World-Leading Land Based Spill Preparedness and Response in British Columbia

The Perspective of Large Liquid Hydrocarbon Transporters

Canadian Energy Pipeline Association
Railway Association of Canada

In consultation with
Western Canada Marine Response Corporation
Western Canadian Spill Services Ltd.

March 17, 2014
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World-Leading Land Based Spill Preparedness and Response in British Columbia

The Perspective of Large Liquid Hydrocarbon Transporters

1. Executive Summary

Companies and organizations that today provide the vast majority of liquid hydrocarbon transportation services and oil spill prevention, response and recovery systems in British Columbia support the initiative by the Ministry of Environment (MOE) for a world leading land based spill preparedness and response regime. Safety and integrity are top priorities for the pipeline and railway sectors. While existing preparedness is robust, we are committed to continuously identify new approaches and opportunities to enhance transportation safety in Canada.

This paper is focused on pipeline and railway transportation of liquid hydrocarbons.

As a starting point, we believe that the establishment of an Industry Steering Committee (ISC) would fully and most expeditiously meet the MOE Guiding Principles and Ministry Intentions. The ISC would provide a one-window approach for coordination and communications with regulators and stakeholders, and would ensure effective and sustainable land oil spill prevention, preparedness, response and recovery, while continuing to allow individual companies to address their specific risks. Next steps include drafting detailed mandate and Terms of Reference, liaising with the evolving policy discussions in the Federal Government, determining the optimum governance and funding model and considering undertaking a comprehensive land based oil spill needs assessment.

2. Purpose

The purpose of this position paper is to articulate a vision for a world-leading, robust and continuously improving land based spill preparedness and response capacity in British Columbia while extracting maximum leverage and benefits from existing systems, organizations and capabilities, and ensuring seamless and effective implementation in concert with evolving policies and regulations of other provinces and of the Federal Government.

3. Background

The Government of British Columbia established five necessary conditions for support of heavy oil projects. The third condition requires world-leading practices for land oil spill prevention, response and recovery systems to manage and mitigate the risks and costs of heavy oil pipelines. In December 2012, the British Columbia Ministry of Environment (MOE) published a policy intentions paper for consultation concerning Land Based Spill Preparedness and Response

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1 British Columbia Ministry of Environment (2012), Land Based Spill Preparedness and Response in British Columbia, Policy Intentions Paper for Consultation
inviting feedback by February 2013 and hosting a well-attended symposium in March of the same year. Rounds of meetings of three working groups and of an advisory committee have now concluded and the MOE plans to publish a second intentions paper in early 2014.

In November 2013, Alberta Premier Alison Redford and British Columbia Premier Christy Clark announced a framework agreement between the two provinces on moving energy resources to new markets. The Deputy Ministers Working Group report of December 2013 includes principles and recommendations for a world class marine and terrestrial spill prevention, preparedness and response regime.2

4. Contributing Organizations

This document presents the perspective of a group formed through collaboration and composed of the Canadian Energy Pipeline Association (CEPA), the Railway Association of Canada (RAC), the Western Canada Marine Response Corporation (WCMRC) and Western Canadian Spill Services Ltd. (WCSS). The document also includes contributions from the following companies: Northern Gateway Pipelines, Kinder Morgan Canada, Pembina Pipeline Corporation, Canadian National Railway and Canadian Pacific Railway.

Throughout 2013, many of the contributing organizations actively participated in the MOE consultation process, attending the symposium and working group meetings, as well as submitting input in written form. These activities, as well as our operating knowledge, skills and track record, have informed the consensus view that we respectfully present in this paper.

Collectively, the contributing organizations provide the vast majority of liquid hydrocarbon transportation services and of oil spill prevention, response and recovery systems in British Columbia, and we offer deep expertise and recognized experience in ensuring the integrity and safety of the transportation of large volumes of heavy oil and other commodities.

5. Ministry of Environment Policy Intentions

The MOE policy intentions paper proposed Guiding Principles and a description of Ministry Intentions.

Guiding Principles

Through active participation, the contributing organizations have supported the MOE’s initiative for a world leading land based spill preparedness and response regime. The sentiments behind the seven Guiding Principles are aligned with the visions, missions and mandates of our respective organizations and companies. Safety, systems integrity and protection of the environment are major priorities for the pipeline and railway sectors and we are committed to continuously identify new approaches and opportunities to enhance transportation safety in Canada. Indeed, today’s regime for operational safety, emergency preparedness and

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2 British Columbia/Alberta Deputy Ministers Working Group (2013), Report Prepared for Premier Christy Clark and Premier Alison Redford
environmental protection has been built on strong partnerships between industry, all levels of government and the communities in which we operate.

**Ministry Intentions**
The MOE is seeking to strengthen spill preparedness and response in three specific areas:

- Establishing a world leading regime for land based spill preparedness and response;
- Developing effective and efficient rules for restoration of the environment following a spill;
- Ensuring effective government oversight and coordination of industry spill response.

**World Leading Regime for Land Based Spill Preparedness and Response**
We support seeking a comprehensive and effective world leading regime for land based spill preparedness and response, built on a philosophy of continuous improvement. We believe that industry has and continues to demonstrate a strong track record of addressing the risks to the environment and to public safety through our policies, skills training and specialized capabilities that promote prevention, a culture of safety, emergency response capacity and a commitment to restoration following a spill. We continue to consider emergency response to be a shared responsibility.

Consistency, based on recognized standards and systems, is critical to strengthening performance across all jurisdictions nationwide. This will enable seamless alignment between provincial and federal jurisdictions, sharing of learning and best practices, and maximum leverage of resources such as similar training programs and interchangeable personnel and equipment. We would prioritize a coordinated regulatory framework to effectively minimize the risk and liability associated with moving dangerous goods in Canada.

In particular, we see significant value in an industry driven and self-sustaining Industry Steering Committee (ISC) to enhance coordination and communications between transporters, governments, host communities, and providers of land based oil spill prevention, response and recovery systems which include cooperatives such as the WCSS and the WCMRC. Cooperative organizations have proven to be an effective vehicle for prompt availability of response equipment, technical training, and the development and maintenance of contingency plans to complement the extensive expertise, equipment and financial support for prevention, emergency response and recovery that pipeline and railway companies maintain in-house. The ISC could be the starting point for a more formal organizational framework to be subsequently pursued.

We also support the MOE’s intention to enhance local engagement through Geographic Response Plans that reflect input from local communities, First Nations and other stakeholders, and to collect, store and publish of spill data. Details of our suggestions and input are found in Appendix 1.
Effective and Efficient Rules for Restoration of the Environment

The MOE’s intention to clarify the parameters for remediation, restoration, and recovery activities would be a step forward in comparison to the current approach. We support effective and efficient rules for restoration of the environment following a spill as well as appropriate consultation and environmental monitoring in coordination with appropriate regulatory agencies and impacted stakeholders.

Effective Government Oversight and Coordination

We do not believe that the establishment of a government-led, industry funded spill response organization is necessary or optimum as the implementation mechanism. Furthermore, our view is that additional collection of funds for the establishment of a provincial spill response fund is not required. Government engagement in the Industry Steering Committee as described below would fully and best meet the objectives of the Guiding Principles and Ministry Intentions.

6. Industry Steering Committee

Existing Situation

Transporters of large volumes of liquid hydrocarbons through British Columbia, such as pipeline and railway operators, follow best practices for prevention and have pre-invested in significant preparedness and response capabilities. In addition, equipment caches are maintained inland British Columbia by WCSS and along the Pacific coast by WCMRC. While WCSS and WCMRC have currently limited presence along some of the transportation corridors, strengthened presence could be contemplated as a consideration for ISC. Finally, companies contemplating expansion projects have also committed to commensurate additional capacity in equipment and staff. A map outlining current and proposed spill response team and equipment locations in British Columbia in relation to transportation corridors is shown in Figure 1. Additional details are provided in Appendix 2.

Preparedness goes further than equipment caches, as pipeline, railway operators, WCSS and WCMRC collaborate in skills training and share lessons learned.

With these capabilities, industry is demonstrating that significant amounts of equipment and personnel are available and ready to be deployed when needed.

Furthermore, the existing federal and provincial regulatory frameworks and the risk mitigation programs implemented by operators ensure that the risk associated with moving dangerous goods in British Columbia is minimal.
**Figure 1.** Equipment and Responder Locations in British Columbia and Alberta
**Purpose and Role of the Industry Steering Committee**

The purpose of the ISC is the implementation of a world leading and continuously improving land based spill preparedness and response capacity in British Columbia while extracting maximum leverage and benefits from existing systems, organizations and capabilities, and ensuring seamless and effective implementation in concert with evolving policies and regulations of other provinces and of the Federal Government.

MOE Guiding Principles and Ministry Intentions would be best and most expeditiously achieved by harnessing and coordinating existing expertise, experience, capabilities and equipment through the ISC which would allow for a one-window approach for coordination and communications, and would ensure effective and sustainable land based spill preparedness, response and recovery, while continuing to allow individual companies to address their specific risks. A subscription and self-sustaining business model would be established that is commensurate to each operator’s level of risk and to the risk mitigation programs and capabilities that they already have in place. Active regulator and stakeholder interaction would be available and encouraged through representation on the Steering Committee. The ISC would also look to form appropriate alliances with existing response organizations nationwide.

Incident response, including the management of resources to address incidents, should continue to remain firmly with the operator and not with the ISC or other entity.

Specific duties of the ISC are likely to include:

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

With MOE support, the ISC would take the appropriate steps to reach out to stakeholders and proceed with drafting detailed terms of reference and examine appropriate governance structures in order to ensure effective and sustained implementation.
7. Conclusion and Next Steps

The objective of a world leading land based spill preparedness and response regime in British Columbia is one that is shared by industry and government. Safety, integrity of operations and protection of the environment are major priorities of the pipeline and railway sectors in Canada, as evidenced by existing and planned investments in equipment and skills training for prevention, response and recovery systems. The shared objective of a world leading spill preparedness and response regime would be fully and most expeditiously met by the establishment of an Industry Steering Committee as the leadership vehicle for coordination and communications with transporters, spill response and recovery service providers, governments, regulators, First Nations, local communities and other stakeholders. The ISC would leverage the existing capabilities and expertise of transporters and of cooperative organizations (WCSS and WCMRC) and could be the starting point for a more formal organizational framework.

Next steps for the implementation and launching of the ISC include:

- Drafting of the mandate and terms of reference
- Liaising with the evolving policy discussions in the Federal Government
- Determining the optimum governance and funding model for ISC
- Considering undertaking a land based oil spill needs assessment.

With government support for this approach, the industry can move forward rapidly with the establishment of the ISC targeting having a fully functional system in place before the end of 2014.
Appendix 1 – Specific Responses to MOE Objectives and Topics

*Working Groups 1 and 3*

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<th>MOE Objective</th>
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<th>Proposed Initiatives</th>
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<td>Housing spill data, spill reports, and information on spill responders and equipment</td>
<td>Housing of spill data should continue to be an initiative through the MOEs programming. Information on spill responders and equipment is housed by individual companies as part of their emergency management programs and is available for viewing upon request.</td>
<td>The proposed geographic plans will allow for more collaboration and openness regarding response resources allowing for a venue for availability of responder and equipment data.</td>
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<td>Development, housing and maintenance of geographic response plans will require meaningful local input.</td>
<td>The authors agree with this objective and offers that there are many elements of geographic plans developed or in development within an individual company’s existing emergency plans.</td>
<td>The authors would be open to sharing existing internal geographical plans as part of a commitment to transparency and cooperation. This cooperation would be an excellent window for municipal, provincial and identified stakeholder involvement and communication in order to appropriately identify and catalogue receptors and response challenges within a given geographic plan.</td>
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<td>Verify RO and/or individual companies’ state of readiness; or – as stated above – serving as an RO.</td>
<td>It is the opinion of the authors that a specific Ministry of Environment regulated Response Organization would be impractical because of the geographic realities in the province of BC and possible conflicts and redundancies with current regulations. Instead the efficiencies of current external response contractors and internal response teams should be leveraged in order to strengthen the province’s wide response capabilities. Strategic planning should be used with specific emphasis on area plans to fulfil the objectives proposed in the symposium and working groups 1-3. Area plan development will allow for specific emphasis on geographic realities in the preparation, mitigation and response stages of spill response.</td>
<td>Active regulator and stakeholder interactions are encouraged and would be available through formal liaison with and representation to the authors and allow for access to the foremost expertise throughout the continent through member companies. The authors would also look to form strategic alliances with existing response organizations and provide credible technical advice to the government on response priorities, objectives and actions coinciding with current regulations. The operations of the authors would be open for cooperation and transparency as they are seen to be the key elements of credibility. The authors will ensure public safety and net environmental benefits are openly addressed and communicated as the top response priorities.</td>
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<td>Active regulator and stakeholder interactions have been encouraged to individual companies through their exercise regime and various existing industry committees. This involvement has been informal and varied based on initiatives and availability of individual companies and regulators.</td>
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<td>Coordinating and cataloguing community preparedness and ensuring appropriate resources are available at the local level.</td>
<td>The authors agree with this objective. It would be beneficial to the authors as an organization as well as the individual companies. Individual efforts are being made by companies to further the response training and capabilities through training outreach programs.</td>
<td>Based upon the results obtained by the MOE in their cataloging initiative, the authors may be able to leverage synergies and work together in order to address gaps in municipal emergency preparedness where appropriate and work with identified subcontractors in order to provide response assistance throughout the province.</td>
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<td>Create certainty around industry/response organization state of readiness</td>
<td>The authors acknowledge that there is room for improvement regarding regulatory and stakeholder engagement in terms of preparedness communications. Individual companies will continue individually to engage regulators and stakeholders in their exercise development and conduct.</td>
<td>The authors will pursue public communication as well as stakeholder and regulatory engagement through assessment of current communication programs and identification of enhancements.</td>
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<td>Ensuring adequate technical and special expertise is in place</td>
<td>Individual companies have technical expertise in house or on contract. These resources and their relevant 24/7/365 contact information is included in individual company’s emergency response plans.</td>
<td>Sharing of technical resources may be possible through industry led initiatives. Increased cooperative planning may allow for gap identification and formalization of industry best practices in technical expertise and could lead to the development of industry best practices to respond to spills in various conditions. The sharing of technical resources may take the form of a shared resource list of subject matter experts and other resources that that could be used to assist with a spill response.</td>
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<td>Timely capacity / capability for technical or special expertise</td>
<td>Individual companies have equipment and personnel throughout the province commensurate to their risks (as shown in Figure 1 and Appendix 2).</td>
<td>Working together with regulators the authors may find gaps in response capabilities or specific receptor risks that will be addressed.</td>
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<td>Coordinating spill prevention programs</td>
<td>Individual companies have active spill prevention programs that are mandated by federal and / or provincial legislations in addition to programs that are followed through commitments to industry best practices.</td>
<td>Continued sharing of learnings and best practices could be formalized through the industry led initiative. This formalization would allow for more transparency with regulatory and stakeholder involvement and may take the form of a program where lessons learned from spills and training exercises as well as best practices could be shared with all stakeholders.</td>
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<td>The need for a coordinated, ongoing sustainable spill prevention program.</td>
<td>The authors agree with the need for ongoing sustainable spill prevention programs. Current prevention plans have been addressed above, and are considered to be sustainable.</td>
<td>Coordination of response planning through mutual aid and leveraging of current individual company capabilities would be the founding objective of an industry led initiative.</td>
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<td>British Columbians are confident that spill response is timely, appropriate, and effective; and, the Ministry of Environment has a tool for ensuring response is conducted according to established minimum levels. With the leading option of developing regulations or guidelines that establish response standards on response time guidelines, equipment and personnel levels and location requirements, and exercising and testing requirements.</td>
<td>The authors agree with the role of government as stated but argue that the accountability and responsibility for public safety, infrastructure, business and environmental protection is a shared responsibility between government, communities and the spiller. The authors also believe that industry can develop a sustainable effective spill preparedness and response program that meets regulatory and public expectations without the development of additional regulations. The authors submit that there are existing prescriptive regulations that govern the individual companies regarding training level requirements of employees as well as exercising and testing requirements. There are also existing outcome expectation regulations regarding response expectations that govern equipment and personnel levels for response as well as response time guidelines. Further, there are existing regulatory requirements for the auditing of emergency response plans specific to the transportation corridors that address the effectiveness of proposed</td>
<td>In future, the authors would seek to leverage current capabilities through mutual aid for response and sharing of emergency plans in order to ensure comprehensive and holistic risk assessment. Further, the group will seek to develop a recommended standard training matrix for internal and subcontracted emergency response personnel based upon their job functions in a spill response. Synergistic priorities in spill response would be greatly fostered by regulator and stakeholder involvement in the authors in the planning stages of spill response to allow for the best advisory communication of priorities in the creation of the area plans. Continued individual company efforts in municipal, regional and first responder training and outreach programs will continue with potential mutual efforts made through group cooperation to address gaps that may be found.</td>
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response tactics and strategies. The authors observe that prescriptive rules in regulatory requirements are demonstrated to be sub-optimal in most jurisdictions where they are applied. Objective based priorities in preparedness accompanied by immediate guidance in the response phase would be significantly more effective.

Working Group Paper 1 stated that “the primary role of government is to demonstrate and apply governance, that it is government, not the spiller that has the accountability and responsibility to determine priorities for the public, infrastructure, business and environmental protection and to establish and monitor response performance”.

The authors agrees with this statement and offers that only through clear communication on response capabilities as outlined in this paper, and demonstrated in exercises that are made open to regulators, including the MOE – may priorities and communication of those priorities be demonstrated before a spill incident will allow for world class spill response with synergistic objectives between the regulators and the spillers occur in the event of a spill.
<p>| Consistent spill impact monitoring | Individual companies employ consultant subcontractors to initiate spill impact monitoring. | Active regulator expectation communications are invited on this topic and may be communicated through interaction with industry as a whole and with specific meetings such as what will be possible with industry led initiatives. Sharing of technical resources may be possible through the authors. Increased cooperative planning may allow for gap identification and formalization of industry best practices in technical expertise. |</p>
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<td>All parties involved in a response understand their roles and responsibilities and are able to support achievement of spill response standards. With the leading objective to establish regulatory requirements that ensure the incident command system is consistently applied above Tier II.</td>
<td>The authors are in full agreement and will continue to use ICS and IMS in their spill response operations as well as train internal staff and work with subcontracted responders, first responders and regulators within the ICS framework.</td>
<td>Where ICS training needs are identified the authors may enter into mutual aid outreach education programs.</td>
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<td>All responders have the appropriate levels of skills and competencies for the role they are assigned, supporting achievement of response standards and reducing health and safety risks. With a leading option of establishing regulatory requirements that ensure responders are trained to provide an effective response to a spill.</td>
<td>Individual companies are currently maintaining at least minimum training requirements for their internal and subcontracted staff. Training requirements are specific based upon individual company risk and are best assessed by the company though industry stakeholder communication and advisory are welcomed.</td>
<td>Mutual training and exercise scheduling could be facilitated by the authors in order to increase the training and experience of internal and sub-contracted responders to capitalize on efficiencies through joint exercises. An industry best practice of a minimum training matrix or a training pathway may be developed by the group. This matrix would be created through the coordination of a training needs assessment program and establishing training objectives. Further work in this area could come in the form of coordinated program development where gaps or opportunities have been identified. Mutual aid arrangements may also be possible for training provision for volunteers and laborers in the event of an incident that exceeds the resources of the spill location.</td>
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<td>Persons or businesses that suffer a loss due to a spill are easily and quickly able to access information about the claims process; and, (2) response to injured wildlife is coordinated. Public enquiries and reports of injured wildlife are funneled through a single contact point, freeing responders to concentrate on other priorities.</td>
<td>Individual companies within the authors have active claims programs that are activated in the event of loss due to a spill. Wildlife response and communications planning is included in each company’s emergency response plan.</td>
<td>Industry experts could be accessed through the member companies for an educational seminar for member companies, stakeholders and regulators in order to further understanding of wildlife response. The authors could work together to coordinate an assessment of the current status of wildlife response capability and identify enhancements.</td>
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### Working Group 3 Topic 4

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<td>The responsible party and province are both able to accurately and as quickly as possible start assessing the impact of a spill on the surrounding environment.</td>
<td>Individual companies within the group include consultants for spill impact and assessment in their emergency response plans. These subcontracted resources are engaged in an emergency response capacity and will respond to site when called upon for impact assessment of spills. Typically these resources are activated before ministry requests for activation are made.</td>
<td>Industry experts could be accessed through the member companies for an educational seminar for member companies, stakeholders and regulators.</td>
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Appendix 2 - Oil Spill Response Equipment

*British Columbia and Alberta*

The following provides a general overview of oil spill response equipment in British Columbia and Alberta that is owned and maintained by pipeline and railway companies as well as emergency preparedness and response organizations. Alberta is included because the two bulk liquid hydrocarbon pipelines, the proposed new pipelines and two railway companies that operate in B.C. have equipment located in Alberta that can be dispatched to B.C. locations if required. In addition, equipment maintained by WCSS can also be utilized throughout the province on a case-by-case basis.

Figure 1 provides the approximate location of the equipment described in the section.
Pipeline Companies – Trans Mountain Pipeline (operated by Kinder Morgan Canada)

Currently there are equipment caches in five locations in British Columbia:

- Burnaby
- Westridge
- Hope
- Kamloops
- Blue River

Kinder Morgan also maintains an extensive inventory of equipment in Alberta which is available for transport to other locations if required (i.e. Jasper, Gainford, and Edmonton).

The equipment is designed to contain and recover liquid hydrocarbon in surface water with an emphasis on rivers; in several locations the company has jet boats that would be used to deploy the equipment. The company has a corporate emergency response plan that includes control point information, resource lists of contractors and subject matter experts that could be involved in spill control. Kinder Morgan holds several emergency response exercises/drills annually where equipment is deployed in surface water and they also maintain their internal training programs.

Kinder Morgan also has a mutual aid agreement with other pipeline members of the Canadian Energy Pipeline Association (CEPA) including Pembina Pipeline and Enbridge, and is a shareholder of both WCMRC and WCSS.

![Figure 2 - Picture of Typical Oil Spill Equipment Deployment Training Exercise](image-url)
Pipeline Companies – Pembina Pipeline

Pembina Pipeline maintains oil spill response equipment in the following B.C. locations:

- Fort St John
- Willow Flats (Chetwynd)
- Prince George
- Kamloops

Pembina also has equipment caches in Alberta (i.e. Grande Prairie, Edmonton) that can be transported to any location as required. The response units are self-contained with all of the hardware required to deploy in a river or lake environment; Pembina equipment also includes boats.

Figure 3 - Pembina Pipeline – Response Equipment

As indicated Pembina has a mutual aid agreement with Kinder Morgan and Enbridge as well as other CEPA members and is affiliated with WCSS. Like the other pipeline companies they maintain corporate ER Plans, supplemental oil spill contingency manuals and hold annual ER drills and equipment deployment exercises.
Pipeline Companies – Northern Gateway Pipelines / Proposed Pipelines

Northern Gateway Pipelines has regional equipment locations identified in their proposed pipeline plan that extends from Alberta to Kitimat, including:

- Whitecourt, AB
- Smokey River Pump Station, AB
- Tumbler Ridge, B.C.
- Prince George, B.C.
- Burns Lake, B.C.
- Kitimat, B.C.

In addition Northern Gateway Pipelines is also planning to locate initial spill response units at all of the pump stations including:

- Whitecourt, AB
- Smokey River, AB
- Tumbler Ridge, B.C.
- Bear Lake, B.C.
- Fort St James, B.C.
- Burns Lake, B.C.
- Houston, B.C.
- Clearwater, B.C.
- Kitimat, B.C.

In some cases the equipment caches will include boats and specialized equipment (i.e. communication trailers and wildlife response units).
Railway Companies – Canadian Pacific Railway (CP)

CP maintains emergency response equipment in both B.C. and Alberta. Their equipment caches differ somewhat from the typical pipeline company response units, with some common features like oil spill sorbents and containment boom; they also maintain specialized equipment such as air foam units. Cache locations in B.C. include:

- Field
- Golden
- Cranbrook
- Creston
- Nelson
- Revelstoke
- Tappen
- Kamloops
- Hope
- Coquitlam

CP has access to contractor equipment and could access equipment from both WCMRC and WCSS in some cases. CP maintains an ER Plan and also holds annual training exercises.
Railway Companies – Canadian National Railway (CNR)

CN maintains 11 equipment locations in Alberta and another 18 caches in British Columbia; all of the B.C. response caches include oil spill containment boom and sorbents. Caches are located in:

- Kamloops
- Thornton
- Prince George
- North Vancouver
- Hope
- Lytton
- Valemount
- Squamish
- Lillooet
- Williams Lake
- Fort St. James
- Burns Lake
- Smithers
- Terrace
- Mackenzie
- Chetwyn
- Fort St. John
- Quesnel

CN has access to contractor equipment and could access equipment from both WCMRC and WCSS in some cases. CN maintains an ER plan and also holds annual training exercises.
Western Canada Marine Response Corporation (WCMRC)

WCMRC is a well-established, internationally recognized oil spill preparedness and response organization with a primary focus on the marine environment of British Columbia’s west coast. WCMRC also coordinates the response to tank truck incidents on behalf of Canadian Fuel Association members, and has been involved with inland spill response in the province.

WCMRC offers training programs and has the capability to assist member companies directly with their spill response activities by providing in-house subject matter experts and access to trained contractors. WCMRC has extensive caches of equipment located in three geographic areas including:

- South Coast Operations – Warehouse of spill response equipment as well as vessels, specialized equipment and caches primarily located in Vancouver area and on the Sunshine Coast.
- Vancouver Island Operations – Extensive equipment in several areas.
- North Coast Operations – Extensive equipment in locations like Prince Rupert, Kitimat, Shearwater and Haida Gwaii.

Figure 4 - WCMRC Vessel
Western Canadian Spill Services (WCSS)

Established in 1972 as a non-profit volunteer-based organization, WCSS is currently comprised of 18 inland Oil Spill Cooperatives including Area C in N.E. B.C. Members of WCSS include licensees of oil wells, gas wells that produce more than 2 m$^3$ of hydrocarbon liquids per month and oil pipeline companies.

WCSS maintains area oil spill contingency plans, coordinates annual exercises in each area and offers both open registration and contract training. WCSS maintains initial spill response units, regional response units and specialized equipment, i.e. jet boats, wildlife units, winter units, air curtain incinerator, air boats, etc.

WCSS’s equipment is primarily designed to contain and recover liquid hydrocarbon spills in lakes and rivers including those with an ice sheet present. There are over 600 WCSS member companies including Kinder Morgan, Enbridge and Pembina that have access to Alberta based equipment for use in B.C. if required. Although the railway companies are not WCSS members, they can access WCSS equipment on a case-by-case basis.

Figure 5 - Drilling Bore Holes in an Ice Sheet
Figure 6 - WCSS Wildlife Response Unit

Acknowledgement

Prepared by: Al McFadyen, WCSS President and COO
On Behalf – British Columbia Industry Liquid Petroleum Transporters
2014/01

Note: This submission is a general overview of oil spill equipment locations in British Columbia and Alberta that is subject to change at any time. The document is not intended to be all encompassing and may exclude contractors’ equipment, equipment maintained by regulatory agencies and other.