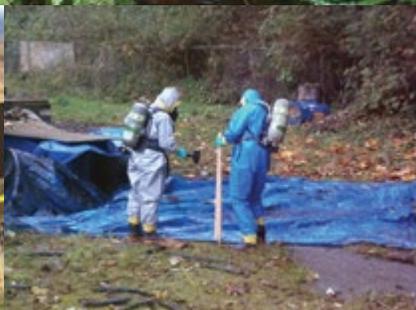


# Land Based Spill Preparedness and Response in British Columbia

Ministry of Environment Policy  
Intentions Paper for Consultation  
April 2014



*Moving forward with world leading practices  
for land based spill preparedness, response and recovery*







## Message from the Minister of Environment

Honourable Mary Polak

As British Columbia's economy and population grow, and with the rapid expansion of the Asia-Pacific market, there are increased demands for our natural resources. This means there will be more movement of oil and other hazardous materials throughout the province and we want to ensure the necessary safeguards for the environment are in place. Strong spill response and environmental protection measures are part of the path to economic development and job creation. A robust spill preparedness and response regime supports a strong economy by providing the necessary oversight to allow for the responsible transportation and use of oil and other hazardous materials – whether it is fuel en route to a gas station, chlorine being used at a water treatment facility or

commodities generating revenue through export.

We have been consistent that our five conditions for heavy oil pipelines and rail transport must be adhered to before the Province would consider its support. This intentions paper looks at condition three – *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.*

Over the past year, B.C. has led or participated in a number of projects aimed at improving spill response, preparedness and prevention for oil and other hazardous materials spills both on land and in the marine environment. We have consulted extensively with industry, First Nations, government and other stakeholders on focused policy options for land based spills.

Our goal is to develop policy with the right mix of prevention, planning,

response and recovery, within the context of a polluter-pay model. B.C. is working closely with federal agencies such as Natural Resources Canada, which has authority over inter-provincial pipelines, and Transport Canada, which regulates inter-provincial railways and marine shipping. Our goal is to avoid unnecessary duplication while ensuring the proper rules and regulations are in place. In areas where world leading is being achieved by federal requirements, we will work carefully to ensure alignment between our two jurisdictions.

This has been a collaborative process and I thank everyone who contributed their time and expertise over the past year. This intentions paper represents the next step towards achieving a world leading land based spill preparedness and response system for B.C.



# Introduction

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. The policy intentions in this paper will help achieve the Ministry's objective of effective and timely response to spills.

It also outlines the progress being made on Condition 3 in the Premier's five conditions for heavy oil pipelines: World leading practices for land oil-spill prevention, response and recovery systems to manage and mitigate the risks and costs of heavy-oil pipelines. This condition also applies to oil transported through B.C. by rail.

This paper is the result of more than a year of study and consultation. It builds on an initial intentions paper released in November 2012

and takes into consideration the large volume of technical information and stakeholder feedback gathered by the Ministry. This includes: consultation comments on the initial intentions paper; a symposium in March 2013 which involved approximately 200 people; research reports; three technical working groups; an advisory committee; and comments heard during presentations to conferences, local governments, First Nations and environmental groups. This paper does not contain detailed descriptions of how the new regime may be structured, how industries would be captured under new requirements, or the potential costs associated with these measures. While these details are critical to successful implementation, it is important to first seek public feedback on the components being

proposed before undertaking the detailed work of drafting new regulations. More information is available in the Next Steps section on page 10.

The intentions paper and response form, as well as further information about how these intentions were developed, are posted on the [Ministry's Land Based Spill Preparedness and Response in British Columbia website](#).

After a 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 will consult further with stakeholders during the design and implementation of changes that are advanced into policy or law.

## The intentions paper includes the following information:

• Introduction .....	page 1
• Spill response in B.C.....	page 2
• Context.....	page 3
• Guiding Principles.....	page 4
• Ministry Intentions:	
1. Preparedness, response and restoration requirements.....	page 5
2. Provincial preparedness and response organization .....	page 7
3. Enhanced provincial Environmental Emergency Program.....	page 9
• Next Steps .....	page 10
• Providing Comment - Contact information and avenues for commenting .....	page 11
• Additional Technical Information:	
I. Key parties in the British Columbia Ministry of Environment's proposed spill preparedness and response system .....	page 12
II. Ministry intention 1: preparedness, response and restoration requirements.....	page 13
III. Ministry intention 2: provincial preparedness and response organization .....	page 15
IV. Ministry intention 3: enhanced provincial Environmental Emergency Program.....	page 18

# Spill Response in British Columbia

The Province of British Columbia (the Province) is committed to a world leading preparedness and response regime for land based spills of oil and other hazardous materials. Land based spill refers to any spill impacting the terrestrial environment, including inland water bodies and coastal shorelines, regardless of the source. The Ministry of Environment has a mandate and legislated responsibilities for environmental emergency prevention, preparedness, response and recovery resulting from spills in B.C.

While the Ministry is responsible for any spill that creates pollution, most often the emphasis is on the risk posed by oil and other hazardous materials. The safe transportation and use of these products is critical to B.C.'s economy and way of life. The Ministry is focused on reducing both the risk and impact of spills. This includes ensuring that heavy oil proposals for B.C. meet world leading standards for spill preparedness, response and recovery that reduce the risks to B.C.'s environment.

The Ministry is proposing a world leading land based spill preparedness and response regime that builds on the considerable response capacity currently held by the major industrial players. The intention is to create a certified regime that includes the following components:

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

The Ministry recognizes the essential interests and role of communities and First Nations in spill prevention, preparedness, response and recovery following a spill. B.C.'s communities and First Nations face direct risks and incur many social, economic and environmental consequences – and should play an important role in planning, preparedness and response to reduce the probability of occurrence and impact of a spill.

B.C.'s Environmental Emergency Program covers the inland areas and coastal shoreline of B.C. – an area of 947,800 km<sup>2</sup> with a coastline of 27,000 km. The program's sixteen fulltime staff include ten response officers stationed in seven communities across the province.

## SPILL PREPAREDNESS AND RESPONSE

### PREVENTION

Design, Equipment, Operating Practices

### PREPAREDNESS

Risk Assessment, Plans Equipment & Training

### RESPONSE

Coordinated, Timely, Staged, Effective

### RECOVERY

Remediation, Restoration, Restitution

### Natural gas and spill response

Natural Gas and other non-persistent materials will not be captured under the requirements proposed in this intentions paper. Gaseous substance releases are highly regulated from a safety perspective but require little, if any, spill cleanup. Materials that pose the highest risk are those that are, by nature, toxic and persistent.

### Risks and Spills

Transport and handling of materials can present risks to British Columbia's environment. Spills can also have significant economic, social and cultural impacts for British Columbians.

**Risk** can be assessed on the basis of **probability** and **consequence**. Air, water and soil, as well as plants and animals, can be threatened by a spill. Consequences can include impacts that last decades in the vicinity of a spill, as well as over wide areas.

Investments in planning, preparedness and an effective and rapid response greatly reduce the consequences of a spill.

## Context

The Ministry of Environment has taken the following key factors into account in developing intentions for strengthening B.C.'s preparedness and response regime for land based spills.

### **Gaps in the existing regulatory framework**

Currently, oversight of spill preparedness, response and recovery involves provincial, as well as federal agencies in a complex matrix of regulations and policies. Operational regulators such as the BC Oil and Gas Commission, B.C. Ministry of Transportation and Infrastructure, the National Energy Board, Transport Canada and others effectively regulate their sectors regarding safety, spill prevention and environment in their respective operational corridors. The B.C. *Emergency Program Act* and the *Emergency Program Management Regulation* name the B.C. Ministry of Environment as responsible for “direction at hazardous material and pollution spills”. 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.

### **Increased transportation of oil and other hazardous materials means increased risks**

The province's growing population and role as the Pacific Gateway mean an increasing volume of materials en route to domestic and foreign markets is being transported through the province by truck, rail and pipeline. Significant changes in the way oil and other hydrocarbons move across this province bring increased risk. Between February 2012 and February 2013, there was a 60% increase in the amount of crude oil shipped by rail in Canada, with continued growth being forecast. Two major oil pipeline proposals under review could see more product moved across the province to west coast ports.

### **The current provincial Environmental Emergency Program requires additional capacity to meet its mandate**

While the incidence of pipeline or rail related spills are low the program currently receives approximately 3,500 spill reports per year from a variety of sectors, most involving minor spills. With growth in industrial development there will be a related increase in the movement of oil and other hazardous materials. The program will require additional capacity in order to respond to

this growth, in terms of: key oversight and response functions; providing planning, training and on the ground response support; identifying unreported spills; ensuring industry meets its requirements for spill preparedness and response; and, taking action when a spill response is insufficient.

### **Increased public scrutiny**

Several high profile spills within the past two years have highlighted public safety and environmental risks posed by the transportation of oil and other hazardous materials. The sustainable use and transportation of these materials in support of economic activities depends on public confidence that a world leading regime is in place in the event that something goes wrong.

### **A larger role for communities**

Local governments, First Nations and stewardship groups are playing an increasingly significant role in spill preparedness and response – from acting as first responders, to providing valuable information about local ecological sensitivities. These groups face direct risks and costs in the event of a spill – and must have opportunities to be fully engaged in risk assessment, planning and preparation, communication, response and recovery activities.

# Guiding Principles

The Ministry's intentions for a strengthened spill response program are grounded in the following key principles – refined through consultations over the past year.

**Prevention and preparedness are essential** – adverse environmental, public health, and economic consequences are best avoided through effective prevention measures and reduced through robust preparations for response.

**Polluter pays for prevention, preparedness, response and recovery** – industrial sectors that pose a risk to the environment and public safety have the responsibility to address those risks. The costs of addressing risk should be the responsibility of those industries that bring the risk, and not the communities that bear it. In the event of a spill, the spiller is responsible for the cost of effective response and recovery of the environment.

**Government provides strong oversight** – the Province sets clear standards for spill preparedness, response and recovery, monitors how well industry meets these standards and has enforcement tools to ensure an effective response to spills.

**Requirements are based on risk** – risk assessment is a key component of preparedness.

**Avoid unnecessary duplication** – B.C.'s requirements should provide for a consistent, province-wide level of preparedness and response across industry sectors while avoiding unnecessary duplication among regulators. We recognize federal and other provincial agency authorities and will provide equivalencies where appropriate.

**Public accountability and transparency** – communities should have the information they need to support informed preparedness programs. The public should receive information about spills that may impact them, from the first report generated on discovery of the spill, through to the recovery phase. Government provides the public with accurate and timely information about legislative requirements, compliance and spills data.

**Continuous improvement** – regulations, policies and best practices guidance should evolve in keeping with changes in the transport of commodities, and improvements in spill preparedness and response equipment and techniques.

## Equivalencies

The Ministry intends to establish a consistent level of preparedness and response across B.C. Some industry sectors already have regulations that address parts of the Ministry's proposed regime. The Ministry will work with provincial agencies such as the BC Oil & Gas Commission and with federal regulators to acknowledge these equivalencies and avoid duplication.



# Ministry Intentions

The Ministry is proposing the following policy intentions for implementation:

1. Spill preparedness, response and restoration requirements
2. A provincially regulated preparedness and response organization
3. An enhanced Provincial Environmental Emergency Program

## 1. Preparedness, response and restoration requirements

The Ministry intends to develop and implement clear and effective standards for preparedness, response and restoration that all potential spillers will be required to meet.

While maintaining that *prevention and preparedness are essential*, the Ministry recognizes that prevention requirements (e.g., rail or pipeline safety regulations) largely rest with operational regulators such as Transport Canada, the National Energy Board and the BC Oil and Gas Commission that have jurisdiction over sector-specific “hard” prevention requirements. While specific prevention requirements are not included in this package, increased “soft” prevention actions,

**The Ministry’s objective is to ensure that all companies that pose a risk are required to meet high standards for preparedness, response and restoration – regardless of which regulator oversees their day-to-day operations.**

particularly around education and stewardship with industry and regulators, are key functions of the enhanced Ministry Environmental

Emergency Program (see pages 9 and 18-19).

In keeping with the *avoid unnecessary duplication* guiding principle, the Ministry will make every effort to avoid duplication of regulatory oversight while supporting effective and consistent requirements for oil and other hazardous materials. 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.



# Ministry Intentions

Requirements addressing preparedness, response and restoration are listed below and described in the “additional technical information” section of this paper (see pages 13-14).

## Preparedness requirements

- Detailed spill response planning
- Staging equipment and trained personnel
- Drills and exercises
- Community readiness
- 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
- Sampling and monitoring

## Restoration requirements

- Environmental damage assessments
- Restoration activities and plans
- Addressing loss of access to public amenities
- Post-incident reviews

## Key consultation questions – preparedness, response and restoration requirements

- » Who should lead development of geographic response plans?
- » 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?
- » 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?
- » 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?
  - What response actions would you recommend attaching time requirements to (e.g., cascading levels of response action)?
  - What additional factors or criteria would you recommend for consideration in determining appropriate and effective response times?
- » 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?

**The Ministry's objective – as primary environmental regulator for the Province of British Columbia – is 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 party necessary to the response.**

## Cost recovery as a barrier

Current response policy relies on the concept of cost recovery whereby reasonable costs can be recovered from the responsible party after an incident.

Unfortunately, local governments and First Nations, both of whom have a key role to play in spill response, often are challenged in their ability to put up their own resources at the front end of a response.

The intention of the ministry would be to move beyond cost recovery to where the PRO acting on behalf of the responsible party, would have sufficient financial capacity to, where necessary and reasonable, provide “in the moment” resourcing to local governments and First Nations. In so doing, the PRO would ensure that funding is not an impediment to the early and meaningful involvement of these groups in the response to spills in B.C.

## 2. Provincial preparedness and response organization (PRO)

The Ministry ultimately intends to 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. Initially this requirement would focus on the movement of oil and petroleum products by pipeline and rail with other sectors above the risk threshold to be added later. Companies below the risk threshold – which would be set during the implementation phase – 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. In the event of a spill, the organization could be contracted by its mandatory and voluntary members to respond. It would also be available to non-members for an additional fee and could be hired by government to take over a response where the responsible party is unable, unwilling or unidentified. Financial access would be available through the PRO to assist the Province, First Nations and local governments with costs incurred during spill response.

The Ministry is also considering extending existing provincial cost recovery mechanisms to local governments and First Nations who incur costs while responding to spills in their communities.

A single organization can achieve significant cost savings for its members while avoiding duplication of resources and effort. Government oversight of spill contingency planning and response activities would also be more effective and efficient.

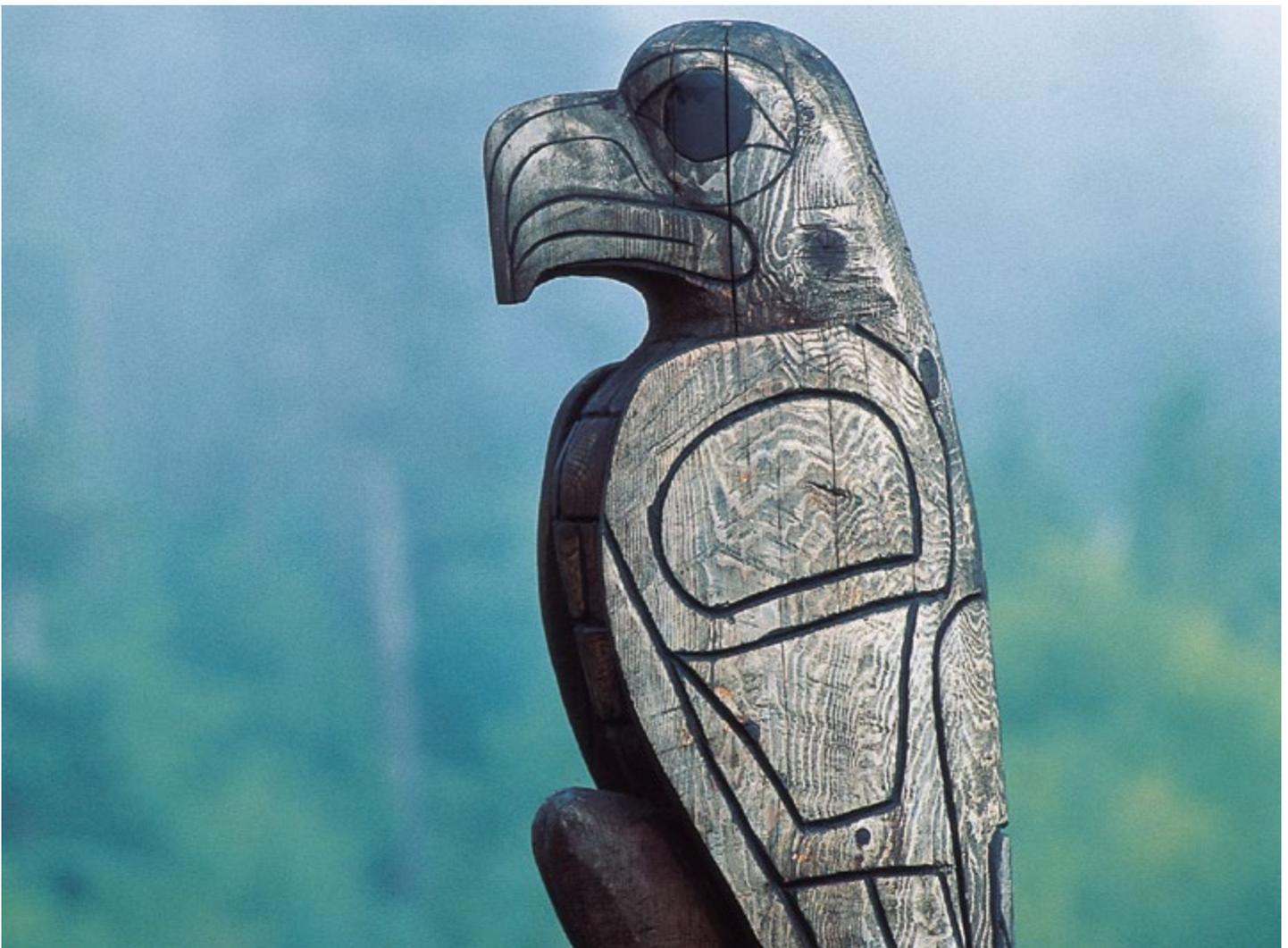
The Ministry notes the federal government is also considering options for ensuring financial coverage is available for spill response. Any changes in the federal system will inform the funding of a B.C. response organization.

See pages 12 and 15-16 for additional technical information about Ministry intentions in establishing a provincial preparedness and response organization, a description of an existing industry funded spill response organization operating in B.C., and a summary of the key responsibilities of parties involved in B.C.'s spill preparedness and response system.

# Ministry Intentions

## Key consultation questions – provincial preparedness and response organization

- » 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?
- » 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?
- » 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?
- » 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?



**The Ministry's objective is to ensure the necessary resources are available to provide leadership and oversight in the face of increasing movements of oil and other hazardous materials. The program will be funded both by government and proportionally by industry based on risk, with a minimal draw on government tax revenue.**

### 3. Enhanced Provincial Environmental Emergency Program

The provincial Environmental Emergency Program requires strengthening to ensure spill planning and preparedness is appropriate to address existing risks and anticipated growth in industrial activity in B.C.

The Ministry intends to establish funding mechanisms to ensure an effective and efficient and enhanced program.

The enhanced program would shift costs currently borne solely by taxpayers to include support from the oil and other industrial sectors that pose a risk to the environment and public safety – in keeping with the *polluter pays for prevention, preparedness, response and recovery* guiding principle.

The funding mechanism should:

- Ensure an adequate level of annual program funding
- Be in keeping with the polluter pays guiding principle
- Be fair
- Address the degree of risk and potential impacts associated with different sources and types of spills

Details regarding program staff levels and potential resources for an enhanced program are provided in the “additional technical information” section of this paper (see pages 18-19).

### Key consultation questions – enhanced Provincial Environmental Emergency Program

- » 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?
- » 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?

## Next Steps: Design and Implementation

The Ministry has significant work ahead in designing and implementing legislation and regulation to support a world leading land based spill preparedness and response system. Following consultation, the Ministry will develop an implementation plan dealing with outstanding technical and administrative issues. This work will include: 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.

Considerations for preparedness requirements and thresholds would include the types of material being used or transported, the method of transportation, the volume that could be spilled and possible receiving environments. For the transport of heavy oil, consideration will be given to the risks posed during transport (i.e.,: from a pipeline or railcar) as well as risks posed during offloading at terminals. Response and environmental recovery requirements would be associated with the actual extent of damage or potential for future damage from a spill.

Anyone who spills will have to meet any proposed new standards for responding to the spill. Companies that pose a certain level of spill risk will be required to meet additional requirements for planning and preparedness such as belonging

to a provincial response organization, with an initial focus on rail and heavy oil pipelines.

In considering options and in future work to implement intentions, the Ministry will make every effort to minimize financial impacts to industry while maintaining program principles. It should also be noted that industry funding of government-led spill preparedness, response and recovery already exists in neighbouring states and in the federal marine spill regime, as well as within some sectors in B.C.

The system will be primarily funded by industry, while recognizing that some governance responsibilities and costs should be borne by taxpayers through continued government funding. The Ministry will confirm funding provisions in consultation with key parties, including other government agencies, during implementation. Funding mechanisms will be developed in accordance with the *polluter pays for prevention, preparedness, response and recovery* guiding principle, using the criteria of clarity, fairness, ease of administration, risk based thresholds and public transparency. As is the case at present, when a spill occurs, the responsible party will be required to pay all costs associated with the response and recovery.

The Ministry will consult with stakeholders throughout the design and implementation phases.



## Providing Comment



The Ministry welcomes comments on the proposals outlined in this intentions paper. Comments will be carefully considered in the development of the Province's spill preparedness and response regime. The Ministry will prepare recommendations for consideration by the Minister based on feedback gathered during this consultation.

This intentions paper and a response form for providing comments to the Ministry, as well as further information and links to related legislation, are posted on the [Ministry's Land Based Spill Preparedness and Response in British Columbia website](#). Comments may be submitted using the response form provided or respondents may choose to provide separate written comments.

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*.

The Ministry has contracted Cindy Bertram of C. Rankin & Associates to manage consultation comments on behalf of the Ministry of Environment, as was done with the consultation on the first intentions paper released in late 2012. If you have any questions or comments regarding the consultation process, please review the information posted on the Ministry website linked above, or contact Cindy Bertram at:

**Email:**  
cindybertram@shaw.ca

**Mail:**  
PO Box 28159 Westshore RPO  
Victoria B.C. V9B 6K8

**Comments to the Ministry should be made on or before June 26, 2014.**

*Thank you for your time and comments.*



# Additional Technical Information

## I. Key parties

### Key parties in the British Columbia Ministry of Environment’s proposed spill preparedness and response system

The following chart outlines the key areas of responsibility for industry, government and a proposed response organization under a new spill preparedness and response system.

Party	Responsibilities	Proposed Funding Responsibilities
Company or organization handling oil or other hazardous materials	Prevention of spills – through good design, sound equipment and safe operating practices. Planning and preparation for a potential spill – risk assessment, plans, equipment, training, continuous improvement.	Funding based on risk thresholds (e.g., type, persistence, toxicity and volume of materials involved) for: <ul style="list-style-type: none"> <li>• industry led preparedness and response organization</li> <li>• provincial Environmental Emergency Program costs</li> </ul>
If a spill occurs – the “responsible party”	Response – report, contain and respond to the spill in a timely and effective manner. Recovery – remediation and restoration of the environment and restitution for losses incurred.	Full costs of response and recovery (including remediation, restoration and restitution of damages) and cost recovery for any costs incurred by the Province.
Preparedness and response organization	Coordinate preparedness activities to meet provincial requirements. Undertake response actions only upon request, and under direction, of the responsible party or the Ministry. Preparedness includes: sourcing and maintaining equipment; planning for all logistical needs; and ensuring that trained personnel are available to respond to a worst case spill (in keeping with regulatory standards).	The organization would be funded by industry for ongoing operations. It would only undertake actions on request of a spiller (i.e., the responsible party) or direction from the Ministry. The Ministry may also be a voluntary member of the organization.
Ministry of Environment – the Environmental Emergency Program	Planning, preparedness and response. Participate in or lead training, outreach, education and planning and preparedness activities. In the event of a spill: provide on-the-ground response oversight and support; ensure compliance with requirements; and take action when a spill response is insufficient.	Government resources to fund functions or components not covered by industry funding.

# Additional Technical Information

## II. Ministry intention 1: preparedness, response and restoration requirements

Detailed descriptions of proposed requirements are provided below.

### Preparedness requirements

<b>Detailed spill plans</b>	Outlining how all response requirements will be met, including how equipment and trained responders will arrive at a spill location within a given timeframe. Plans should also specify how specific response techniques will be used to collect and manage spilled material and ensure protection for potentially impacted resources.
<b>Equipment and trained personnel</b>	Capacity and staging requirements based on risk and operational area to ensure availability for spill response within a given timeframe.
<b>Drills and exercises</b>	Drills, equipment deployments, live and table-top exercises and unannounced drills of various sizes to ensure that the company's and/or preparedness and response organization's plans are functional and effective.
<b>Community readiness</b>	Education and outreach activities, support for training and exercises and staging of initial response equipment caches.
<b>Area-based planning/ geographic response planning</b>	Response planning regions based on common risks and geographic features. Plans will identify companies and activities that present a spill risk, the resources and personnel available to respond within a given timeframe and sensitive areas and associated environmental values that need to be considered in the event of a spill. For designated water bodies and coastlines within each area, geographic response plans (GRPs) that guide the first 48 hours of a spill response will be required. GRPs would have standardized format, content and engagement requirements.

### Response requirements

<b>Spill Reporting</b>	Process that includes the initial report, regular updates and an end of cleanup report for the emergency response phase (that signifies the transition to longer term remediation and restoration work).
<b>Response times for responders and equipment</b>	Includes staged requirements based on the impact of the spill: (a) initial trained responders and equipment types on scene; (b) a second tier of responders and equipment on scene; and (c) the establishment of Incident Command System with key positions filled.
<b>Trained responders</b>	Minimum training levels and qualifications for all on scene responders (including local personnel). Specific training requirements for technical specialists and incident command staff based on their roles. Provisions for “just in time training” to support a scalable response and make best use of local resources.
<b>Use of the incident command system</b>	As the required management system for use in all spill incidents – to ensure a coordinated and integrated response among all the players.
<b>Additional response actions</b>	The Ministry retains the ability to require the responsible party to take additional response steps, based on the seriousness of the spill.

*continued on page 14*

# Additional Technical Information

## Response requirements *cont.*

<b>Communications plans</b>	Are activated based on the seriousness of the spill and include a combination of urgent immediate actions (e.g., public notification of safety issues) and longer term actions (e.g., general website and hotlines, identification of a spokesperson, physical location to provide information about ongoing spill response activities and injured wildlife reporting and spill claims hotlines).
<b>Sampling and monitoring</b>	For all spills over the spill reporting threshold (preliminary stage – standard set of activities to assess impacts to public health and the environment), as well as additional activities for larger incidents where additional information will be required to determine what restoration actions are needed.

## Restoration requirements

<b>Environmental damage assessments</b>	Are required based on the significance of the spill. An initial screening level environmental damage assessment would be a component of the end of clean up report, outlining the extent of damage. Upon reviewing the initial assessment, the Ministry may require a second more detailed assessment to guide its decision on the extent of required restoration.
<b>Restoration activities and plans</b>	<p>Are required based upon review of the screening level environmental damage assessment or the significance of the spill. The following paths for quantifying restoration requirements may be available to the responsible party: (a) a research based approach to quantify impacts in the event of large or complex spills <b>OR</b> (b) a formula based model for smaller or less complex spills that uses a variety of data (such as volume, toxicity, persistence and characteristics of the receiving environment) to calculate a monetary value that must be applied to restoration activities.</p> <p>A restoration plan would have to be approved by the Ministry before it can be initiated and evaluated by the Ministry upon completion. Mechanisms for community and First Nation involvement would also be developed.</p>
<b>Addressing loss of access to public amenities</b>	Responsible parties frequently provide enhancements or alternate opportunities for the public when significant damage has occurred to public properties. This may be required, based on the extent and duration of impacts to the community and public resulting from a spill. When provincial assets such as highways, parks or public beaches are closed or impacted as a result of a spill, there is an intrinsic loss to communities.
<b>Post-incident reviews</b>	Are required based on the seriousness of the spill. They must be funded and potentially led by the responsible party and include the Ministry of Environment, federal agencies, First Nations, local governments and others involved in the incident response or management. A standard format or template would be developed for consistency. Consideration of public transparency with respect to post-incident reviews will be further assessed by the Ministry.

# Additional Technical Information

## III. Ministry intention 2: provincial preparedness and response organization

### Description:

A provincially regulated and industry led non-profit organization (preparedness and response organization – or PRO) that would conduct spill planning and preparedness activities on behalf of its members. It would be available to provide spill incident management and/or response functions upon activation by a spiller or the Province. The mandate of the organization would be to ensure the planning and preparedness requirements, as set out by the Ministry, are met so that a timely and effective response can be initiated regardless of what is spilled, where or by whom. The PRO would also ensure that funding is not an impediment to the participation of all parties necessary to a response. This would be achieved by ensuring mechanisms are in place to provide financial coverage for costs incurred by the Province, local governments and First Nations as part of spill response.

### Principles:

- The PRO is funded by industry to ensure that required planning and preparedness activities are completed and the full breadth of required response capabilities (e.g., wildlife response, spill monitoring, waste handling) are available at an appropriate capacity to ensure effective and timely response to all spills in the province. The Province will set requirements in these areas.
- Thresholds for funding the PRO and being mandatory members would focus on industries involving persistent and toxic products with an initial focus on oil pipelines and railways: natural gas and similar non-persistent materials would not be included.
- Industry would fund the operational activities of the organization and ensure that sufficient financial resources are held by the PRO such that funding is not an impediment to the participation of any parties necessary to the response (e.g., local government, First Nations) and that all required response and restoration activities happen in a timely manner.
- PRO and its members would have the ability to determine an organizational structure and fee schedule to maximize efficiency in meeting the requirements. The PRO would be funded by companies that are required to belong to the organization based on the level of risk they present as well as by voluntary members. A responsible party that incurs a spill and is not a member of the PRO could either be signed up at the time of the incident or be charged at non-member rates for PRO response services.
- There is *no requirement* for a responsible party to use the PRO when they have a spill. The party responsible would continue to be fully responsible for the response and all associated costs (including government oversight, any services provided by the PRO, and recovery costs). Under this approach, any responsible party would have the ability to contract the spill preparedness and response organization for some or all of a response, as well as continue to rely on trained company staff and/or private contracted services to meet provincial spill response requirements.
- The Province may direct a responsible party to use the PRO if their response is deemed inadequate or may directly hire the PRO to conduct a response in situations where a responsible party is unable, unwilling or unidentified at the time of the spill. In this case, the Province would pay the costs and attempt cost recovery from the responsible party.
- Functions of the PRO could include: development of geographic response plans (GRPs); spill response planning; exercising and response; incident management services; spill response services (either directly or through pre-qualified third parties); logistical planning for all aspects of response; spill education and outreach, training; serving as a hub for a strategic advisory committee; and, confidentially holding specific real-time hazardous materials shipping information.
- It is critical to recognize that a provincial preparedness and response organization could be established in a manner that recognizes the capability, capacity and plans that currently exist among B.C. companies and

*continued on page 16*

# Additional Technical Information

## Principles: *cont.*

organizations. Existing equipment and trained responders could remain under the control of individual companies and contractors, and also be included under the coordinating umbrella of the organization (leading to cost savings in exchange for sharing with the broader community).

## Rationale:

- A PRO provides British Columbians assurance that necessary spill planning and preparedness activities are ongoing and that the full range of spill management and response capabilities are available with the appropriate capacity to ensure timely and effective response to all spills in the province regardless of the source, location or competency of the spiller involved.
- Enables industry to realize efficiencies and cost savings through a shared approach to required prevention, planning and preparedness activities, and sharing of resources.
- Creates efficiencies and cost savings for the Province: in terms of both planning and preparedness activities that would be handled by the PRO; and by enabling the Province to test and oversee a PRO versus having to oversee individual companies.
- Reduces the need for, and complications associated with, mutual aid agreements to ensure availability and the movement of response equipment and personnel throughout the province.
- Provides a forum for improved coordination, collaboration and communication among industry sector – as well as various levels of government, First Nations and key stakeholders who may also be involved with the PRO on spill related issues.

## Potential Funding Costs:

- Costs for operation of the PRO are to be determined based on regulatory requirements (e.g., planning, preparedness and response standards) and the existing capabilities and capacities available amongst potential members and third party providers.

For comparison:

- Western Canada Marine Response Corporation (spill response cooperative responsible for 27,000 km of B.C.'s coastline and Canadian territorial waters) has an annual operating budget this year of approximately \$10 million and a capital budget of \$6.5 million.
- Western Canada Spill Services (spill preparedness and support cooperative operating in Alberta and some portions of B.C. and Saskatchewan) has an annual operating budget of approximately \$1.7 million and a capital budget of \$250,000.



## Additional Technical Information

### **B.C.'s existing industry funded spill response organization:**

#### **Western Canada Marine Response Corporation\***

Transport Canada, as the lead federal regulatory agency responsible for Canada's marine oil spill preparedness and response regime, regulates and certifies Marine Response Organizations in Canada under the *Canada Shipping Act*. Western Canada Marine Response Corporation (WCMRC) is the only response organization currently certified to respond to marine oil spills in B.C.

#### **Membership:**

WCMRC was formed as a cooperative among four local Vancouver oil refineries (Chevron, Imperial Oil, Suncor Energy and Shell) and a pipeline company (Kinder Morgan) and has grown to include more than 2,200 operators.

#### **Preparedness and response functions:**

Under federal regulation, industry bears liability and responsibility in the event of a marine incident including the operational elements of response. WCMRC operates on behalf of industry by providing spill related planning and preparedness, training, equipment and responders, and responding to spills at the direction of a spiller (approximately 20 annually). In the event of a spill, WCMRC is contracted by the responsible party to clean up the spill under their direction. In the event that the polluter is unidentified, unable or unwilling to respond the Canadian Coast Guard or B.C. Ministry of Environment may contract WCMRC services and direct the response.

#### **Funding mechanisms:**

Planning, preparedness and operational readiness are fully funded by industry through mandatory membership by way of a bulk oil cargo fee (a per tonne fee levied on product received or shipped to international destinations), capital asset fees (a variable fee for smaller capital purchases), and by voluntary members who pay an annual membership fee (entitling them to discounted response rates and other services). In the event of a spill the responsible party would contract and pay for all response services provided by WCMRC.

*\* Although other preparedness organizations currently operate in B.C. providing planning, equipment and training, WCMRC is the only organization currently providing complete response services (spill management, community outreach, equipment, training, exercising and response).*

# Additional Technical Information

## IV. Ministry intention 3: enhanced Provincial Environmental Emergency Program

### Description:

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 to provide appropriate government oversight when spills occur.

### Principles:

- The Province has responsibilities 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.
- Companies and industry sectors that create the risk of spills have a significant role and responsibility for spill prevention, preparedness, response and recovery activities – and government is considering whether they should cover all the costs associated with the response and recovery from their spills.
- The Environmental Emergency Program must be appropriately resourced to ensure that companies and industries operating in B.C. are meeting all applicable requirements and the Ministry is ready and prepared to step in whenever the responsible party is unable, unwilling or unidentified.
- The Ministry's role in response to a spill is to provide regulatory oversight and technical assistance to spillers and their contractors – and to assume management and direction of spill response activities (through the activation of a PRO or response contractors) in those situations where the responsible party is unable, unwilling, or unidentified. The Environmental Emergency Program will also establish Unified Command with the responsible party, other levels of government and First Nations for significant spill incidents.
- 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.

### Rationale:

- Increases in the movement of hazardous goods through B.C. have placed a strain on the existing program staffing levels and budget. The Environmental Emergency Program requires additional capacity to address the risks posed by a growing commodities sector.
- This approach recognizes that many of the hazardous materials 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.
- Program staff and resources would be dedicated to:
  - Demonstrating leadership – e.g., supporting a strategic advisory group for implementation and ongoing improvement of British Columbia's spill preparedness and response regime.
  - Supporting timely and effective response to spills – including participating in incident command, monitoring a company's response and maintaining the ability to step in to ensure response in the event that there is a time lag between a spill being identified and a responsible party stepping forward.
  - Spill related research and incident reviews to support continuous improvement including data acquisition and analysis – to support collection of baseline information, reporting of spill events, tracking and monitoring of response and recovery activities, and public reporting.
  - Development and dissemination of standards, guidance protocols and provincial plans for prevention, preparedness, response and recovery.

*continued on page 19*

## Additional Technical Information

### Rationale: *cont.*

- Liaison and training support – for risk assessment, planning and response with provincial spill incident management team members, First Nations, local and regional response agencies and organizations, and other key stakeholders.
- Monitoring, compliance and enforcement efforts – to ensure that standards are being met, required response activities are taking place and recovery actions are carried out.



# Notes

