



Ministry of Environment & Climate Change Strategy

**POLICY INTENTIONS PAPER FOR ENGAGEMENT:
PHASE TWO ENHANCEMENTS TO SPILL MANAGEMENT
IN BRITISH COLUMBIA**

**Response times | Geographic response plans | Addressing loss of public
use from spills including economic, cultural, and recreational impacts |
Maximizing the marine application of environmental emergency
regulatory powers**

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1. CONTEXT

British Columbians share a close connection to British Columbia's (B.C.'s) natural environment – the air, land, water, fish, and wildlife. For Indigenous people, their connection to B.C.'s land, rivers, and streams – and the fish and wildlife that live there – reaches back thousands of years.

An increase in the transportation of liquid petroleum products through the province by rail, pipeline, and truck will have a disproportionate impact on B.C.'s environment, Indigenous peoples, and the economy. A majority of British Columbians agree that a dramatic increase in the transportation of liquid petroleum products presents risks to B.C.'s environmental and economic interests and that plans must be put in place to address these risks, as well as to address existing risks, response gaps, and impacts identified through spills which have taken place to date.

The Government of British Columbia has a responsibility to set clear standards for spill preparedness, response, and recovery and to take deliberate steps to ensure that B.C. is prepared to respond to catastrophic spills. For this reason, the Ministry of Environment & Climate Change Strategy (the ministry) is exploring further enhancements to spill preparedness and response with respect to land transportation of hazardous materials.

Recent responses to oil spills in B.C.'s coastal waters, including the leakage of oily water from the *MV Marathassa* into English Bay in 2015, the grounding of *Nathan E. Stewart* tug and spill of more than 110,000 litres of diesel into the Seaforth Channel in 2016, have also caused significant concerns for local, provincial, and First Nations governments about the capacity of governments, private companies, and oil spill response organizations to respond quickly to an oil spill on land or in water. For this reason, the ministry is exploring potential regulatory enhancements it can make within B.C.'s jurisdiction to ensure that the province can fully protect its interests following spills in or affecting the marine environment.

To this end, the ministry is engaging on a variety of measures to ensure that concerns regarding at-risk ecosystems, shorelines, wildlife, and jobs are adequately addressed in government policy and regulations. The ministry will also be taking steps to better understand the potential spill risks and impacts presented by the transportation of bitumen products in particular. This input will help to inform future policy development.

2. INTRODUCTION

In October 2017, the Government of British Columbia approved three new regulations that brought Division 2.1 Spill Preparedness, Response and Recovery of the *Environmental Management Act 2003* (EMA) into force and established improved standards for spill preparedness for liquid petroleum products across transportation sectors while requiring stringent response and environmental

recovery actions from all spillers.¹ Collectively, these new standards and requirements are known as the phase one enhancements for spill management in B.C.

This intentions paper describes four phase two policy concepts that the ministry is considering pursuing to improve responses in the event of spills. It also outlines the engagement process that the ministry is following to obtain feedback from technical experts, First Nations, and all British Columbians including how to respond directly to the content in this paper. Feedback on this paper will be welcomed for 60 days (February 28 through April 30, 2018). Further instructions on providing feedback are outlined on the final page of this document.

The phase two policy concepts that the ministry is inviting feedback on are:

- Prescribing response times to ensure timely responses following a spill;
- The development of Geographic Response Plans to ensure resources are available to support an immediate response that takes into account the unique characteristics of a given and particularly sensitive area;
- Addressing loss of public use from spills including economic, cultural, and recreational impacts to ensure communities are compensated for negative impacts from spills (e.g. compensation to a community and/or Indigenous community when food gathering access is limited following a spill); and
- Maximizing the marine application of the ministry's environmental emergency regulatory powers within B.C.'s jurisdiction. The intent is to ensure a consistent and high standard of protection in both marine and terrestrial settings.

The ministry expects that additional policy concepts will be explored in future regulatory development phases to address further potential enhancements that have been identified. These policy topics may include: industry funding for the ministry's Environmental Emergency Program; qualification requirements for responders; adding preparedness requirements for additional sectors and substance types (beyond the current focus on transportation and liquid petroleum products); and sampling and monitoring requirements for spillers to assess environmental impacts immediately following a spill.

2.1. Phase two policy summaries

2.1.1. Summary of proposed policy on response times

The ministry is exploring whether all regulated persons² should be required to demonstrate in their spill contingency plans how they will complete critical response actions within prescribed

¹ Information about the phase one enhancements can be found on the ministry's Environmental Emergency Program website at <http://gov.bc.ca/spillregulations>.

timeframes and whether high-volume regulated persons (owners of all pipelines and railways transporting liquid petroleum products) should also be required to implement those response times should they experience a spill.

The ministry intends to engage on: which response milestones should have response times associated with them; which milestones should be enacted as either planning standards or required response times following a spill; if requiring actual response times following a spill should be limited to high-volume regulated persons; and how requirements for response times should be implemented.

2.1.2. Summary of proposed policy on Geographic Response Plans

Geographic Response Plans (GRPs) identify significant natural, cultural, and economic resources in specific geographic areas, such as a portion of a river or an inlet, which would be put at risk in the event of a spill. Such plans identify response actions that will help to minimize impacts on these areas in the event of a spill. GRPs have been in use in the states of Washington and Alaska for several decades and provide a common set of instructions on how to protect sensitive areas.

The ministry is exploring whether regulated persons operating in particularly sensitive areas should be required to develop one of two types of land-based GRPs for those areas. For example, hot-spot GRPs that could be required at designated areas with high environmental and socio-cultural sensitivity (e.g. protected areas, sensitive habitat, salmon-spawning streams, population centers, and archaeological sites) along with areas that are important to Indigenous communities.

The ministry intends to engage on: what should be included in the content of GRPs; how and where GRPs should be developed; the division between linear and hot-spot GRPs; and the timeframe for when GRPs should be developed. The ministry proposal focuses on terrestrial GRPs; however, the ministry also wants to engage on how it should work collaboratively with other organizations that are currently developing GRPs for the marine environment.

2.1.3. Summary of proposed policy on addressing loss of public use impacts from spills including economic, cultural, and recreational impacts

During and after major spill incidents, communities can be affected in a variety of ways, including the impacts of a spill on public places and resources. Environmental damage caused by spills and by the subsequent spill response may cause an upheaval to daily life in a community that may continue for years – or even decades – after the initial emergency response phase has ended. Public access to parks, wilderness areas, and our coastal areas is an essential part of our culture and identity as British Columbians.

² Phase one enhancements to spill management identified **regulated persons** as rail or highway transporters in possession, charge, or control of 10,000 litres or more of liquid petroleum products and pipelines transporting any quantity of liquid petroleum products. As part of the phase one enhancements, regulated persons are required to develop and test spill contingency plans.

To address these risks, the ministry is exploring an additional component within the existing recovery plan process, whereby the ministry may order a responsible person to develop, submit, and carry out a plan to compensate communities for impacts to the use and enjoyment of public places and resources. The plan would describe a process to assess impacts, using input from impacted parties, and propose actions, including compensation, to mitigate or counteract those impacts. Once approved by a director, the spiller would be responsible for implementing the plan.

The ministry intends to engage on the components to be included in the plan and options for determining and valuing impacts including engagement requirements.

2.1.4. Summary of proposed policy on maximizing the marine application of ministry environmental emergency regulatory powers

While marine spill management is regulated by Transport Canada, and the Canadian Coast Guard provides lead agency oversight for industry response to ship-source spills, the Province of B.C. has a significant interest in maximizing the application of the ministry's regulatory authority with respect to oil spill prevention, preparedness, response, and recovery. Division 2.1 of EMA and its associated regulations apply to marine spills in many respects, including new reporting and recovery requirements (effective October 30, 2017), and in cases where a land-based spill migrates to the marine environment.

The ministry intends to explore whether there are additional opportunities within B.C.'s jurisdiction to enhance provincial regulations with respect to all spills in or affecting the marine environment, including ship-source spills. Policies will be developed in continued collaboration and coordination between provincial and federal regulatory frameworks.

The ministry intends to engage on: the marine application of spill reporting; response actions; GRPs; loss of public use; and recovery planning to ensure the protection of provincial interests for spills in or affecting the marine environment.

3. ENVIRONMENTAL EMERGENCY PROGRAM

3.1. Legislative framework

The ministry's Environmental Emergency Program (EEP) is responsible for environmental emergency management in B.C. Its mandate links strongly to Division 2.1 Spill Preparedness, Response and Recovery of EMA. Division 2.1 of EMA and its associated regulations establish spill preparedness, response, and recovery requirements that ensure effective spill management.

- Schedule 2 of the Emergency Program Act Regulation under the *Emergency Program Act 1996* defines the duties of Ministers in the event of an emergency. It requires the Minister of Environment & Climate Change Strategy to provide direction and technical advice with respect to spills, as well as ensure the proper disposal of spilled substances.
- Division 2.1 Spill Preparedness, Response and Recovery of EMA provides the provincial government with the authority to approve regulations that establish requirements for improved spill management in B.C. Further, it sets out requirements that must be followed to ensure effective spill management in B.C., specifically the responsibilities of a spiller and cost recovery of government costs should government support a response. The phase one regulations established new requirements for developing and testing spill contingency plans, spill reporting, and recovery planning to address the long term impacts of a spill (see the three regulations summarized below). Government is not limited to establishing policies for only those items listed in Division 2.1 of EMA because it also has the ability to introduce amendments to EMA to establish new provisions if there is a need to do so.
- Spill Preparedness, Response and Recovery Regulation under EMA defines which entities must demonstrate preparedness (regulated persons being pipeline, railway, and highway transporters of liquid petroleum products) and requirements for spillers to prepare recovery plans to address the long term impacts of a spill.
- Spill Contingency Planning Regulation under EMA defines requirements for regulated persons to develop and test spill contingency plans including the required content in plans and what types of tests must be completed during each three-year period.
- Spill Reporting Regulation under EMA defines requirements for when and how spillers are to report spills. This regulation establishes a multi-step reporting process that includes requirements for an immediate initial report, update reports, an end-of-spill report, and, if required by a director, a post-incident lessons-learned report.³

3.2. Environmental Emergency Program overview

The EEP is committed to exemplary emergency management through leadership, organization, team work, and shared responsibility. To meet this mandate, the EEP maintains a response section with the capacity to monitor, augment, or take over the response to a terrestrial spill within provincial jurisdiction and a planning, preparedness, and recovery section which ensures that the ministry has an effective spill management framework in place.

³ Note: the requirement for update reports and end-of-spill reports will come into effect in October 2018.

Response section

The response section includes Environmental Emergency Response Officers (EEROs) who are strategically positioned throughout the province to respond in the event of an environmental emergency (e.g. spill). There are currently 17 EEROs working across B.C., all of whom are independently certified Hazardous Materials Technicians. The ministry has EEROs on call 24/7 to provide emergency management, technical response guidance, site presence, and environmental oversight. The response section also includes four senior EEROs, two section heads, an information officer, logistics officer, training officer, and the response manager. The response section responds to more than 3,500 annual reports of spills across B.C.

The response section has a presence in 12 B.C. communities: Nanaimo, Black Creek, North Vancouver, Surrey, Squamish, Victoria, Kamloops, Penticton, Cranbrook, Smithers, Prince George, and Fort St. John.

Planning, preparedness, and recovery section

The planning, preparedness, and recovery section includes 22 staff working in the Victoria office. This section works to reduce the environmental impacts of spills through activities such as:

- Developing guidance, policies, and procedures for emergency preparedness, response, and recovery;
- Advancing legislative and regulatory enhancements for government to consider;
- Developing, maintaining, and updating ministry response plans;
- Participating in intergovernmental and cross-jurisdictional response planning;
- Supporting the activation of the Ministry Emergency Operations Centre (MEOC) during major incidents;
- Organizing, conducting, and participating in training and exercises; and
- Managing processes and information technology systems to support responses and data management.

How EEP responds during a spill incident

Spills are reported to the Emergency Management British Columbia (EMBC) Emergency Coordination Center (ECC) in Victoria. An EMBC Operations Officer collects the pertinent information from the caller reporting the spill and notifies the appropriate EERO.

The EERO assesses the incident's severity by evaluating the risk it poses to the public and the environment, along with other factors. The EERO then determines which entities should be notified and how the incident should be handled. Most reported incidents are considered a Code 1, this rating indicates a lower severity incident. Code 1 incidents are usually handled by the local EERO who will verify information and ensure that the spill is cleaned up according to provincial legislation and regulations. The responding EERO will oversee the spill clean-up and liaise with local communities, First Nations, the spiller, and other response agencies.

Larger, more severe or more complex hazardous material incidents are deemed Code 2 incidents. Responses for these spills often require more coordination and oversight to ensure that the environment and public are protected and the spill is cleaned up appropriately. The response will grow to meet the requirements of the incident and could involve onsite EERO involvement and environmental emergency response specialists. Depending on the circumstances, the duration of Code 2 incidents and onsite EERO involvement can last from hours to months.

The MEOC can also be activated during a spill response to support logistics, planning efforts, and provide regulatory guidance as needed. Provincial government staff could also be deployed from anywhere in the province to support field operations and provide government oversight. These government staff comprise the ministry's Incident Management Team can increase in size from a few ministry staff to dozens of staff from across government performing numerous response functions.

Communications with impacted entities is essential to a successful response. Ensuring that all impacted parties, local governments, Indigenous communities, and other response agencies and partners are engaged and informed is paramount. The ministry will maintain oversight of the response until environmental and human health impacts have been addressed and appropriate information sharing has been achieved.

Once initial the spill response has concluded, the ministry will assess whether the incident warrants further recovery action to address long-term impacts on the environment. If a director under EMA believes recovery action is necessary, they will order a spiller to develop and implement a recovery plan.

The ministry responds to spills on private and Crown land and works closely with federal partners to coordinate responses to spills in areas under federal jurisdiction.

4. EMERGENCY MANAGEMENT PILLARS

There are four pillars that must be considered for ensuring effective emergency management of any hazard. The EEP considers all four pillars in meeting its mandate.

Prevention

Prevention refers to actions to eliminate or reduce the risks of environmental emergencies in order to protect lives, property, the environment, and reduce economic disruption.⁴

EEP and prevention: the EEP monitors developments in prevention and analyses spill data to determine if there are trends that indicate a need to consider additional prevention measures. The ministry works with its regulatory partners, neighbouring jurisdictions, and industry to promote and stay informed of prevention measures. The ministry will continue to evaluate its role under the prevention pillar.

Preparedness

Preparedness refers to being ready to respond to an environmental emergency and manage its impacts through measures taken prior to an event; for example, developing emergency response plans, establishing mutual assistance agreements, undertaking resource inventories, and participating in training and exercise programs.

EEP and preparedness: the EEP develops provincial spill response plans, maintains preparedness to assist in or take over spill responses, and engages with industry, Indigenous communities, responders, and stakeholders to ensure response planning and testing is taking place. The phase one regulatory enhancements which took effect on October 30, 2017 established regulatory preparedness requirements for regulated persons to develop and test spill contingency plans.

Response

Response refers to actions during, immediately before, or immediately after an environmental emergency to manage its consequences.

EEP and response: The ministry has a central role in direct spill response and ensuring compliance from spillers with provincial response requirements. The phase one regulatory enhancements build on this role by establishing multi-step spill reporting and creating explicit response requirements that spillers must implement if necessary. The ministry retains the authority to take over responses that are not meeting legislative and regulatory requirements. The ministry will recover all expenses for government expenditures related to the incident response from the spiller.

⁴ The definitions of the four pillars used in this paper are from Public Safety Canada's *An Emergency Management Framework for Canada 2011, second edition* which can be accessed online at <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/mrgnc-mngmnt-frmwrk/mrgnc-mngmnt-frmwrk-eng.pdf>.

Recovery

Recovery refers to actions to repair and/or restore environmental conditions to an acceptable level through measures taken after an environmental emergency

The EEP and recovery: The phase one regulatory enhancements established the requirement that a spiller must develop and implement a recovery plan that addresses the long-term impacts of a spill if directed to do so by a director under EMA.

5. PRINCIPLES GUIDING POLICY DIRECTION

The following eight principles will guide the policy direction that the ministry ultimately pursues for enhanced spill management in B.C.

Preparedness is essential

After a spill occurs, impacts to human health, the environment, and economic interests can be significantly reduced by an effective response. An effective response can only occur if there are plans in place that match resources and expertise to potential spills. The ministry will continue to develop requirements that ensure regulated persons have plans in place that prove an effective response is possible.

Polluter pays for preparedness including government oversight

Those entities that can spill must invest in ensuring that they are adequately prepared to respond to a spill incident. The ministry will ensure that regulated persons are in compliance with the law.

Polluter pays for response, recovery, and government oversight

In the event of a spill, the spiller is responsible for the cost of the response and for recovery of the environment. These costs include the spiller's own costs as well as any government actions that are required for the response to a spill, including oversight to ensure a spiller is responding effectively. In the future, government may pursue industry funding to support the EEP's preparedness activities, including compliance and enforcement, to ensure its preparedness requirements are met.

Government provides strong oversight

The ministry sets clear standards for spill preparedness, response, and recovery and monitors how well industry meets these standards ensuring that it utilizes appropriate enforcement tools to support an effective response to spills.

Requirements are established based on best practices, evidence, and risk

Any requirements advanced by the ministry will be the product of in depth analysis to ensure the protection of human health and the environment in all cases.

Public accountability and transparency

All Indigenous and non-Indigenous communities in B.C. should have access to the information that they need to support informed preparedness and response decisions. The public should receive current information about spills that may impact them, from the first report that is generated through to the recovery phase.

Continuous improvement

Legislation, regulations, policies, and best-practice guidance should progress with the increase in the transportation of commodities, while staying current with advances in technology.

Avoid unnecessary duplication

The ministry intends to establish a consistent level of spill management across B.C. Some industry sectors already have regulations in place that address elements of what the ministry is building. The ministry will work with provincial agencies, such as the B.C. Oil and Gas Commission and with federal regulators, to recognize existing requirements and avoid duplication wherever possible. New ministry requirements should provide consistent, province-wide preparedness and response improvements across industry sectors while avoiding unnecessary duplication amongst regulators.

6. POLICY CONCEPT: RESPONSE TIMES

6.1. Description

Response time requirements are established timeframes for when response actions must take place following a spill. Linking response times to significant response milestones helps ensure that a response is unfolding in a timely manner. Examples of applicable milestones for response actions include having skilled and experienced personnel mobilized to respond to a spill, having appropriate equipment deployed, and activating an Incident Command Post.

6.2. Background

Response time requirements can be established as either planning standards or performance standards. Planning standards would use components of spill contingency plans and apply timelines for when actions identified within the plan are to be completed. Regulated persons would then be required to test their plans to demonstrate that they can activate their response in the required timeframe.

Performance response times are applied during a spill incident and require the spiller to have response processes and resources activated and/or on site within a prescribed timeframe. Section 91.2 of EMA outlines the response actions that a spiller must take following a spill, but does not

apply performance response times. Other than the requirement to immediately report a spill at or above the spill volume reporting thresholds, there are no timeframes identified for when response actions must be initiated or completed. Similarly, the ministry does not currently prescribe response timeframes for planning purposes. As per the Spill Contingency Planning Regulation, spill contingency plans must specify the resources to be activated when responding to a worst-case spill, however, there are no times specified for when the resources should be mobilized, on site, or deployed. Further, under current regulations, response times are not a component of spill contingency plan tests.

Sections 91.11, 91.2 (1) (c), and 92.1 of EMA collectively provide government with the authority to make regulations with respect to either planning standards or performance standards for response times. The ministry has identified the need for the incorporation of response times into spill preparedness and response actions as a priority and is investigating time requirements for both planning and performance standards.

Response times are not an unfamiliar concept for industry, regulated persons, or responders. Response times have been established in B.C. as voluntary industry standards for many years. For example, the Canadian Fuels Association and the Canadian Energy Pipeline Association have response time guidelines for land transportation and pipelines respectively. There are federal response time requirements for transporters of dangerous goods and spill response organizations typically commit to response times as part of client response contracts.

Currently, companies operating on both sides of the Washington State-B.C. international border are required to consider spill response timeliness in Washington State but not within B.C. Other jurisdictions have planning standards that are tested through unannounced drills and the certification of primary response contractors. Some jurisdictions also have response plans that are reviewed and approved by regulatory bodies based on the location of equipment caches as well as the presence of contractual agreements with response contractors committing to respond within prescribed times. The ministry intends to review spill contingency plans periodically and requires a testing schedule to be implemented, but it is not exploring unannounced drills as an option or planning to review and approve all spill contingency plans. The approach for choosing which spill contingency plans are to be reviewed will be based on risk and past performance. While testing response times has merit because it ensures careful planning exists to ensure readiness to spills, the ministry is also exploring setting response times for performance actions during real-time spill incidents.

Performance standards place the responsibility on the regulated person to ensure what they have outlined in their spill contingency plan will be available during an actual response within a prescribed timeframe. The faster a response is activated, the less severe the impacts of a spill on human health, the environment, and communities.

6.3. Policy options

Response times

The ministry is exploring whether all regulated persons should be required to demonstrate in their spill contingency plans how they will complete critical response actions within prescribed timeframes and whether high-volume regulated persons (owners of all pipelines and railways transporting liquid petroleum products) should also be required to implement those response times should they experience a spill.

The ministry intends to engage on: which response milestones should have response times associated with them; which milestones should be enacted as either planning standards or required response times following a spill; if requiring actual response times following a spill should be limited to high-volume regulated persons; and how requirements for response times should be implemented.

6.3.1. Response milestones

The ministry does not intend to identify timelines for all milestones associated with spill response, but rather, select key indicators that demonstrate response actions are progressing acceptably. Response milestones and their associated times in Table A below are being proposed by the ministry for all regulated persons as both planning and performance standards for high-volume regulated persons.

6.3.1.1. Table A: Proposed response times

Planning and performance response milestone	Planning and performance response time (in time elapsed since the spiller learned of the spill)
1. Initial spill report, activation of notification procedures, Incident Command System, and other applicable sections of a spill contingency plan	Immediately
2. Departure from base location of trained personnel with initial equipment to: (1) conduct a site assessment, spill monitoring, and impact assessment and (2) initial response actions	Within 1 hour
3. Trained personnel arrive at site with initial equipment to: (1) conduct a site assessment,	<u>Pipeline and railway operations:</u> <ul style="list-style-type: none"> • 2 hours for populated areas

monitor the spill, and conduct an impact assessment and (2) complete initial response actions	<ul style="list-style-type: none"> • 4 hours everywhere else <u>Highway transporter operations:</u> <ul style="list-style-type: none"> • 2 hours for populated areas • 4 hours within 150 kilometers of populated areas • 8 hours everywhere else
4. If necessary, the first wave of additional response equipment and trained personnel arrival on site (capacity to address up to 25% of worst-case specified volume)	<u>Pipeline and railway operations:</u> <ul style="list-style-type: none"> • 3 hours within 150 kilometers of populated areas • 6 hours everywhere else <u>Highway transporter operations:</u> <ul style="list-style-type: none"> • 4 hours for populated areas • 6 hours within 150 kilometers of populated areas • 12 hours everywhere else
5. If necessary, the second wave of additional response equipment and trained personnel arrival on site (capacity to address up to 40% of worst-case specified volume)	Within 12 hours after the arrival of the first wave

Note: It is to the responsibility of the regulated person to ensure that all aspects of their spill contingency plan can be activated safely within an appropriate timeframe regardless of whether a specific response time is identified. The ministry may also order specific actions beyond what is identified in the table above.

Further, it is the responsibility of all responsible persons (spillers) to fully comply with Section 91.2 of EMA which outlines the response actions a spiller must take, if necessary, to address a spill. The absence of a designated response time does not negate the need for spillers to carry out the other activities specified in EMA.

6.3.1.2. Table B: Interpreting the terms in Table A: Response times

Term	Description
Notification procedures	The individuals and organizations that must be informed following a spill, including company employees, governments (including First Nations specifically), and the public. Procedures for notification and communication as outlined in applicable spill contingency plans.
Incident Command System	The Incident Command System is the management structure used by emergency response personnel to organize the spill response.
Activate the spill contingency plan	As per Section 91.11 (4) of EMA, a regulated person must ensure that if a spill occurs a spill contingency plan is implemented to the

	extent the plan is applicable.
Base location	Any location that is owned or contracted by a regulated person or contracted response organization to house response equipment.
Trained personnel	Regulated persons must ensure that responders are appropriately trained for the role(s) that they are expected to perform.
Initial equipment to conduct a site assessment, spill monitoring, and impact assessment	Equipment such as air monitors, maps, a copy of the hazard worksheet, sampling kits, and copies of planning documents such as applicable GRPs.
Equipment to conduct initial response actions	Equipment such as clamps, plugs, or patches to control the source of the spill, steps-by-step instructions on how to call product vendors to assist with source control basic source control materials, Personal Protective Equipment, and initial response equipment as appropriate such as sandbags or sorbent materials.
First wave of additional response equipment and trained personnel on site	The first wave of equipment refers to the resources able to address, at a minimum, 25% of a worst-case spill including equipment for response, recovery, and clean-up including storage and waste management. This may also include applicable firefighting, first aid, and air monitoring equipment.
Second wave of additional response equipment and trained personnel on site	The second wave of equipment refers to the resources able to address, at a minimum, 40% of a worst-case spill including equipment for response, recovery, and clean up including storage and waste management. This may also include applicable firefighting, first aid, and air monitoring equipment.
Immediately (as a response time)	Refers to prompt, vigorous action, without any delay, having regard for circumstances (e.g. responder and public safety).
Populated areas (as it relates to response time)	For the purpose of response times, the ministry is exploring defining “populated areas” as a B.C. municipality having a population of greater than 5,000 people. “150 kilometres from a populated area” refers to the distance along a maintained highway, a right-of-way, or a length of rail from a defined latitude and longitude within the municipal boundary.

6.3.2. Response times as planning standards

The ministry is exploring the requirement of all regulated persons to factor the above response times into their spill contingency plans, as well as conduct tests such as drills and exercises, to demonstrate that they can activate their response resources within the prescribed timeframes. The rationale for establishing planning standards is that if regulated persons are prepared to respond within established timeframes, they are more likely to respond within those timeframes during an actual spill incident. Planning standards also provide a benchmark that the ministry expects during an actual spill response. When those times are not met during a spill response, the ministry can order

actions to take place and specify timeframes within the order. The ministry can also investigate why these timeframes were missed and examine opportunities for continuous improvement in planning to ensure improved response times in the future.

6.3.3. Response times as performance standards

Performance standards are rules that identify actions or outcomes that must occur within a prescribed timeframe during a spill response (e.g. trained personnel with initial response equipment must leave their home base within one hour of a spill being reported). The ministry is considering creating a class of regulated persons who will be required to adhere to performance standards. This class will be defined by those who transport large volumes of regulated substances. This is to address the increased consequence of large quantity spills into the environment. The requirement for high-volume regulated persons to meet performance standards would be in addition to the requirement that they include planning standards in spill contingency plans.

In summary, high-volume regulated persons would be required to plan for response actions to take place within prescribed timeframes (planning standards) and successfully implement response actions within prescribed timeframes following a spill (performance standards). The response times that are proposed in Table A are not new, as they are largely linked to existing industry commitments. The proposed measure would make it a regulatory requirement for high-volume regulated persons to initiate response actions following a spill within the prescribed timeframe rather than a voluntary measure. In setting response time performance standards in regulation, the ministry would be able to assess compliance following spills to determine if regulated persons were actually able to mobilize a response in the manner that they claim in their spill contingency plan. In the absence of reasonable extenuating circumstances (e.g. a weather incident that blocked highway access), the ministry could pursue compliance and enforcement action against the spiller for a response that did not occur within the prescribed timeframe.

The sooner effective response actions are initiated, the less severe the impacts will be. In most cases, the ministry believes spillers respond as quickly as is reasonable and safe for the conditions that are present. Integrating response times into planning and actual spill response (performance standards) provides the ministry with confidence that a response will unfold in a manner that minimizes the impacts of a spill.

In designing performance standard policies, the ministry would emphasize that there are reasonable circumstances when times may be exceeded, even when all measures have been taken to meet them. Circumstances such as responder and public safety, inclement weather, communication infrastructure problems, road closures, or access constraints could create a situation where a timeline is reasonably exceeded. The presence of these extenuating circumstances alone would not absolve a high-volume regulated person from the requirement to meet the required response times. However, their presence would be a factor in the determination to pursue compliance and enforcement actions. The ministry would consider whether the spiller was operating with due

diligence and could demonstrate that all reasonable measures were taken to avoid exceeding prescribed timelines.

6.3.4. High-volume transporters

The ministry intends to explore requiring response time performance standards from all railway and pipeline operations that fall under the definition of a regulated person; this would be in addition to the requirement that all regulated persons comply with the response time planning standards. While highway transporters can have high impact incidents, the extent of those incidents are limited by virtue of the maximum quantity of material a truck trailer can transport. The significant volume of regulated substances being transported by rail and pipeline means that these sectors have the potential to have far larger incidents than highway transporters. A timely response must be guaranteed to contain the damage that could occur from a large-scale rail or pipeline incident.

6.4. Implementation

Division 2.1 Spill Preparedness, Response and Recovery of EMA has provisions in place that allow for the development of regulations for both planning and performance response times.

- Section 92.1 (b) (i) of EMA provides the authority to make regulations respecting the content of spill contingency plans as well as how and when they are tested. Under this authority, the Minister could pursue planning response times.
- Section 91.2 (1) (c) (i) of EMA requires responsible persons to ensure that personnel with the skills, experience, resources, and equipment necessary to appropriately respond to a spill arrive at a spill site within a prescribed timeframe. Subsection (ii) requires that those persons establish an Incident Command Post within a prescribed timeframe.
- Section 92.1 (1) (a) (iv) of EMA gives the Minister the authority to make regulations with regards to response times respecting spill response actions and the establishment of the Incident Command System.

In proposing response times of any kind, the ministry would seek to phase in requirements in recognition of the workload and culture change being pursued. Further, efforts will be made to align requirements with those of federal partners where there are existing federal response time requirements, as long as those requirements ensure a timely and effective response. The ministry would seek to have new planning response time requirements coincide with timelines for reviewing and updating spill contingency plans. For new performance planning standards, the ministry would allow time for impacted regulated persons to consider what additional response capacity is needed to ensure that they can comply with the new timeframes.

7. POLICY CONCEPT: GEOGRAPHIC RESPONSE PLANS

7.1. Description

GRPs identify sensitive, natural, cultural, and/or significant economic resources at risk from spills of oil or other persistent hazardous material and describe and prioritize response strategies to minimize impacts to these resources should a spill occur. GRPs are tailored to a particular geographic area at risk from a spill such as a: river segment where salmon and other important fish species are present; a lake used as a community's freshwater source; or a wetland serving as critical habitat for numerous protected species of mammals, fish, reptiles, amphibians, and birds.

GRPs outline the response actions that are appropriate for that site and link those actions with resources available in the area. GRPs are map-based and each one has a variety of information contained within it such as step-by-step direction for the first 48 to 72 hours of a response. GRPs identify risks and tactics on the ground and are used to enhance the coordination of response efforts during the initial phase of a spill response.

7.2. Background

Section 91.31 of EMA provides the Minister with the authority to order a group of regulated persons operating in a particular area to develop and maintain a GRP for that area. Under the current regulations, regulated persons are the owners or operators of pipelines, railways, and highway transporters; therefore, GRPs would only be ordered along land-based transportation corridors at risk from spills of regulated substances. By order, the Minister is authorized to:

- Designate area(s) where GRPs will be developed;
- Designate the regulated person or class of regulated persons operating in the area who will be required to prepare, review, update, and test the GRP;
- Establish or authorize the Terms of Reference for the development of the GRP (e.g. plan contents, requirements for public consultation, and timeline for completion);
- Require the establishment of an advisory committee to contribute to the development, review, and testing of the GRP and determine how compensation for their time is to be provided;
- Specify persons and organizations that must be considered and/or engaged with during GRP development;

- Specify a period of public consultation;
- Require that the regulated person(s) ordered to develop the GRP pay costs associated with it; and
- Specify timelines for updating and testing GRPs.

Section 91.31 (5) (c) and 6 (a) and (c) of EMA allows for the development of regulations with respect to the prescribed format of completed GRPs as well as any publishing requirements and public consultation. Ultimately, the ministry will have the authority to determine if/when a given GRP is adequate.

Currently, there are GRP initiatives in B.C. that focus on the marine environment and some industry led terrestrial plans. As part of the ministry's responsibility to provincial marine resources, the ministry will be seeking to ensure that marine GRPs meet the same standard being pursued for land-based transportation corridors. Maximizing the marine application of ministry environmental emergency regulatory powers is a distinct phase two topic and marine GRPs are addressed as part of that topic.

The goal for provincial GRP policy is for a system of land-based plans that provide sensitive areas, such as a salmon bearing stream, a fresh-water drinking source, or inland grizzly bear habitat, with an additional level of preparation so that initial tactical response actions advance rapidly and assertively if a spill occurs. They should be designed to include up-to-date information on notification strategies and any site-specific logistical concerns that may be faced during an initial spill response. They will point to significant resources in a GRP area, prioritize which ones to respond to, and outline the step-by-step instructions necessary to ensure their protection. The strategies are not meant to be rigid and can be altered if, during a spill response, circumstances arise that change the tactical direction of the plan.

Case Study: Skeena River as a place where GRPs could be required

The Skeena River in northwestern B.C. has always been important to Indigenous people in the region. It hosts a variety of fish, wildlife, and vegetation as well as a nursery habitat for salmon and food for bird species, eulachon, and herring. Highway 16 and railway tracks run directly next to the north side of the Skeena River. The highway serves as the only road transportation in and out of Prince Rupert and the surrounding communities. The railway tracks are critical to the transportation of exports and imports using the Port of Prince Rupert. There are numerous critical environmental values that must be protected along this stretch of highway and railway.

The spring eulachon run and summer salmon runs are followed upriver by Harbour Seals, Northern Sea Lions, Bald Eagles, and five species of gulls. The eulachon run occurs mid-March to mid-April and salmon runs occur mid-July to early September. The mouths of major tributary rivers and mud banks exposed at low tide are very good places to see shorebirds and waterfowl year round. From

November through April, Trumpeter Swans over-winter in several of the back channels seen near the highway. The Skeena River is the second largest salmon producing river in Canada. Eulachon populations have steadily declined across B.C. and their continued presence in the Skeena River is important for First Nations fisheries.^{5,6} Ecotourism in this region is of growing importance. A spill into the Skeena River could have serious consequences for a multitude of environmental, cultural, and economic values.

Skeena River GRPs could identify all of the sensitive environmental values that are present and recommend the availability of boom at designated locations with instructions on how to access and deploy it in a manner that diverts spilled oil from reaching critical habitat. The GRPs could include information about areas where spilled oil could be diverted so it can be collected and transported for waste treatment. Staged equipment identified in such plans could also include wildlife deterrents to keep marine mammals and bears away from spill sites. GRPs could provide instructions for launching boats at pre-arranged access points, including details about any challenges for responders that could be present at given access points. Finally, GRPs can provide contact information for area residents and communities to ensure notifications regarding a spill reach all individuals who need to know as quickly as possible.

Under Division 2.1 of EMA, regulated persons are required to develop spill contingency plans in B.C. GRPs would build on the spill contingency planning requirement by requiring a more in depth level of planning in that they take the general procedures outlined in a spill contingency plan and create working strategies for high-priority areas that can be tested and evaluated for effectiveness (e.g. they may outline specific tactical steps to be taken to protect a specific resource of value within a GRP area). GRPs take into consideration contributions from local governments, first responders, Indigenous and local knowledge, and cultural resources and make it publicly available. Following the development of GRPs, it may be possible for spill contingency plan holders to reference relevant GRPs to fulfil spill contingency planning requirements if GRPs have been developed for the spill contingency plan holder’s area of operation. For example, GRP sites may be referenced when outlining procedures for protecting the environment, human health, and infrastructure in an individual spill contingency plan.

7.2.1.1. Table C: Comparing GRPs and spill contingency plans

GRP	Spill contingency plan
<u>Map with locations of sensitive areas</u> <ul style="list-style-type: none"> • Large scale as well as photographs and 	<u>Maps with locations of sensitive areas</u> <ul style="list-style-type: none"> • Small scale of entire regular route or

⁵ Department of Fisheries and Oceans Canada. *Eulachon (Nass/Skeena River Populations)* <http://www.dfo-mpo.gc.ca/species-especies/profiles-profil/eulachon-eulakane-nass-eng.html>

⁶ Ministry of Environment & Climate Change Strategy. *Wildlife Viewing: in the Skeena Region* http://www.env.gov.bc.ca/fw/wildlife/viewing/docs/wildlife_viewing_skeena.pdf

<p>diagrams of potential hazards such as water intake valves or sensitive habitat</p> <ul style="list-style-type: none"> Includes a two page printable (or electronically available) document for use at the site during response 	<p>transportation corridor</p>
<p><u>Notifications and communications</u></p> <ul style="list-style-type: none"> Contact information for local municipalities, emergency response organizations, local health authorities, and private property owners in the immediate area 	<p><u>Notifications and communications</u></p> <ul style="list-style-type: none"> General procedures for alerts and communication policies
<p><u>Response tactics and site-specific strategies</u></p> <ul style="list-style-type: none"> Booming strategies, equipment, and number of people needed to deploy Step-by-step directions on how to deploy boom, potentially remove and clean up a spill, and remove waste at a specific location 	<p><u>Response procedures and strategies</u></p> <ul style="list-style-type: none"> General procedure for stabilizing, containing, removing, and cleaning up the spill and waste
<p><u>Locations of assets and resources</u></p> <ul style="list-style-type: none"> Equipment cache locations identified within each specific GRP area, as well as how additional resources can be deployed if necessary Equipment linked directly to potential needs within a specific area to ensure rapid protection for a valuable site 	<p><u>Locations of assets and resources</u></p> <ul style="list-style-type: none"> Equipment identified at strategic locations along a transportation corridor that can be deployed to spill sites when needed

The ministry has considered the merits of GRP programs in Washington and Alaska where programs have been in use for decades. Their GRPs are publicly available and provide a common set of instructions on how to protect sensitive areas, such as specific details of how to access particular foreshores, where equipment caches are located and where and how to prioritize the deployment of boom to protect a given resource. In looking to these examples, the ministry will work to harmonize its GRP content with neighbouring jurisdictions and with existing efforts underway in B.C.'s marine and terrestrial environments.

EMA allows the Minister to require, by order, the development of GRPs for areas where spills could impact key infrastructure, agricultural areas, environmentally sensitive areas, culturally sensitive areas, archaeological and socio-economic sites of significance, and recreational areas.

7.3. Policy options

Geographic Response Plans

GRPs identify sensitive natural, cultural, and significant economic resources in specific geographic areas, such as a portion of a river or an inlet, that would be put at risk in the event of a spill and offer

response plans that will help to minimize impacts on these areas in the event of a spill. GRPs have been in use in Washington and Alaska for several decades and provide a common set of instructions on how to protect sensitive areas.

The ministry is exploring whether regulated persons operating in particularly sensitive areas should be required to develop one of two types of land-based GRPs for those areas; linear GRPs would require a series of GRPs next to each other along large scale transportation corridors (e.g. pipelines, railroads, and major highways) and hot-spot GRPs that could be required at designated areas with high environmental and socio-cultural sensitivity (e.g. protected areas, sensitive habitat, salmon-spawning streams, population centers, and archaeological sites) along with areas that are important to Indigenous communities.

The ministry intends to engage on: what should be included in the content of GRPs; how and where GRPs should be developed; the division between linear and hot-spot GRPs; and the timeframe for when GRPs should be developed. The ministry proposal focuses on terrestrial GRPs; however, the ministry also wants to engage on how it should work collaboratively with other organizations that are currently developing GRPs for the marine environment.

7.3.1. GRP Terms of Reference

A GRP order, issued to one or more regulated persons, would be accompanied by a Terms of Reference (TOR) explaining how to develop and maintain the GRP. The TOR for each GRP would vary based on location and activity-specific considerations. Items that the ministry envisions including in each TOR:

- The names of the regulated person(s) who are required to fund, develop, and maintain the GRP;
- The area that must be addressed when developing the GRP;
- GRP contents, including equipment caches, sensitivity maps, access maps, and tactical direction to responders for protecting a particular resource;
- Engagement and advisory committee requirements;
- The methodology for determining site locations within the GRP; and
- Timelines for completing the plan, as well as updating and testing it.

7.3.2. Content required in GRPs

The ministry believes that GRPs should be consistent in the information that they provide so that any trained responder can refer to a GRP and know how to follow the instructions provided within it to

ensure an effective response. The following table provides a summary of the content that the ministry believes would be required in both linear GRPs and hot-spot GRPs.

7.3.2.1. Table D: Content that could be required in GRPs

Content type	Description
GRP scope	The scope of any Minister-ordered GRP will be outlined in the TOR (and the regulation, if applicable).
GRP activation	Provide a description of the criteria, assessment procedure, or decision-making framework used to determine when a GRP will be activated.
Overlapping and adjacent plans	Regulated persons must describe how their GRP complements other existing plans and harmonize response actions in the overlapping area.
Spill response contact sheet	<p>In the event of a spill, or an imminent risk of a spill occurring, it is the responsibility of the regulated person to contact the applicable persons or agencies. This could include:</p> <ul style="list-style-type: none"> • Government authorities (e.g. EMBC, Fisheries and Oceans Canada, Canadian Coast Guard); • Indigenous communities; • Health authorities; • Local first responders; • Persons who would need to take protective actions; • Health care facilities; • Contract providers (e.g. spill responders, registered professionals, technical specialists, hotels, etc.); • Critical infrastructure providers (e.g. Telus, BC Hydro); • Municipalities (including public works); and • Recreational organizations.
Map(s) of GRP area	<p>Map(s) identifying:</p> <ul style="list-style-type: none"> • Project boundaries (e.g. pipeline, railroad, and highway); • Land ownership boundaries; • City centers and areas of human habitation; • First Nation reserves; • Parks, conservancies, ecological reserves, and protected areas as defined by the Protected Areas schedule of the Spill Contingency Planning Regulation; • Transportation routes in the GRP area; • Places in the GRP area where spill incidents are most likely; • Waterbodies and wetlands, including seasonal variations; • Locations and profiles of threatened and endangered species, important or unique animal, fish, and plant habitat including seasonal variations in populations or activity; • Sensitive resources at risk;

	<ul style="list-style-type: none"> • Known archeological, heritage, historical, or cultural features; • Known contaminated sites; • Locations of key infrastructure and utilities; • Agricultural resources; • Recreation sites or areas; • Site locations; • Locations of response equipment caches; • Locations of potential staging sites; • Site access (boat launches, access roads, trails, etc.) including seasonal variations; • Anchor points for booming including seasonal variations; and • Areas where spill response actions may be limited with respect to access, velocity of the potential receiving environment (high-flow river), or the ability to recover materials during a response, including seasonal variations.
Response equipment caches	<ul style="list-style-type: none"> • In addition to identifying the location of response equipment, the GRP should identify all of the equipment contained in the caches.
Tactical response strategies	<ul style="list-style-type: none"> • Collection of tactics (mitigation/prevention measures) as well as other information designed to give responders guidance about why, what, and how to protect the values(s) identified; • Measures for responders involved in prolonged spills that require extensive cleanup; • Tactics to address submerged or sinking oils – this might include methods to locate, track, and recover submerged oils.

7.3.3. Advisory Committees

A Minister’s order could be issued for a GRP that would require the establishment of an advisory committee comprised of regional experts, local Indigenous communities, and other entities whose input may support its development. The role of the advisory committee would be to ensure that local interests are reflected during GRP development and testing. The Minister may specify who must be considered to be a part of the committee. There may be one committee for the province-wide GRP development process, regional committees for a grouping of GRPs, and/or individual committees for each GRP being considered.

7.3.4. Linear GRP planning zones

Linear GRPs would be designated around pipelines and railways or along major highways used by multiple regulated persons. A linear GRP is a series of smaller GRPs lined up next to each other providing coverage for the entire length of a pipeline, railroad, or section of a major highway. Wherever possible, the Minister would seek to have new requirements align with existing efforts that are already underway (e.g. for operations that already have effective GRPs in place, efforts would be made to evaluate whether they can satisfy any new regulatory requirements).

The linear GRP concept identifies areas where large volumes of regulated substances are being transported and examines the planning requirements of the geographic region that falls within the area where the transportation is occurring. Linear GRPs would be ordered by the Minister to be developed by one or more regulated persons operating in an area.

Within a linear GRP area, sites are selected for response strategies. When determining locations for site-specific strategies, factors such as flow conditions and other seasonal changes, site access, responder safety, and resource sensitivity to oil and other hazardous materials are taken into consideration. Potential sites are then verified in the field. Once a GRP location has been determined, the most effective response strategy is chosen and tested. The GRP takes into consideration a variety of information about the response area, but the site specific strategy is a two page document that can be printed or accessed electronically.

7.3.5. “Hot-spot” GRPs

Hot-spot GRPs would be designated for specific areas where there are significant environmental, Indigenous, social, or economic values that require protection from potential spills. For example, a hot-spot GRP could be required for an area that includes a drinking water source or contains critical habitat, such as a salmon bearing stream or rare vegetation. In these examples, the hot-spot GRP would outline area-specific strategies that ensure that these values are protected from spilled material.

Much like linear GRPs, hot-spot GRPs would identify areas that require protection and link those to specific response actions with the local resources available to protect those areas. Hot-spot GRPs are smaller than linear GRPs and would identify 1 – 10 locations where tactical, on-the-ground response actions could be initiated to reduce the impact of a spill and then link those sites to dedicated equipment caches made available within the GRP area.

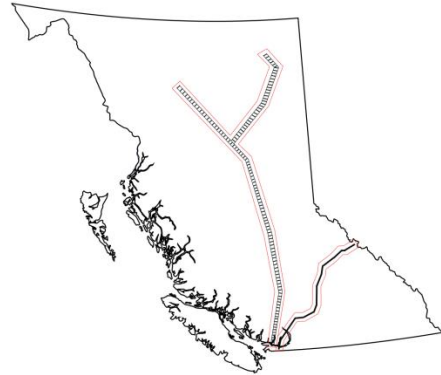
7.4. Implementation

It is acknowledged that GRP coverage throughout B.C. will take many years to achieve. The ministry is proposing an approach to implementation that would develop GRPs primarily for transportation corridors where high-volumes of regulated substances are transported. Under this approach, regulated persons operating pipelines and railways would be required to establish linear GRPs first. Linear GRPs for major highways would follow. This approach places the initial focus for GRP development on areas of the province most at risk from spills. Finally, the ministry would seek to fill gaps in coverage with hot-spot GRPs for specific areas where there are significantly sensitive areas present that would benefit from additional GRP protection. Illustrated below is the three-step proposal for GRP development in B.C.

7.4.1.1. Table E: three-step proposal for GRP development in B.C.

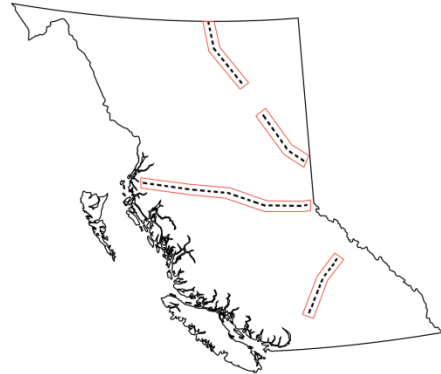
STEP 1

Pipeline and rail linear GRPs – Require regulated persons operating pipelines and railways to establish linear GRPs for the full length of the transportation corridor. Ensure existing GRP efforts that meet the ministry’s objectives are compatible with future GRP requirements. The aim would be to have step one implemented within two to three years of the establishment of new GRP requirements.



STEP 2

Major highway linear GRPs – Require regulated persons operating on major highways to establish linear GRPs for lengths of highway routes where significant sensitivities are present. Given the need for extensive collaboration amongst multiple regulated persons, the aim would be to have step two fully implemented within four to five years of the establishment of new GRP requirements. Proposed highways may include portions of Highway 1 – the Trans-Canada; Highway 3 – the Crowsnest; Highway 5 – the Southern Yellowhead; Highway 5A – the Princeton – Merritt; Highway 16 – the Yellowhead; and Highway 97 – the Alaska.



STEP 3

Hot-spot GRPs – The ministry will consider what additional areas beyond major transportation corridors require GRPs. Any GRP areas that are identified will have localized hot-spot GRPs developed to support immediate response actions that protect local values. The aim would be to identify areas for hot-spot GRPs within one year of the establishment of new GRP requirements and then develop a process to have relevant regulated persons develop GRPs on an annual basis until coverage is complete.



*Graphic for illustrative purposes. Not an accurate representation of where GRPs would be located.

8. POLICY CONCEPT: ADDRESSING LOSS OF PUBLIC USE FROM SPILLS, INCLUDING ECONOMIC, CULTURAL, AND RECREATIONAL IMPACTS

8.1. Description

Loss of public use addresses the impacts of a spill on communities due to loss of use or enjoyment of public spaces and resources. This could include impacts to cultural activities (e.g. subsistence harvesting, food gathering, and ceremonial uses), economic activities (e.g. harvesting for sales and cancelation of tourism activities), recreational activities (e.g. hunting, fishing, camping, and snowmobiling), public places (e.g. parks, beaches, and gathering places), and resources (e.g. wild food resources and drinking water) used by the community, as well as the ‘existence value’ of historical, archaeological, or remote places (e.g. a resource may not be heavily used, but the fact it exists is valued). The impacts could be temporary or long-lasting.

The ministry will also be engaging on the how local authorities and Indigenous communities may be compensated by spillers for response and recovery costs.

8.2. Background

Current legislative and regulatory requirements address the environmental impacts of a spill including pollution impacts to flora and fauna and impacts to human health and infrastructure. Personal damages can be sought through insurance claims or civil court. However, impacts to communities and their well-being as a whole are not currently addressed in EMA and have not been addressed in major spill incidents in the past. Ensuring a spiller and/or the owner of the substance or thing that spilled fully addresses and mitigates all impacts of a spill including impacts to communities is consistent with the ministry’s commitment to the polluter-pay principle.

Loss of public use is already being addressed in neighboring jurisdictions using a variety of legislative and regulatory tools. By applying a number of different tools to measure losses in recreational and cultural use areas, other jurisdictions like Washington and Alaska factor compensation into damage assessments which spillers are then required to pay. The goal of these processes aligns with the ministry’s vision to compensate the public for the harm and loss in value of community spaces caused by a spill. The ministry will also be exploring the concept of requiring spillers to compensate local authorities and Indigenous communities for spill response and recovery costs incurred.

8.3. Policy options

Addressing loss of public use from spills including economic, cultural, and recreational impacts

During and following major spill incidents, communities can be impacted in a variety of ways, including impacts to public places and resources. Environmental damage caused by spills and by the subsequent spill response may cause an upheaval to daily life in a community that may continue for years or even decades after the initial emergency response phase has ended. Public access to parks, wilderness areas, and our coastal areas is an essential part of our culture and identity as British Columbians.

To address these risks, the ministry is exploring an additional component within the existing recovery plan process whereby the ministry may order a responsible person to develop, submit, and carry out a plan to compensate communities for impacts to the use and enjoyment of public places and resources. The plan would describe a process to assess impacts using input from impacted parties and propose actions, including compensation, to mitigate or counteract those impacts. Once approved by the ministry, the spiller would be responsible for implementing the plan.

The ministry intends to engage on the components to be included in the plan and options for determining and valuing impacts, including engagement requirements.

8.3.1. Loss of public use plan development and approval process

Currently, the ministry has the authority under section 91.2 (4) of EMA to order a spiller to develop and implement a recovery plan to address long-term impacts to the environment, human health, and infrastructure due to a spill. The ministry is considering the addition of explicit regulatory provisions to clarify a director's power to order a spiller to assess the impacts of loss of use of public resources as part of a recovery plan and undertake actions to counteract those impacts where applicable. Actions could include financial compensation as well as non-financial compensation for affected communities. Table F below provides examples of compensatory measures to address community impacts for a variety of community impacts.

A brief overview of the process:

- The ministry may approve a plan for implementation, if the plan is inadequate, the ministry can request revisions and re-submission of the plan;
- Once approved, the responsible person implements all actions in their approved plan in accordance with their approved implementation schedule;

- Once all actions are completed, the responsible person must submit a conclusion report declaring that the actions in the plan have been carried out; and
- The ministry expects that the responsible person will hire a qualified professional (subject to any professional reliance requirements that exist) to develop the plan and follow a collaborative, inclusive, and transparent process.

It is the ministry's intent that timelines for development and submission of a recovery plan will be within a reasonable timeframe after a spill occurs to allow for appropriate engagement with impacted communities and exploration of compensatory actions.

Loss of public use is intended to address impacts to broad groups of the public and is not intended as a tool to assess or compensate for impacts to individuals. Where the impacted community is the general public, the ministry may participate in the impact assessment process with the responsible person (e.g. in cases where existence value is the only value impacted). Impacts to a community's collective economic interests may also be addressed using this loss of public use process. Impacts to private lands, businesses, infrastructure, and personal income would continue to be addressed through existing processes (e.g. personal insurance claims, civil court proceedings, or direct compensation agreements between the individual and the responsible person).

8.3.2. Loss of public use plan content

In addition to the general recovery planning requirements laid out in section 6 of the Spill Preparedness, Response and Recovery Regulation, the ministry is proposing to include the following content in a recovery plan to address loss of public use:

- A description and map of all public resources and places impacted and potentially impacted;
- An assessment of the direct and indirect effects of a reduction in use, economic benefit, or enjoyment of public resources on a community, local government, Indigenous community, special interest group, and/or other impacted party;
- A description of the actions proposed to counteract identified impacts and an analysis, in support of those actions, that identifies and weighs alternatives;
- A summary of engagement and consultation completed in both the impact assessment process and to address proposed actions; and
- A schedule for the implementation of the plan.

8.3.2.1. Table F: examples of compensatory measures to address community impacts

Community impact	Compensatory measures
Loss of outdoor recreational opportunity (e.g. hiking)	<ul style="list-style-type: none"> • Fund trail improvements or other infrastructure improvements • Work with the community to develop alternate recreational opportunities
Loss of use of public a park	<ul style="list-style-type: none"> • Fund improvements to the impacted parks and/or other parks in the community
Decreased enjoyment of a public park	<ul style="list-style-type: none"> • Fund improvements to the park or nearby parks • Fund a community event
Impacts to a cultural resource	<ul style="list-style-type: none"> • Work with the local Indigenous community to determine appropriate actions and/or compensation to address this impact
Impacts to wild food resources	<ul style="list-style-type: none"> • Restoration and/or compensation with a focus on planting wild food plants • Actions to improve fish and wildlife habitat and populations
Impacts to remote places	<ul style="list-style-type: none"> • In addition to restoration, determine impacts to the existence value of the impacted location and determine what actions or compensation will address those impacts
Impacts to a community's economic interests	<ul style="list-style-type: none"> • Fund community economic development opportunities and provide compensation for those that have been lost
Direct response and recovery costs incurred	<ul style="list-style-type: none"> • Direct compensation may be most appropriate in this circumstance.

8.3.3. Restorative justice and loss of public use

Restorative justice interprets offences as a violation of people, relationships, and community values and seeks to repair harm through discussion and negotiation between offenders and victims. The ministry is considering encouraging the use of restorative justice as part of the loss of use planning process. A restorative justice approach could be used to determine compensation actions or payment amounts for community impacts from spills that violate EMA. This approach is sometimes used by government to address issues of non-compliance committed by regulated persons under environmental legislation. This approach would only be considered when the responsible person did not intend to commit the offence, when the responsible person admits fault or takes responsibility for the offence, or when the spiller, community representatives, and the ministry freely and fully consent to participate. The major benefits of this approach are: (1) the people affected by a spill are able to participate in its resolution; (2) it avoids long and costly review processes most commonly associated with court proceedings; and (3) restitution or corrective actions serve the community's interests. Ultimately, however, if a resolution cannot be reached between parties, it is envisioned that the ministry would exercise the authority to impose a solution and/or compensation on the spiller.

Case study: restorative justice in Trail, B.C.

In 2010, Teck Metals, a zinc and lead smelting and refining complex located in Trail, B.C., reported a mercury discharge into the Columbia River and a leachate overflow into Stoney Creek. Teck Metals reported the spill to the proper authorities and accepted full responsibility for the unauthorized discharge. At the conclusion of a lengthy joint investigation under the *Fisheries Act 1985* and EMA, the B.C. Conservation Officer Service and Environment Canada's Environmental Enforcement Branch recommended the community justice forum process as a method to resolve these incidents. Two forums brought together the parties involved and those impacted by these incidents, including representatives of the company, employees, community, and environmental groups. As the result of the forums, the parties reached an agreement where Teck Metals agreed to pay \$325,000 to benefit community environmental initiatives such as the Kootenay Columbia Trails Society and committed to reviewing various aspects of their sump and piping configuration to prevent future occurrences.

8.4. Implementation

Should future loss of use requirements be created, the ministry would provide guidance to spillers in the event they are ordered to develop and implement a recovery plan that addresses loss of public use.

9. POLICY CONCEPT: MAXIMIZING THE MARINE APPLICATION OF MINISTRY ENVIRONMENTAL EMERGENCY REGULATORY POWERS

9.1. Description

The marine application concept refers to the opportunity to enhance existing ministry authorities, within BC's jurisdiction, to ensure provincial interests are fully addressed in marine spill prevention, preparedness, response, and recovery. While the primary responsibility for marine spills rests with federal agencies, a spill of any significance will impact and involve all orders of government.

9.2. Background

In Canada, both the federal and provincial governments have interests in the marine context. Marine spill management is regulated by Transport Canada under the *Canada Shipping Act 2001 (CSA)*. The established polluter-pays framework requires vessels of a certain size to pay fees to regional response organizations which maintain plans, staff, and equipment to respond to marine spills. On the west coast of B.C., Western Canada Marine Response Corporation (WCMRC) is the only Transport Canada certified response organization. The Canadian Coast Guard is the lead agency responsible for overseeing responses to ship-source spills. If the source of the spill is unknown or if the responsible person fails to respond effectively, the Canadian Coast Guard will manage the response.

At the provincial level, the ministry is the lead coordinating agency in the event of oil and other hazardous spills, as outlined in the *Emergency Program Act 1996*. Currently, during a spill incident, the ministry, in conjunction with EMBC, is responsible for coordinating the response of all provincial agencies and providing provincial on-scene command. The ministry, under the authority of EMA, also regulates the management of any hazardous waste that may be generated from a spill event.

As the provincial lead for environmental emergencies, the ministry works with federal lead agencies on any spills under federal jurisdiction that impact provincial interests. Coordination is critical because marine spills can initiate in an area under one government's jurisdiction and migrate to the other government's jurisdiction (e.g. a ship-source spill reaching a beach). Incidents such as the leakage of oily water from the *MV Marathassa* into English Bay in 2014 and the grounding of the *Nathan E. Stewart* tug in 2016 highlight the value of continuing to strengthen marine response and recovery in a way that complements and is coordinated with federal spill regulations.

9.3. Policy options

Maximizing the marine application of ministry environmental emergency regulatory powers

While marine spill management is regulated by Transport Canada, and the Canadian Coast Guard provides lead agency oversight for industry response to ship-source spills, the Province of B.C. has a significant interest in maximizing the application of the ministry's regulatory authority with respect to oil spill prevention, preparedness, response and recovery. Division 2.1 of B.C.'s EMA and its associated regulations apply to marine spills in many respects, including new reporting and recovery requirements (effective October 30, 2017), and in cases where a land-based spill migrates to the marine environment.

The ministry intends to explore whether there are additional opportunities within B.C.'s jurisdiction to enhance provincial regulations with respect to all spills in or affecting the marine environment,

including ship-source spills. Policies will be developed in continued collaboration and coordination between provincial and federal regulatory frameworks.

The ministry intends to engage on: the marine application of spill reporting; response actions; GRPs; loss of public use; and recovery planning to ensure the protection of provincial interests in the marine environment.

9.3.1. Marine application of spill reporting

The Spill Reporting Regulation outlines the potential for more than four reports to be required for an incident; an initial spill report, update report(s), an end-of spill report, and, if ordered by a director, a lessons-learned report. The ministry intends to require compliance with the Spill Reporting Regulation for marine spills where provincial resources are impacted. Further, recent incidents have uncovered opportunities for enhanced collaboration for alerting and notification procedures among the Canadian Coast Guard, EMBC, and the ministry following marine spills. The ministry intends to work closely with federal partners as it pursues the full application of its Spill Reporting Regulation for marine spills where provincial resources are impacted.

9.3.2. Marine application of response actions

The CSA establishes federal responsibilities from monitoring to managing clean-up efforts for any ship-source or mystery source pollution incident in marine waters under Canadian jurisdiction. The ministry's objective is to ensure that response actions for the marine environment are comprehensive, integrated, and well understood by all relevant parties. This means an assessment of existing practices is needed to make sure that no gaps exist between federal and provincial requirements, including:

- Minimum response times for responders and equipment;
- Minimum training and qualifications for all on scene responders;
- Access to the best technology available for marine spill clean-up;
- Use of the Incident Command System to ensure a coordinated and integrated response amongst all those involved;
- Communications plans are activated based on the seriousness of the spill; and
- Continuous improvement of the response protocol.

The ministry will consider policy options to fill gaps identified in the regulatory mandates, roles, and interactions of federal and provincial response agencies, exploring opportunities for: (1) further cooperation; (2) formal government-to-government agreements; and/or (3) additional provincial requirements within B.C.'s jurisdiction.

9.3.3. Marine application of recovery planning

The mechanisms for spill recovery are laid out in the Spill Preparedness, Response and Recovery Regulation. Following a spill, a director can order a spiller to develop and fully implement a recovery plan that addresses the long-term environmental impacts caused by the spill. In all instances where provincial resources are impacted, the ministry intends to exercise its authority to order a spiller to develop and implement a recovery plan. The ministry intends to work closely with federal partners to ensure that the province's recovery requirements are fully understood by marine operations and that when an EMA director orders a recovery plan, a responsible person for a marine spill complies.

9.3.4. Marine application of geographic response plans

The ministry is currently exploring options for area based planning on the provincial land base and is participating in a number of external marine initiatives aimed at developing coastal and marine response plans. The ministry is aware of current initiatives led by the Canadian Coast Guard, Indigenous communities, as well as industry and is interested in continuing with a collaborative planning approach tailored to the risks and conditions specific to B.C.'s marine environment. In an effort to address potential gaps, while avoiding unnecessary duplication and excessive regulations, the ministry intends to work closely with our outside partners to ensure marine plans are developed collaboratively and in recognition of emerging provincial and federal requirements.

9.3.5. Marine application of loss of public use

A significant gap exists in compensation for loss of public use from spills in B.C. While the ministry examines policy options to address loss of public use impacts associated with land-based spills, it is also important to ensure that measures are in place to address loss of public use when the marine environment is impacted, such as loss of public use of public beaches and other recreational areas. There is no established process in federal statutes or regulations that dictate how long-term impacts to the environment or affected communities will be determined or compensated for. In cooperation with federal partners, the ministry intends to explore opportunities to provide for loss of public use compensation with respect to spills in or affecting marine environments.

9.4. Implementation

The ability to strengthen provincial regulations for the marine sphere will center on the province's responsibility to protect provincial resources. In cases where requirements are best developed and administered by federal regulators, federal-provincial cooperation exists as an extra-legislative option. The ministry will invite federal participants to join the working group it establishes for this policy concept.

As part of its policy work and engagement efforts, the ministry will thoroughly review Division 2.1 of EMA and its associated regulations to determine precisely where it has existing authorities for the marine environment. At the conclusion of this review, the ministry will issue a detailed report stating how its legal framework applies to spills in or affecting the marine environment and how the ministry will participate in such incidents going forward. The ministry may recommend regulatory changes where it becomes apparent there are gaps that need to be addressed to ensure effective marine spill preparedness, response, and recovery.

Initially, the ministry intends to ensure that the first phase of enhancements (effective as of October 30, 2017) will protect provincial interests for the marine environment in the same way they do for land-based spills. The ministry intends to work to ensure that provincial requirements for spill reporting, response actions, cost recovery, and recovery planning are fully applied.⁷

Second, the ministry will ensure that all future enhancements consider both land-based and marine-based spill management wherever it makes sense to do so; starting with the GRPs and loss of public use concepts currently being considered for policy development.

Finally, the ministry is prepared to consider policies that improve marine spill response even in those instances where a corresponding provincial land-based requirement or policy interest does not exist.

10. ENGAGEMENT TIMELINE

The ministry has planned several engagement sessions on the policy concepts outlined in this intentions paper to ensure it hears from Indigenous communities, local governments, federal agencies, industry, environmental organizations, emergency responders, stakeholders, and the public. Obtaining feedback is essential as it ensures that the perspectives of those who are interested and/or impacted by the policy being pursued can provide their perspectives and expertise to the ministry to consider when designing policy proposals. In finalizing the policy direction, the ministry will consider the feedback it receives alongside its internal research and the policy principles identified in this paper.

Intentions paper and “what we heard” summary report – Publicly released in February 2018, the purpose of the intentions paper (this document) is to introduce the policy concepts that the ministry is exploring and obtain feedback from anyone who wishes to provide it. Details on how to provide feedback are located under section 10 of this document. The opportunity for the public to provide feedback on the intentions paper will be available for 60 days following its publication. Following the public feedback period, a “what we heard” summary report will be released in May 2018 allowing 60

⁷ The ministry will continue to find ways to cooperate with our federal partners to ensure the development and testing of spill contingency plans for the marine sphere complement provincial requirements through ongoing collaboration.

days for commenting and 30 days to compile the report. Feedback can be provided via survey or written submissions at engage.gov.bc.ca/SpillsRegulation.

First Nations engagement and First Nations engagement summary report – In April and May 2018, the ministry, in collaboration with the First Nations Fisheries Council, will engage with Indigenous communities from across B.C. Workshops will take place in seven locations. The schedule has full-day sessions planned for: Terrace, Kamloops, Prince George, Fort St. John, Bella Bella, Nanaimo, and Vancouver. Indigenous communities will also be welcome to participate in other planned engagement activities and to provide written submissions. The First Nations Fisheries Council will prepare a summary report of the feedback received during the seven engagement sessions they have organized with the ministry. The report will be released publicly in July 2018.

Technical working groups – Working groups comprised of representatives from those entities that are most impacted and interested in spill management in B.C. will be established in March 2018 for a three to four month period for each of the policy concepts. The purpose of these working groups will be to provide research, analysis, and feedback in support of refining the policy concepts. Each working group will produce a report which will be developed and released publicly in June 2018. Participation will be by invitation, with members selected primarily for technical subject matter expertise.

Policy update and summary of comments report – Once the primary engagement activities are complete, the ministry will publicly release a policy update in August 2018 specifying how the policy concepts, first introduced in February 2018, have evolved and what the ministry intends to recommend for phase two legislative, regulatory, and/or policy enhancements. The ministry will prepare a summary report of the feedback received on the policy update. The report will be released publicly in November 2018. Details on how to provide feedback on the policy update will be outlined in that report at the time of its release, commenting will likely remain open for 40 – 60 days.

Implementation – Once ministry decisions have been made on what phase two legislative, regulatory, and/or policy enhancements are to be pursued, the ministry will complete the work required to design the enhancements and work on implementing and communicating them using a combination of fact sheets, in-depth guidance documents, presentations, and workshops. Depending on government direction, phase two regulations will be implemented as early as 2019.

10.1.1.1. Table H: Overview of engagement activities in 2018

Month	Event
February	Engagement launched Intentions paper released
April	First Nations engagement workshops launched Technical working groups launched
June	“What we heard” summary report released
July	First Nations summary engagement report released Technical working group reports released
August	Policy update released
November	Policy update summary comments report released

11. COMMENTING ON THIS POLICY INTENTIONS PAPER

The ministry welcomes written feedback on all components of the intentions paper. The ministry will use any comments it receives on the intentions paper, along with internal research and feedback obtained from other engagement activities, to inform the policy options it puts forward for government to consider.

An online questionnaire has been developed to provide the public and stakeholders with an opportunity to share their perspectives on the policy concepts in this intentions paper. The questionnaire will be available online until April 30, 2018. Written submissions will also be accepted. Feedback received by April 30, 2018 will be summarized in a “what we heard” report, which will be released publicly in June 2018.

Instructions on providing written feedback electronically and completing the online questionnaire can be found at engage.gov.bc.ca/Spills Regulation. Letters and paper copies of written feedback can also be submitted to the following mailing address:

Attn: Citizen Engagement
 Government Communications and Public Engagement
 PO Box 9409 Stn Prov Govt
 Victoria BC
 V8W 9V1