proposed. APEGBC members and licensees possess specialized technical knowledge that should prove both relevant and valuable in many areas to be regulated under the new regime:

- drafting and review of regulatory changes;
- formulation of designs, equipment and operating practices for prevention;
- preparation of risk assessment methodology and plans e.g. detailed spill response planning, staging of equipment and personnel, area-based and geographic base planning;
- formulation of coordinated plans for robust responses e.g. spill reporting, adequacy of response times, responder training, communications plans, sampling and monitoring;
- preparation of designs and plans, and ensuing field reviews of works, for land remediation|restoration|restitution e.g. environmental damage assessment, restoration activities and plans, post-incident reviews; and

 formulation of guidance documents defining the best practices to be adopted for effective and continuously-improving spill preparedness and response.

APEGBC further believes that reliance on qualified professionals will contribute to increase public confidence in an effective land spill preparedness and response regime in British Columbia.

Page 10 of the Intention Paper lists the tasks contemplated in developing an implementation plan dealing with the outstanding technical and administrative issues, namely: determining thresholds for new requirements; technical research to inform specific standards and requirements; examining equivalencies; detailing costs to industry or government; and time lines for implementation. APEGBC can confidently state that the Association possesses substantial experience in supporting the Province on similar projects. Recently, APEGBC worked with the Ministry of Education, the University of British Columbia, the local engineering community and international experts to develop the award-winning Seismic Retrofit Guidelines (SRG) which are being applied to the seismic retrofit of British Columbia school buildings (information available https://www.apeg.bc.ca/For-Members/Professional-Practice/School-Seismic-Upgrade-Program). APEGBC's work as project manager in the development of the SRG - and as a member of this unique collaboration between Government, academia, the regulator for professional engineering in BC, the local engineering community and international experts was recognized at the 2013 Canadian Consulting Engineering Awards in Ottawa where the SRG received the inaugural "Engineering a Better Canada Award" for the Canadian engineering project which "best showcases how engineering enhances the social, economic or cultural quality of life of Canadians".

APEGBC also has probative experience in assisting various Government Ministries in drafting and reviewing the effects of regulatory changes; for example, two APEGBC representatives currently sit as members of the Modernization Advisory Group looking into changes to the *British Columbia Building Code*.

The Association of Professional Engineers and Geoscientists of British Columbia confirms its support for this significant initiative and extends its offer of assistance in achieving the goals set by the Ministry in its Intention Paper.

Should you have any comments or queries, please do not hesitate to contact Gilbert Larocque, CD, PEng, LLB, Associate Director, Professional Practice. He can be reached at glarocque@apeg.bc.ca and 604-639-8178.

G. Larocque, CD, PEng, LLB

Associate Director, Professional Practice



B.C. Ministry of Environment – Land-Based Spill Preparedness and Response Policy Intentions Paper for Consultation WCSS Comments – July 25th, 2014

Western Canadian Spill Services (WCSS) is a non-profit volunteer based organization that is owned and directed by its shareholders; Canadian Association of Petroleum Producers (CAPP), the Explorers and Producers Association of Canada (EPAC), pipeline companies through Kinder Morgan Canada Inc. and Enbridge Pipelines, and independent licensees of wells and pipelines.

WCSS has been providing oil spill preparedness and response support to licensees of oil wells and pipeline since 1972 when industry collaborated with regulators from Alberta and N.E. British Columbia to develop the first oil spill cooperatives.

Upstream petroleum companies maintain their own robust spill preparedness and response programs, and typically identify WCSS as an important component of their overall program. WCSS resources include the following:

- WCSS Oil Spill Contingency Manuals supplemental plan to a licensee's Corporate Emergency Response Plan.
- Oil Spill Equipment 42 oil spill response units in 36 locations, 25 response boats, wildlife units, winter units, specialized skimmers, boom units and a host of specialized response equipment.
- Training Programs 20-25 annual oil spill cooperative training exercises, a wide range of open registration courses and contract courses.
- Continuous Improvement small scale research and development program to improve the industry's spill response capability.
- Communications Program community involvement, website and initiatives to help foster a
 better understanding of the industry's commitment to environmental protection linked to spill
 prevention and emergency planning.



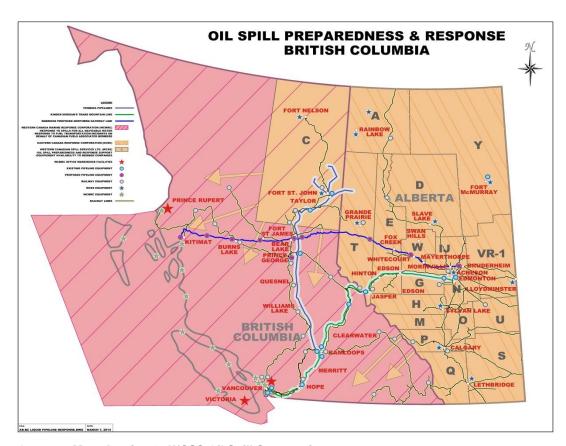
WCSS Cooperative Training Exercise

Spill Preparedness and Response Support since 1972.

T: (403) 516-8160 F: (403) 516-8172 E: <u>info@wcss.ab.ca</u> www.wcss.ab.ca



In the Area C Oil Spill Cooperative (N.E. B.C.) representatives from both the Ministry of Environment and the Oil and Gas Commission have participated on the Cooperative's steering committee for many years and have direct input into the Coop's programs. WCSS currently holds a minimum of 2 annual training events and maintains oil spill response equipment in both Fort St. John and in Fort Nelson, and has the flexibility of moving additional equipment from Alberta if it is required. In the event that one of our members (i.e. Pipeline Company) experiences a spill outside of our jurisdictional area we maintain a policy that allows them access to our equipment as a second line of defence.



Orange - Map showing 18 WCSS Oil Spill Cooperatives

Although rail and trucking companies are not eligible for membership with WCSS we do have policy that would provide access to our resources on a discretionary basis; if there is oil spilled in surface water we will help if we can.

WCSS believes that the upstream petroleum industry currently maintains a world class spill preparedness and response program in N.E. British Columbia and that it would create unnecessary duplication for the Province to introduce a new regime in that area. That being said; one of WCSS's strategic objectives is to strive for continuous improvement and we are prepared to address any gaps in our current spill preparedness program that would benefit our membership and stakeholders.

The British Columbia Ministry of Environment (MoE) is well positioned to facilitate coordination and collaboration across <u>multiple industry sectors</u> (via their operational regulators). To support this coordinating function it would be reasonable to focus on the development of risk-based Geographical Response Plans (GRPs). Under the guidance and leadership of the MoE, WCSS supports the



development of GRPs, in particular for NE B.C., and is prepared to address any gaps in our current programs that the plan identifies to enhance the region's current oil spill response capability. Further, and of significant importance, industry has a strong history of collaboration with government and other stakeholders through existing committees focused on land based spill preparedness and response. It will be critical to ensure that this work (and relationships) are leveraged on a go-forward / as GRPs are developed and piloted.

WCSS also recognizes the merit in the formation of an industry led non-profit provincial preparedness and response organization (Industry Steering Committee) that was proposed in the Canadian Energy Pipeline Association (CEPA) and Railway Association of Canada (RAC) paper "World-Leading Land Based Spill Preparedness and Response in British Columbia". It seems reasonable that an Industry Steering Committee in collaboration with regulators and stakeholders could be another viable option to enhance the spill preparedness and response capability in the province. This strategy is reflective of the formation of an Alberta industry-led steering committee (Conservation Committee) in the early 1970's to address concerns about the state of oil spill preparedness in the province. The work that the committee did in collaboration with government and other stakeholders resulted in the development of oil spill contingency plans, procurement of spill equipment, development of training programs, development of a continuous improvement program and formation of Oil Spill Cooperatives in 1972 which is arguably one of the most effective oil spill preparedness models in the world.

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July 22, 2014

Mr. Graham Knox, Director Environmental Emergency Program Ministry of the Environment (MOE) PO Box 9342 Stn. Prov. Govt Victoria, BC V8W 9M1

RE: Land Based Spill Preparedness and Response in British Columbia

Hadih Graham,

I really appreciated you making the effort to meet with me last Friday morning to discuss the Ministry of Environment's Policy Intentions Paper on developing a world leading Land Based Spill Preparedness and Response in British Columbia.

While we weren't able to resolve the issue of better communications and engagement of aboriginal governments in the review and comment on changes to government legislation, policy, regulations and practices, I believe you have a better understanding of Wet'suwet'en Hereditary Governance.

As stewards of Wet'suwet'en territories, clan and house members have high concerns related to the potential risk of contamination to country foods, water, fish and wildlife. In the past five years we have attended a mine chemical spill on the Huckleberry FSR, a coal train derailment along the Bulkley River, and are increasingly concerned with hazardous materials transported by rail and road.

Mike Ridsdale, our Environmental Assessment Coordinator believes aboriginal government representatives should sit on the Incident Command Team to relay information to, and from their respective communities.

During the Incident of the Queen of the North, First Nations (FN) communication was essential for FN communities to be properly informed of the situation and that any concerns they may have is relayed to the appropriate authorities, since they may have a different perspective on the various issues.

On review of the Policy Intentions Paper several questions arose about MOE's legislation regarding spills of hazardous materials, and if BC has the legislative authority to ensure an appropriate response. Is there any issue around overlaps of federal and provincial legislation?

What provisions are there towards a Constitutional question regarding level of authority?

Cost recovery – MOE recovers costs from the polluter. EC coordinates cost recovery through CCG on the coast. What happens when a polluter would like to see coordination for cost recovery? Polluter may not know how the "system" works. Who is ultimately responsible; finding many agencies with similar roles and responsibilities makes the situation confusing during a time of crisis.

Public Safety and Emergency Preparedness Canada (PSEPC) role and responsibilities include support to lead agencies during an incident of any kind, this can be utilized during an incident.

Recommendations:

- 1. First Nations (FN) should be incorporated in emergency fan-out, and incorporated into the Incident Command (IC). Need an instant communication with FN (first 18 hours) with the affected FN communities list of contacts within the communities and part of the fan out list from BC Provincial Emergency Preparedness (PEP).
- 2. Need to develop websites for operations and environmental information (MOE/EC) and linked to each other to post incident photos and post a public checklist of what agencies are doing so that First Nations and other people are informed. The website should facilitate a way to manage volunteers, etc. Have a secure ftp site to allow sharing of information and provide a secure site to protect the information. The type of information that can be posted on ftp sites (i.e. personal information, etc.) should be determined.
- 3. There should be a list of qualified wildlife and other experts to be called upon on short notice.
- 4. Need an operational strategy to accommodate involvement by politicians (local, provincial, federal)
- 5. Need feedback loop to determine what information was "aired" on television, newspaper, radio, etc. to determine what messages should be relayed next.
- 6. Clarify agency role and responsibilities at onset of Incident.
- 7. Conduct annual Regional Environmental Emergency Team (REET) meetings. Need to hold regular interagency meetings to update agencies and share information on resources, developments, and issues.
- 8. Concerns with regards to where the ICP, REET, etc. can be located use of town resources is an issue. Responders can easily overtake small town or community resources. Much of the technical input can be done remotely. Integration of agency area and community plans should be conducted.
- 9. A REET representative should be determined at incident command meetings (co-chair, Chair of REET, etc.)
- 10. Agencies should be prepared to provide incident response costs estimates on a daily basis.

11. Important to understand current and future resource uses by FN (and other stakeholders) throughout the year to ensure priorities for protection and clean-up are not missed.

From this extensive list of recommendation, you can appreciate our interest in engaging with the BC's Environmental Emergency Program to enhance spill preparedness and response throughout Wet'suwet'en clan territories. (map attached).

The Office of the Wet'suwet'en, Natural Resources Department Management and staff look forward to engaging with your Ministry in further discussions, planning and development of a provincially regulated and industry led non-profit preparedness and response organization.

Tabi Missiyh,

David G. Belford, Natural Resources

Office of the Wet'suwet'en

CC: Honourable Minister Mary Polak ENV.minister@gov.bc.ca

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