

LAND BASED SPILL PREPARATION AND RESPONSE IN BC REVIEW

SUMMARY OF POST-SYMPOSIUM SURVEY RESPONSES MAY 2013

Prepared for: BC Ministry of Environment

May 2013

By: C. Rankin & Associates
Victoria, B.C.

Table of Contents

A.	Common Themes (overall)	1
B.	Common Themes – Question 3: elements that would create a World Class regime.....	2
C.	Common Themes – Question 4: key challenges or constraints.....	2
D.	Common Themes – Question 5: key opportunities or strengths to be considered	2
E.	Common Themes – Question 6: success of symposium	2
F.	Common Themes – Question 7: areas of improvement for symposium.....	3
	Compilation of Responses (by question)	4

Land Based Spill Preparation and Response in BC Review

Summary of Post-Symposium Survey Responses

May 2013

Introduction

The Province of British Columbia (BC) is committed to a world leading preparedness and response regime for land based spills, as expressed most recently in BC's five conditions necessary for support of heavy oil projects. In keeping with the established polluter-pay principle, and recognizing the increase in development activities across the province, the Ministry of Environment (the ministry) is reviewing industry funded options for strengthening BC's spill preparedness and response policies and capacity. Land based spill refers to any spill impacting the terrestrial environment, including coastal shorelines, regardless of the source.

Following the March 2013 Symposium the Ministry of Environment invited participants to participate in an online survey designed to evaluate the success of the symposium and identify future areas of consultation and policy work.

This report is a summary of symposium participants' comments received as part of the consultation process.

A. Common Themes (overall)

- Any improvements to the spill preparedness and response regime should be undertaken in a coordinated manner – with the involvement of all stakeholders, a clear understanding of existing programs and roles of various government agencies, and support of responsible provincial and federal agencies
- British Columbia has the foundation of a successful program – with existing systems and capacity in such organizations as Emergency Management BC, Western Canadian Spill Services and West Coast Marine Recovery Corporation
- Land based (complementary to marine based) spill prevention and response should be explicitly considered and addressed in any review
- Consistent and sufficient funding, as well as appropriate government oversight, are central elements of an effective regime
- While there is strong and widespread support for the “polluter-pays” principle, development of any additional funding models should involve industry and have explicit parameters regarding purpose and oversight
- Washington and Alaska have strong spill preparedness and response programs that BC can draw upon for insights and expertise
- Geographic Response Plans and exercises with agencies, communities and stakeholders to ensure familiarity with the Incident Command System and Unified Command are commonly cited as priorities for additional attention

B. Common Themes – Question 3: elements that would create a World Class regime

- Leveraging existing effective programs, a risk based analysis of gaps, collaboration to address gaps, and adequate funding to ensure consistent planning, practice exercises, monitoring of spills and response, and response capacity
- Coordination and collaboration among agencies (e.g., Federal, Province, Local Governments, First Nations, Industry) and clear definition of government role
- Contingency plans that are developed collaboratively by all members of the response community and reflect geographical diversity and jurisdictional borders
- Legislated requirements for restoration to a pre-spill ecosystem state and a legislated framework for response measures supported by industry having sufficient insurance to pay clean up and damages
- Ensuring oiled wildlife response is an integral part of the regime

C. Common Themes – Question 4: key challenges or constraints

- Funding and political will, lack of infrastructure and resources in terms of personnel
- Identification of a funding model and the legislation to mandate an obligation to pay
- Tension between voluntary standards and legislated requirements
- Understanding existing regimes in place and working to integrate with existing systems, avoiding duplication (gap analysis)
- Achieving consensus among the variety of stakeholders who will have an interest in such a regime
- Ensuring strong coordination with all levels of regulators, and local government
- Remoteness and complexity of BC geography and weather conditions
- Ensuring compliance

D. Common Themes – Question 5: key opportunities or strengths to be considered

- High profile of energy development and transport has created an opportunity to establish legislation, partnerships and funding for a regime at a time of high public support for environmental protection
- Acceptance of polluter pays principle and willingness to prepare, prevent and respond – opportunity to collaborate and enhance spill preparedness and response measures
- Much of the science and organizations already exist – BC has the opportunity to choose the best, or portions of the best systems within the province and from neighbouring jurisdictions
- A sector by sector analysis could determine whether there are any gaps in existing practices and opportunities to leverage existing best practices, allowing better integration and coordination of response assets and plan systems
- Having a widely understood spill preparedness and response regime in place provides public assurance during a spill event that interests have been considered and integrated in the response

E. Question 6: overall, the symposium met my expectations and was successful

Responses:

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Total	Average Rating
Percent	2.82%	12.68%	11.27%	46.48%	26.76%	100%	3.82
Number	2	9	8	33	19	71	(on a 1-5 scale)

F. Common Themes – Question 7: areas of improvement for symposium**Discussion areas:**

- There was a disproportionate amount of time dealing with the marine environment (even in recognition that many land based spills impact the marine environment)
- Too much discussion focused on oil
- Too much ambiguity in the questions – e.g., on funding, no question was asked on “if additional funding is necessary”
- Presentations from local government and Emergency Management BC.
- A “connect the dots’ presentation that described a scenario, e.g., a spill and how the different players respond and work together (Feds, Prov, local government, industry)
- Discussion groups were heavily influenced by the preceding presentations
- More emphasis on surveillance and pre-event (spill) prevention
- More discussion on “Best Practices” instead of “World Leading”
- More discussion on review of gap analysis and recommendations

Participants:

- I would like to have seen more balanced group of NGO’s, Universities, Private companies, municipal government and First Nations presenting. Fewer corporations.
- Include stakeholders at every level from volunteers to the highest level.
- More Federal participation
- More participation from local government and other government agencies

General comments:

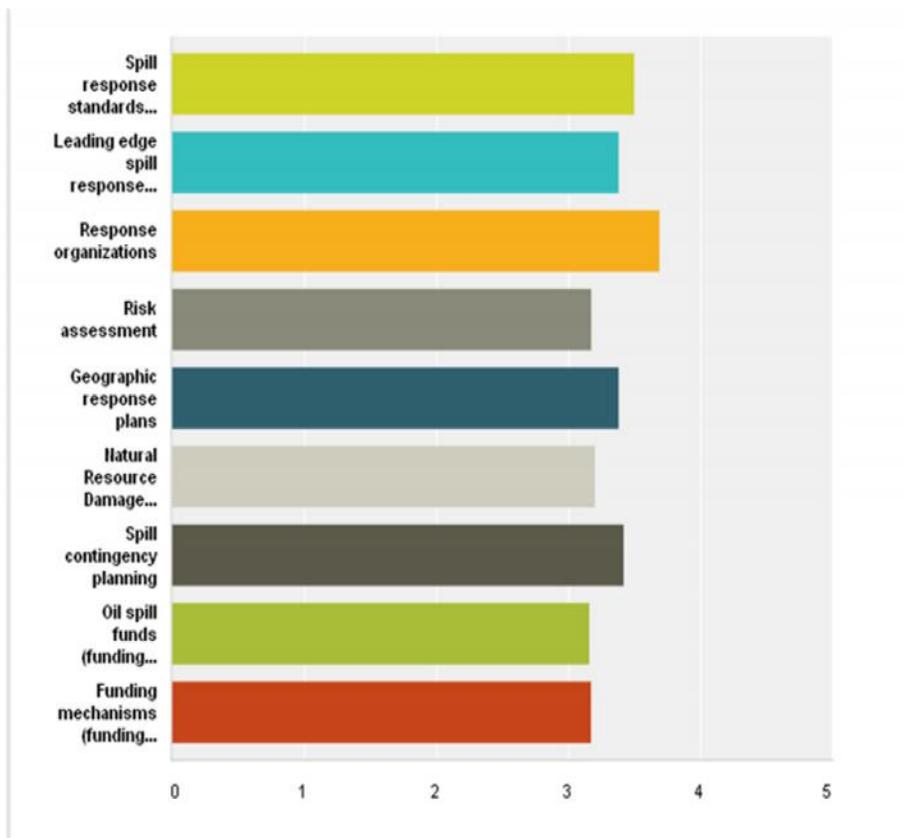
- Set up an annual symposium, perhaps in a less formal setting to accommodate more discussions. Increase the ratio of workshops vs. presentations.
- Based on the pre-Symposium survey, NRDA was the topic least understood by participants – a backgrounder would have been appreciated
- Provide more concrete information (e.g., definitions – “net improvement”) on topics to be discussed prior to symposium
- Top heavy with US content – it would have been beneficial to hear from others in Europe and elsewhere in the world

Compilation of Responses (by question)

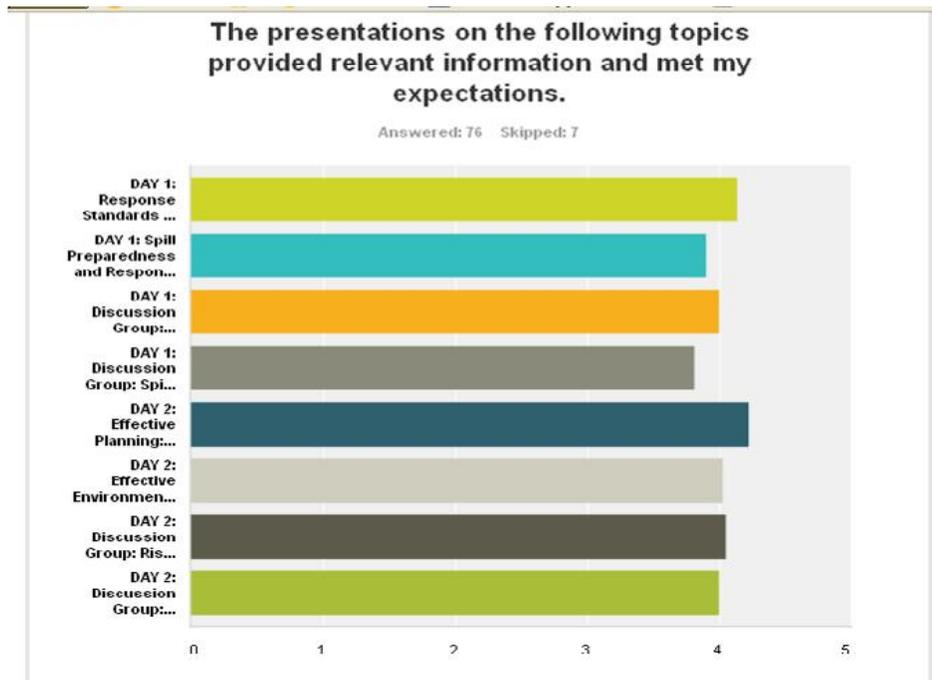
Question 1: After hearing the presentations and discussions at the symposium, please rate your knowledge on the following topics. (5-“Expert” 0-“None”)

Pre-symposium respondents were least knowledgeable on the topics of natural resource damage assessment, oil spill funds and funding mechanisms.

Post-symposium survey respondents commonly indicated substantive knowledge across the topic areas, with the exception of risk assessment where 14 persons rated their knowledge as “minimal”. The categories that received the lowest ratings from post-symposium respondents were oil spill funds and funding mechanisms.



Question 2: The presentations on the following topics provided relevant information and met my expectations, from highest (1) to lowest (11).



Post-symposium survey respondents indicated that on average they “somewhat agreed” or “strongly agreed” that the topics covered provided relevant information and met their expectations. The area that rated lowest satisfaction by respondents was “Preparedness & Response Funding: Understanding Industry Funding Mechanisms and Government Spill Funds”.

Question 3: In your opinion, what are the key elements that would create a world-class spill preparedness and response regime in British Columbia?.

- Identify and use the programs existing today. Create a robust information gathering process within the MOE to document spill events, magnitude, and response effectiveness. An engaged MOE program to practice mock events with all agencies, communities and stakeholders to ensure familiarity with ICS Unified command and to identify management struggles prior to an actual event. Analysis of findings from both programs to identify areas for improvement on an ongoing basis.
- United management structure
- Focus on land spill response
- Understanding existing gaps; collaboration; harmonization; leveraging existing effective systems
- Adequate funding for government oversight, strong regulatory standards

- Integration across jurisdictions (provincial coordination); funding; a clear accountability matrix; mapping/inventory
- What is the need for BC to be world class? Is the system broken or in need of repair? Unfortunately the role of the regulator was not defined and it's difficult to understand how the current regulatory framework isn't sufficient.
- Sustainable funding from industry for preparedness as part of the “polluter pay principle”. Preparedness measures to be regularly tested by a systematic and sustainably funded program of both announced and unannounced drills that integrate all members of the response community (government, industry, responders, stakeholders). Integrated spill response contingency plans that are developed collaboratively by all members of the response community (i.e., Northwest Area Contingency Plan)
- Consistent and sufficient funding, collaboration and consistent practices across the province
- Statutory authority, sufficient funding, requiring industry to have sufficient insurance to pay cleanup and damages, buy in by federal govt., spiller pays, industry pays for prep.
- Significant Geographic Response Planning, Industry Funding Model, especially for 'mystery spills' and those beyond the means of the RP, and some sort of NRDA process
- Accountability, mandatory insurance for spiller, adequate equipment on hand geographically located and available, focus on spill prevention then spill response.
- Solid spill prevention and preparedness plans that can be tested, well trained responders that understand ICS, best achievable response technology and capability, adequate funding, comparable standards with trans-boundary countries.
- Commitment and contribution from all stakeholders to achieve common goals and objectives
- Transparent spill preparedness and response regime plans
- Having all stakeholders involved
- Independent governance, reliable funding and resourcing, collaboration
- Mandatory legislated requirements for restoration to a pre-spill ecosystem state and a legislated framework for response measures
- 1. Preventative approach: shifting our society away from fossil fuel dependency through conservation measures & demand management & investment in renewable energy, 2. Coordinated area-based plans that involve key stakeholders & is open to any interested party 3. Funding system that ensures spill costs, remediation and restoration are not externalized to the taxpayer
- Assured funding, Geographic Response Plans, All parties coming together to work on plans, equipment on site in remote locations, trained responders
- Funding , training and planning
- Solid agreements and set roles among the Federal and Provincial agencies. More so than any amount of funding
- Definition and benchmarking of objectives
- Corporations must fund spill fund and an independent advocate must spear head clean up agency

- Consensus based Standards supporting a strong Regulatory platform
- One discussion thread resonated with me in this regard, and that is the absolute requirement of involving local first responders, in particular fire departments in this discussion.
- Adequate government resources and oversight
- Everything is inter-related (municipal, provincial, fed) each system needs to complement each other. One government entity can't do everything so a world class system must account for this and complement each other. (Very difficult to do when politics gets involved)
- Natural Resource Damage Assessments and Restoration Requirements. Not clear what is missing from spill response capabilities because there was no comparison between the patchwork that exists in BC (required by NEB, *Railways Act*, *Environmental Management Act*) and what exists elsewhere.
- I think a world-class regime should demonstrate the following parameters: be well funded and well resourced (e.g., equipment, FTE's); employ an all-hazards approach and/or "cradle-to-grave" approach to emergency management/response; have strong science/technical support; take a risk management approach to problem solving; is results-oriented, credible and accountable
- Effective cleanup, full restoration, detailed government oversight, coordination across industry and international borders.
- Based on best available information and technology, incorporates existing systems for preparedness and response, recognizes and encourages the collaboration of regulatory and industry partners. Clear mandate for response and funding for all spills, not just spills with responsible parties.
- Engagement at all levels of government and the public. Coordinated planning between government and industry. Geographically distributed resources for efficient response. Exercises to validate, maintain and improve contingency plans.
- Spill data, risk assessment, industry and area contingency plans, public involvement in plans, polluter pay principle and role of industry sector, regulatory oversight, liability and insurance
- Consistent standards in planning preparedness and response
- Too little information to provide feedback at this point
- Coordination and not spill cowboys that think that they alone are/have the solution
- We need to formulate strategies and build voluntary spill reporting and also monitoring and surveillance systems using sensor networks and we need to build a risk based and risk informed frameworks to plan and manage these types of incidents.
- Communication, establish agreements on jurisdictional boundaries. Standards specific to each sector on industry, i.e. trucking, pipelines
- It appears that Canada's regulatory framework needs to be reconsidered and strengthened with contingency plans building from the new regulatory authority. I think it is unwise to base a "world-class preparedness and response program" on voluntary standards.

- Focus on “outcomes” not inputs. It is important for the MOE to fully understand the current system and to engage the OGC and NEB in DEMONSTRATING a world class spill preparedness and response regime in BC.
- Adequate funding, legal authorities, planning and preparedness that meets public/stakeholder expectations, decisions supported by data/science
- Good surveillance to provide data on the types of spills and causal circumstances – this would allow pre-event phase prevention and reduce the frequency of spills and there make the need for response rare
- Risk based & defensible; practical & achievable; enforceable & verifiable: ICS & unified command
- Clear coordinated information is vital
- Must be achievable, risk based, and avoids duplication of efforts
- 1. Absolute clarity on Provincial/Federal roles, expectations and accountability. 2. Universal buy-in from transporters, producers, and handlers of hazardous goods. 3. Establishment of a fund for initial response and for orphan spill incidents.
- Better coordination between agencies and a clear definition of government role/authorities during a response
- All entities incorporating same response system (i.e., ICS & UC)
- Statutory Federal and Provincial requirements for contingency plans
- Ability for building on what we already have with an improved system of communication, cooperation and collaboration
- Communication, transparency, organization, excellence
- Transparent development inclusive to all interested and involved parties
- Ensuring oiled wildlife response is integrated into ICS and is mandated under new legislation
- Trained spill responders who can be on site and set up within a couple hours of notification
- Need the authority to respond and order workers, have the enforcement regulatory framework, and funding mechanism in case a responsible party cannot/refuses or the government takes over action to ensure cleanup as a result of the incident
- Diverse, inclusive and transparent development of standards supporting regulation
- There is no explicit Washington State legislation to cover this. We could ask for a legislative fix to language to include coverage for oil spill volunteers, but this may not be likely since the intent of this provision is for search and rescue and natural disaster incidents. This is an issue that is still being worked out. Government alignment with existing industry programs.
- Portions of this exist within Industry already
- Don't reinvent the wheel - look south of the border for ideas and opportunities to build off rather than recreate
- Collaboration of all the industry group's spill response preparedness and capabilities
- Cooperation across all agencies – government, industry and response organizations

- Clear objectives, standards, dedicated resources, funding
- Response plans in place and industry effective monitoring of risk areas

Question 4: What is the key challenge or constraint to building such a regime in B.C.?

- Attempting to create a program without first identifying the needs
- Funding
- Combining preparedness systems
- MOE staff who appear to be misleading or unaware of what is going on in land spill responses
- Lack of communication between government ministries; the desire to have a unique "BC" solution instead of using existing best practices;
- Political will, industry push-back
- Political interest/will and resourcing
- No comment
- Opposition by industry lobby groups
- Willingness of government
- Industry attitude, lack of statutory authority, insufficient staff in emergency response office, funding
- HUGE infrastructure gaps in comparison to US, esp. dedicated GRP coordination, and expertise re Damage Assessment. US public service clearly MUCH better resourced in terms of personnel to carry out these tasks, at both state and federal levels. In the marine context at least, remoteness and complexity of BC coast, as well as challenging weather conditions throughout much of year, also presents major challenges to mounting a rapid and safe response in many parts of BC.
- Funding, coordination between industry groups
- Cost prohibitive, vast isolated areas where spills may occur with too long of a response time
- Adequate funding
- Industrial Sector varying degree of spill preparedness and response. Sectors that have committed substantial resources and time to bring-up their sector, above others, would likely not easily accommodate sectors that were unable or unwilling to provide a free ride that would bring competitors up to their reputation with clients.
- Ensure the plans are communicated and available at all levels
- Funding and training
- Organizational barriers
- Current government policy; reluctance to make mandatory minimum standards and requirements
- Funding

- 1. Political focus on short term profits rather than overall wellbeing 2. Lack of leadership roles for federal/provincial collaboration on coordinated geographic planning 3. FULL cost of fossil fuel use needs to be implemented
- Partly our geography with such rugged terrain and extensive, remote coast, many stakeholders
- Commitment by governments to fund and commit to
- Coordination across existing industries and existing spill preparedness regimes. Coordination of Federal and Provincial agencies in planning and actual spill response
- Intersection of industry (most seem to think "world class" already exists) and government objectives
- Corporate lobbyists
- Having the appropriate stakeholders using an accepted development process
- Political will – Industry pushback
- Jurisdictional “grey” areas
- Sorting out the extent to which industry's claim that "everything is fine in BC now" is true. Figuring out what is missing here. Not creating overlap while ensuring consistent high level of capacity for spill response
- Key challenges or constraints are often timing and the current political climate (both of which are good with all the buzz around pipeline development). Other times its government itself due to lack of funding and/or budget restrictions or an election year. Another challenge is achieving consensus among the variety of stakeholders who will have an interest in such a regime.
- Seemed like industry really feels that they are at the top of their game. I think spills usually prove otherwise.
- The identification of a funding model (and the associated funds), legislation to mandate the creation of a clear mandate that requires the funding model and response obligations (for government and industry).
- Government funding to provide ongoing engagement and support
- Knowing what exists already and building on it without duplication
- Ensuring compliance and no duplication
- Understanding existing regimes in place, work to integrate with existing systems, jurisdictional management constraints due to agency legislation and functions, identifying spill types and sources that would elicit a disaster level response.
- The key challenge is balancing NGO's expectations with what is needed to manage risk. There needs to be a reality check as to what is reasonable and practical as opposed to a wish list
- It is not clear where the funding will come from – I think it is the main constraint
- Acceptance by all stakeholders; time expectations
- Funding for positions where response and preparedness are their primary focus, not ancillary duties
- To avoid duplication, seek harmonization with other jurisdictions and levels of government, build upon existing models and minimize cost

- Funding and industry buy-in
- Some of the worst spills with the most long-lasting effects are and will be underground – e.g., drilling through aquifers on such a wide scale to reach petroleum deposits - the risk of one hole may be very low, but with thousands the risk of spills up into aquifers becomes very high.
- Most sectors have good programs in place; need to identify who & where the gaps are
- Clear coordinated information
- Ensure strong coordination with all levels of regulators, and inclusion of local governments as well who will be responsible for the first responders that inevitably are first on scene
- Buy-in from key regulators such as NEB and Transport Canada
- I didn't see any clear regulatory role for government, and the existing culture seems to rely on industry to be good citizens
- Developing agreed upon standards throughout the life cycle of the incident
- Funding
- A compilation of what is currently in place so that there is an understanding of the gaps. The symposium identified best practices for consideration, but there needs to be an understanding what is needed and the gaps to determine if they will work for BC; miscommunication of what BC already has in place
- Time, money, expectations
- Determining who is/should be involved and get focused involvement by all without any preconceived or hidden agendas
- Resources
- Finding, training, and exercising a number of groups across the province
- Need full legislative and public support and have a budgetary funding stream to finance the Prevention, Planning, Preparedness and Response Program
- Funding and coordination
- BC MOE to identify and understand gaps between current status and want to be position for all various industry sectors and find out common themes and synergy
- Proper Gap Analysis...don't recreate the wheel
- Desire and a sense that we have to have a separate and brand new "world class" (whatever that means) way of doing things - there is not much that is new
- Limited structure within the government to coordinate an overall preparedness program
- Industry buy-in
- Trust between government and industry, training, funding
- Countering industry lobbying to politicians for self regulation

Question 5: What are the key opportunities and strengths to be considered in developing such a regime in B.C?

- Excellent preparedness and response programs exist within the key high risk sectors of the industry. Identification and utilization of these programs need to be leveraged.
- Continued broad collaboration
- Connecting with industry for mutual benefit and support
- Clarify the desired outcomes – it is too wishy-washy at the moment as the MOE flip-flops on whether this is about oil spills or all spills etc; focus the efforts of available resources – there are some valuable people in the room and they won't waste their time if the working group is not effective; leverage existing best practices instead of trying to find a new and uniquely “BC solution”
- Don't have to reinvent the wheel - look at what others are doing. Industry growth makes costs more palatable
- Being able to say that the Province has an economic opportunity that is being effectively and comprehensively managed to minimize risk
- The key opportunity is to complete a sector by sector analysis to determine whether there are any gaps in the existing practices or regulatory framework. BC MOE is well placed to help better understand cumulative effects and environmental impacts to specific areas as a result of multiple spills from multiple sectors.
- Current climate public support for stronger environmental protection
- Opportunities = pristine wilderness and well-protected well-respected environment. Strengths = much of the science, much of the organizations already exist, they just need funding and a coherent provincial structure backed with legislative authority
- Utilize existing personnel, borrow successes from Pacific States/ BC task force
- Industry may be willing to embrace the funding model. We can learn from the US experience in terms of what works and what doesn't. General public expects a high-level of response capacity.
- Existing spill response regimes, some business sectors have a large incentive to do spill response well at this time
- Vast and highly valuable resources to allow for investments into spill prevention and response by private sector
- Washington and Alaska are willing partners with strong programs and expertise to share, look at work that has been done through the Pacific States/BC Oil Spill Task Force, Industry wants to move oil and other natural resources out of Canada so the timing is right to develop a strong prevention, preparedness and response program in BC that is funded by Industry as part of their cost of doing business to protect the environment and the economy by ensuring best and safe practices.
- Establishing a funding source and geographic response plans will provide more public assurance during a spill event that their interests have already been considered and integrated in the response
- Stakeholders from all levels

- First Nation involvement
- Leverage existing (land based) response programs
- To not use “consultation” with Aboriginal and environmental groups as lip service or information-giving, but to incorporate a significant amount of those groups’ suggestions into development of the framework
- There is a significant amount of public support for more leadership and a robust preparedness program. Scientific evidence is also strongly indicating that we need to 1. Start shifting away from fossil fuel & 2. Invest more heavily in spill preparedness. Industry appears to be willing to fund spill preparedness & response - they're just waiting for government leadership to make it so.
- There is great interest at this time and we can capitalize on this to become prepared and work on planning
- Some of this is already in place with other response agencies in the province
- NRDA program would be new – good opportunity to develop from existing models
- No further traffic until adequate spill plan and remediation plan receive public approval
- Accessing the significant experience and knowledge base available in a transparent and trusted way
- Fairness and equity – most operators are very responsible and responsive and have a preventive mindset.
- BC operates a good one window and industry knows the emergencies program but the program has been in a reactive mode for years. They are unable to get out and do prevention and preparedness.
- Existing systems
- Developing collaborative working relationships with ER partners, industry and other stakeholders; opportunity to establish a “centre of expertise” philosophy based on how the elements in #3 above are developed
- Improve the overall Canadian model for spill response. Set example.
- High profile of energy development and transport has created an opportunity to establish new, progressive legislation, partnerships and funding for a regime.
- Acceptance by industry of polluter pays principle and their willingness to prepare, prevent and respond – opportunity to collaborate and enhance rather than facing confrontation.
- More coordination and awareness between industry, the public and government
- Good resources, energy and practices currently in the field and a willingness to move forward
- The range of expertise, experience and knowledge of the participants and working group members
- Need better coordination of response. Expecting WCSS or WCMRC to be the savoir is not realistic. Response times need to be reduced, especially in remote areas.
- This was an excellent opportunity for people to meet and talk about their experiences but it was focused on the experiences in US and we should look at effort and experiences in Europe, Australia and in other regions in the world.

- Understanding what is already being required by all legislative authorities
- There are many phenomenal programs, regulations and standards in place already worldwide. Canada has the opportunity to choose the best, or portions of the best, while creating their program – making it truly world class.
- The current system under the purview of the single regulator is aligned with the legislative requirements and meets the needs of regulators, producers, and the people of BC. Western Canadian Spill Services meets the oil and gas industry's obligations and is a model to build upon. Government should require non-participating/non-compliant industries to participate in WCSO or establish a similar organization to demonstrate preparedness and accountability.
- MOE has the foundation for a successful program: smart people and an excellent reputation. As oil expansion develops into BC, with funding and authorities, MOE can build upon that foundation to grow a program that protects the public's resources when spill happen.
- The opportunity is to develop good disaster epidemiologists to track what has, is, and will be happening to provide better planning for future prevention, and when it is rarely needed, response.
- Gaps; where did the MOE need to respond because the responsible party could not or was not known: and engagement of communities to increase awareness of existing industry programs that are in place
- Organizing and coordinating existing expertise in BC
- Strong existing programs in place by the different sectors
- Easy adoption of standards and capabilities that have evolved in adjacent US States. No need to start from scratch
- Left to their own devices, industry has developed world class systems for response. How to maintain that without relying solely on industry's good will.
- Bringing all parties together in a legislated manner to ensure preparedness (planning & exercising)/prevention efforts are rigorously adhered to
- Gaining a stronger federal regulatory framework that can then be applied at the provincial level - allowing better integration/coordination of response assets and plans system wide
- Collaborating on what is currently in place at all levels (different industries and regulatory levels); ensuring all agencies and industries follow ICS (move this nationally, as this also is followed in the USA), combined GRPs set up on GIS and assessing and outlining protocols to use all of the tools in the tool box
- Lots of resources and experience. The public has a big knowledge gap of what is already out there.
- Build on the already developed programs/plans already in place to develop regional plans that can be implemented to deal with spills.
- The infrastructure and knowledge is there in NGOs – just needs to be supported
- Utilize existing local, State, and federal relationships and programmatic models to help identify gaps and make change
- Collaborative approach and willingness

- Opportunities for closing gaps when identified, build on strong stakeholders network and relationships
- Look at what already exists in Canada
- The fact that most of the big industries already have response plans – government can and should plan a convening role and help thread the different plans
- CSA standards for common approaches in developing plans. Retain RP pay principle. Consider net environ benefit in remediation efforts.
- There are good industry and response organizations practices existing in BC; need to re-build the social license to operate in BC, so government initiated fund (that is distinct, trust fund; managed by third party) is an opportunity for all operating in the province
- There is a lot of knowledge and capability already present however disjointed it remains
- Collaboration

Question 6: Overall, the symposium met my expectations and was successful?

Responses:

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Total	Average Rating
Percent	2.82%	12.68%	11.27%	46.48%	26.76%	100%	3.82
Number	2	9	8	33	19	71	(on a 1-5 scale)

Question 7: Do you have an feedback on how we could improve the symposium?

- The content was based on marine environments and focused only on “oil based” releases. Your intentions paper is based on a terrestrial, all product approach. There appears to be a disconnection between the content presented and the intention. All of the programs which were presented did not look at a successful terrestrial spill response program. Was this because it has not been successful in other areas? The focus on funding prior to identification of the program scope seems to put the cart before the horse. I believe we need to spend a lot more time discussing gap evaluations and the evaluation of existing programs which very well may already be world class.
- Less Water based response and funding and more focus on Land
- Set up a regular symposium schedule annually
- Focus on land spill preparedness and response as opposed to spills writ large
- There is still too much ambiguity in this: where are the gaps? Is this about an oil spill from pipelines? If so then direct efforts towards oil spills from pipelines. Look at comparable regimes, e.g., large US presence but they do not have funding mechanisms like royalty payments etc so it is not very comparable to Canada.
- I would have liked to have heard from local government and EMBC. It would have been helpful to have a "connect the dots" presentation that described a scenario, e.g., a spill and how the different players respond and work together (Feds, Prov, local government,

industry.) Overall, I thought the symposium was excellent. I believe the next step after “collaboration” is integration.

- Additional information about the role of the regulator and why the current regulatory system (and supporting bureaucracy) is insufficient would help industry better understand the need to support something new in a substantive way.
- While the event was well organized and managed, the questions as presented were too vague and unwieldy to lend themselves to being answered effectively
- We could have used a longer brief and background regarding the MOE's current system and legislative tools currently in place to be able to better discuss the gaps present. Based on the pre-Symposium survey, NRDA's was the topic least understood by participants. We needed a backgrounder to be able to truly dive into the topic. The other topics were somewhat more self-explanatory. We all know what spill clean-up is and we all know what a tax or a funding mechanism is. At first glance NRDA's may simply seem like another payment or punishment the responsible party must absorb. In fact, NRDA's would fill a significant gap that exists in BC. After a spill, responsible parties clean up the mess. This only makes sense given that the responsible party profits from the extraction, movement and sale of the province's natural resources. In return, the province expects the responsible party to be just that – Responsible. I believe nearly everyone at the Symposium agreed with the polluter pays principle. NRDA's have an entirely different aim from holding a responsible party accountable in terms of clean-up or punishment. NRDA's aim to compensate the province and the people for the loss experienced due to the spill, be it economic, recreational, cultural or entirely intangible. It is a simple understanding that clean-up can only go so far. The environment requires longer-term support after a spill. The funds received can then be used to improve the natural environment and invest in restoration projects and research. This need not be viewed as a punishment. A simple NRDA regime would achieve these aims in an efficient, cost-effective manner and they would directly benefit the environment. A fuller description of what a NRDA is and an examination of their rationale might change the perspective of industry members that may soon face a NRDA regime and garner their support.
- Determine goals, do you want to increase the size of your program? Determine key elements, how much funding, funding mechanism, limit the focus on oil, that seems to be what's driving the issue, identify sources of potential spills and conduct risk model, narrow the focus of the next symposium
- I enjoyed the symposium, learned quite a lot, and no concrete suggestions as to how to improve. Perhaps it might have been useful to explore, as scenarios, various models that might have applicability to BC? The US has a government-driven response model, by and large, but all talks on Day 1 from industry suggested perhaps BC was moving in the direction of more of a sector driven model...not sure. If we are thinking that the US model is to our tastes, I would have enjoyed talking about a 'gap analysis', whereby there was frank discussion of what would be required for BC to provide a planning, response, and damage assessment model that approached that of the US. My strong suspicion is that it would require a lot more resources on both the provincial and federal levels than are currently on the table. For example, at the federal level, the DFO habitat section has recently been gutted, and this is where I would have seen a lot of capacity in terms of damage assessment. Where are those gaps and is it realistic for us to expect to see them

filled as part of this process? There is no way to be “world class” without the capacity to match...

- The MOE team did a fantastic job facilitating the symposium and kept people engaged in discussion and participation. I would have liked to have seen a more balanced group of NGO's, Universities, Private Companies presenting.
- The feedback was well run and well organized. It was inclusive, yet could have had more First Nations and NGO participation. Overall ... a very good symposium.
- Include stakeholders at every level from volunteers to the highest level. Important for First Responders who arrive on scene first to understand responsibilities and equally government and industry to understand capabilities
- Additional time for participant networking.
- Provide more concrete information, such as definitions of 'net improvement', and provide a draft outline of what the government currently intends a spill response regime to include for participants to review.
- Overall the symposium was very useful and brought a lot of knowledgeable people together. I was looking for more details in the preparedness planning and restoration/remediation goals by many of the Canadian proponents though. The Washington State examples were excellent and I appreciated learning their processes. I was left with the impression that Washington State has much more extensive preparedness & response planning in place than BC as well as an effective NRDA process. We would do well to adopt many of their efforts but adapt to a “made in BC” approach. Using the US's examples would save us from “re-inventing” as we could learn from what worked best in their processes.
- The symposium was very well planned
- I thought the information was informative, a lot on oceans but informative to understand the bigger issues of global oil
- Not really, well done
- Challenge was to focus on inland responses, yet many of the topics and discussions were marine-based. I think it will evolve over time. Overall, communication and process itself were very important and successful.
- Fewer corporate and government officials, more local (municipal) leaders and local First Nation leaders
- Not so much to improve on the Symposium, but rather moving forward, ensure Symposium participants are kept up-to-date as to the Ministry's progress and plans for development and implementation
- For a symposium with a land-based theme, there was a disproportionate amount of time dealing with the marine environment (even in recognition that many land-based spills impact the marine environment).
- We need to start focusing in and start at the beginning – that being RELIABLE spill information that can be used to pull information about chemicals spilled, industries causing the spills, impacts of these spills, role of consultants and contractors (are they doing a good job), oversight time from the province, cost recovery amounts etc ...then we will know where we stand with our current regime which means we know where we are now we know where we need to get to.

- Not enough critical analysis of the current BC system. Too many industry associations saying: “look how world class we are” without a systematic examination of whether that is true or not.
- 1. I would like to have seen a presentation by BC Ministry of Environment so I could gauge (in the context of all the other presentations) where they currently are compared to where they want to be. 2. There seemed to be a lot of marine-based presentations and discussions for a land-based symposium. Perhaps this is inevitable for a province like BC. 3. During the afternoon breakout groups, it would have been better if the various groups reported back the following morning, rather than at the end of the day. It seemed like there was too much of a rush to condense all the information into one or two slides and I know some important points were missed or misinterpreted.
- It's hard to know how successful the symposium was. I got a lot out of it but whether YOU got enough out of it is another story. The whole time I was there I felt like the Ministry had an agenda that they didn't reveal. Fairly, I felt you were trying to get unbiased feedback and discussion but still it seems like if you had some basic gaps or places you feel you need to go, those thoughts would have helped frame the discussions better. Too often I heard folks, mostly industry, asking why we were talking, as if the current system is just what the Province needs. Understanding where YOU think the program could be improved, what YOU might use a spill fund for, etc. could have helped some of these folks get past their blinders to see a broader range of possibilities. I will say that the level of engagement I witnessed was exceptional. I was impressed with how many people stayed in the room for discussions and were actively engaged right up until you forcibly ended conversations. People were clearly interested. More time would have been great for such an ambitious series of discussions but I understand from personal experience that 2.5 days really is a sweet spot in getting people to attend, and keeping their interest while they are participating. Will there be a Symposium II?
- Symposium provided a forum for points of view from industry, stakeholders and American regulators. Discussion groups were then heavily influenced by the preceding presentations. To capture the expertise of those in the breakout groups, the questions need to be more focused on a specific application, i.e., the BC experience (which we heard little about).
- More time and clarification of intent. Questions for discussion need to be clearer, with more direction.
- While it was useful hearing about what the US is doing, I found the symposium top heavy with US content. I was looking to the symposium for solutions and all I came away with was frustration. The questions were minimized due to time constraints, the presentations did not provide me with any new information and over all, I came away feeling that MoE and the spill response organizations do not understand industry and what is needed to make a world class spill response regime. I did not hear the question “what would make British Columbia spill response more effective” (although I did leave early). Let's face it, the province needs to expand spill response capabilities to accommodate heavy oil projects. The main thing MoE should take away is that degree of spill response needed should be commensurate with the level of risk posed. Heavy oil projects should pay for the capacity needed to accommodate them. Companies that choose to manage their risk should be allowed to do so. Building internal MoE capacity should be done on existing budgets and not on the backs of taxpayers. MoE needs to

understand that any associated increase in operational costs for a company will be passed down to the end user.

- Most of the presentations and experiences were from the US. It would have been nice to hear from others in Europe and elsewhere in the world and it is also important to involve academia in these events.
- More time for Q&A kept more on track with land based spills more Canadian Content
- For being land-based, the symposium focused a significant amount of its efforts on MARINE issues. Panel discussions were not clearly knitted together and compared and contrasted effectively by the moderator or panel leader. Some of the questions posed to the symposium participants were misleading and inappropriate (e.g., on funding – no question was asked on “if funding was even necessary”).
- Great job – the symposium was informative and an excellent way to collect input from a variety of diverse interests.
- More emphasis on surveillance and pre-event phase prevention to avoid most spills. More emphasis on hidden spills deep below the surface and protection of aquifers. More discussion on where it is safe and where it is not safe to run pipelines, alternatives to pipelines and ports in very high risk environments. More informed discussion about currently proposed controversial pipelines in dangerous sites and safer alternatives.
- Intent of the symposium was ‘land based’; however, the discussion appeared to be biased to coastal & inland water examples and protection.
- More discussion on “Land-Based” emergency response, and use of Best Practices instead of so-called World-Leading desire
- Symposium was very well staged and conducted. More interaction with audience could have been encouraged. The real energy was felt in the break-out sessions and mixing opportunities. Effort should be repeated next year, perhaps in a more informal setting.
- Provide more info on topics to be discussed a head of time prior to symposium
- More federal participation and review of gap analyses and recommendations
- Add how BC MOE is currently providing response coverage, plus how and what other provinces and Federal agencies are doing
- Increase ratio of workshops vs. presentations. Increase home based material and input; provincial and federal and reduce US input. i.e. include regulators, other provincial and federal agencies like Transport Canada (ERAP plans), Environment Canada (CEPA), etc, Focus on Land Base or clearly open it up to marine spills as well. Look at what is done in other provinces.
- It was pitched as a land based spill; seemed to focus on marine...it also seemed like it was geared to oil and gas; my hope is that the chemical industry and transportation sectors (who look after themselves) do not get caught up in the political game of whether pipeline approval will be granted. Was this just done as an exercise to please pipeline critics and make it look like a public / industry consultation was completed
- It was too long and focused too much on oil rather than on land based spills generally
- I felt that we started at point zero plus one. The questions posed were sometimes leading. For example one question asked something like who should administer the money if we instituted a NRDA like program in BC industry or Government. Why not ask how should the money be administered and who should be responsible for the administration?