

# SUMMARY REPORT

SYMPOSIUM ON LAND BASED SPILL  
PREPAREDNESS AND RESPONSE IN BC



MARCH 25-27, 2013  
VANCOUVER, BC



PREPARED BY:





## INTRODUCTION

The Ministry of Environment is reviewing industry funded options for strengthening BC's spill preparedness and response policies and capacity. As part of the review process, the ministry hosted a symposium March 25-27, 2013 in Vancouver, BC. Over 200 participants representing more than 130 organizations and the Ministry of Environment attended the event. The full Symposium Report, as well as links to presentations and related materials, can be downloaded from the [Ministry of Environment's webpage for symposium participants](#).

The symposium objectives were to:

- ♦ Determine world leading spill preparedness and response practices relevant for BC
- ♦ Identify communication, coordination and collaboration opportunities to achieve world class practices
- ♦ Determine key actions to support the development of world leading practices in BC

The symposium involved plenary and break out group presentations, as well as small group discussions addressing key questions.

## DAY ONE– WORLD LEADING SPILL PREPAREDNESS AND RESPONSE REGIMES

**Councillor Carleen Thomas** of the Tsleil-Waututh First Nation provided a welcome to traditional territories of the Coast Salish peoples and blessing to participants.



The **Honourable Terry Lake**, Minister of Environment, affirmed Government commitment to ensuring that BC maintains a world leading land based spill preparedness and response regime – and to developing policies through communication, cooperation and collaboration.

## PLENARY SESSION 1 – RESPONSE STANDARDS & WORLD LEADING SPILL RESPONSE

- ♦ **Brian Lamond** provided information about the CSA Group, an association that develops standards accredited by the Standards Council of Canada, and current work to establish a standard for emergency preparedness and response for the petroleum and natural gas industry.
- ♦ **Linda Pilkey-Jarvis** reviewed the effort to achieve a regulatory standard of “best available protection” in oil spill planning for Washington State under the Department of Ecology.



- ♦ **Al McFayden** summarized the role of Western Canadian Spill Services in supporting the upstream petroleum industry spill preparedness program in BC and neighbouring provinces.
- ♦ **Scott Wright** provided a history of the development of response organization regulations and standards under the Canada Shipping Act and current capacity of the Western Canada Marine Response Corporation in serving BC coastal and inland navigable waters.

## **PLENARY SESSION 2 – SPILL PREPAREDNESS & RESPONSE FUNDING**

- ♦ **Jim Donihee** provided an overview of the pipeline industry in Canada and British Columbia, including industry oversight, operations and spill response capacity.
- ♦ **Ian Brown** reviewed a report by Price Waterhouse Coopers commissioned by the Ministry of Environment to evaluate funding mechanisms supporting activities to prevent, prepare for, respond to, recover from and remediate spills of petroleum hydrocarbons and hazardous materials.
- ♦ US Coast Guard **Captain Scott Schaefer** (Rtd) provided background to the *California Oil Spill Prevention & Response Act* (1990) and a summary of the provisions in the Act.

## **KEYNOTE PRESENTATION – ACHIEVING WORLD CLASS PERFORMANCE THROUGH IMPROVED PRACTICES**

The lunchtime keynote presentation by **Al Richie** and **Hugh Harden** outlined current practices for the energy pipeline industry in BC and reviewed a 2007 spill incident in Burnaby for lessons learned in improving practices.

## **DISCUSSION GROUP 1 – SPILL RESPONSE STANDARDS**

- ♦ **Louis Laferriere** summarized the development of the Transportation Emergency Assistance Program (TEAP) and the Response Care program of the Chemical Industry Association of Canada.
- ♦ **Geoff Morrison** of the Canadian Association of Petroleum Producers outlined spill prevention, preparedness, response and recovery efforts of the upstream oil and gas industry in BC.
- ♦ **John Skowronski** summarized Canadian Fuels Association member guidelines and practices for petroleum product land spill prevention, preparedness and response.

The following points were presented in summaries of small group discussions:

- ♦ *Key attributes or principles of world class or world leading response standards:*
  - Professional accreditation of responders
  - Risk based standards of response
  - Stakeholder involvement, harmonization and commitment
  - Confidence in regulator capability
- ♦ *Ensuring consistency between voluntary & mandatory standards and across industry sector:*
  - Transition from voluntary to regulatory standards as they are developed and implemented
  - Support world class standards
  - Pool and scale response where appropriate and relative to risk
  - Enforce standards



- ♦ *Characteristics of a world class spill response model:*
  - Consistent goals, objectives and standards
  - Citizen participation
  - Integrated governance
  - A process for continuous improvement and evaluation
  - Clear funding mechanisms
  - A risk based tiered approach
- ♦ *How to ensure continuous review and improvement of standards and responses:*
  - Inclusive
  - Sharing
  - Compliance and verification
  - A set of objectives that guides and leads standards



## DISCUSSION GROUP 2 – FUNDING PRINCIPLES AND MODELS

- ♦ **Mark Johncox** outlined the role of Western Canada Marine Response and Canada’s marine spill system funding model.
- ♦ **Dale Jensen** summarized the funding mechanism used for Washington State oil spill prevention and response.
- ♦ **Frank E. Holmes**, reviewed the history of the industry funding model used in Washington State to institute an emergency response rescue tug/towing vessel stationed in Neah Bay.

The following points were presented in summaries of small group discussions:

- ♦ *Key principles necessary to establish the appropriate level of funding to undertake spill preparedness (planning and testing), and response:*
  - Conduct a gap analysis (to know what is needed)
  - Make sure the fund is easy to administer
  - Funding must be associated with risk
  - Establish joint custody (by industry and government) to ensure that the fund is used for its dedicated purpose
  - Ensure that the polluter pays principle is applied
- ♦ *Role of an integrated response organization in addressing risk:*
  - There may be a need for coordination across sectors and/or for an information hub
  - Auditing is an essential element of any funding of an integrated response organization
  - Consistency in incident response should be the goal
- ♦ *Spill preparedness & response activities that would be appropriate to address through a fund:*
  - Baseline studies



- Immediate loss of resources (e.g., fishing, harvesting)
- Training and equipment at more remote community locations
- Utilization of local knowledge and capacity
- Oiled wildlife capabilities
- ◆ *Principles that should be considered to determine who pays and how much they pay:*
  - First make sure that the need and support for a fund is demonstrated – then consider fees and thresholds with engaged stakeholders
  - Relevant, complementary and risk based
  - Sector and performance based
  - All materials that could cause an impact should be considered
  - Ensure an independent controller of the fund
  - Consider the Washington State model as a start – with additional BC-specific elements

## **DAY TWO– EFFECTIVE AND EFFICIENT ENVIRONMENTAL RESTORATION**

### **KEYNOTE PRESENTATION – CANADIAN RAILWAY APPROACH TO SPILL PREPAREDNESS & RESPONSE**

The morning keynote speakers, **Curtis Myson**, **Kevin Houle** and **Normand Pellerin**, provided an overview of spills management and emergency response programs in the railway sector.

### **PLENARY SESSION 3– EFFECTIVE PLANNING – RISK ASSESSMENTS, SPILL CONTINGENCY PLANNING AND GEOGRAPHIC RESPONSE PLANS**

- ◆ **Chip Boothe** reviewed the changing risk picture in the Salish Sea (Washington-BC boundary waters) presented by current and proposed port and marine traffic in the region.
- ◆ **Josie Clark** shared her experience in spill contingency planning as an area planning committee coordinator with the US Environmental Protection Agency.
- ◆ **Mike Munger** provided an overview of the process and role of citizen advisory committees in developing and maintaining geographic response strategies in Alaska.
- ◆ **Dr. Ziad Shawwash**, outlined a research program to develop a decision making framework and risk management techniques for land based hazardous material spills in BC.

### **PLENARY SESSION 4– EFFECTIVE ENVIRONMENTAL REMEDIATION, RESTORATION AND MONITORING**

- ◆ **Ian Zelo** provided an overview of the Natural Resource Damage Assessment (NRDA) process and funding, as well as an assessment of federal concerns and challenges with the process.
- ◆ **Dave Byers** summarized Washington State's NRDA program.
- ◆ **Greg Challenger** reviewed the challenges in shoreline cleanup assessment faced during response to a 2011 pipeline rupture at the Yellowstone River.

## KEYNOTE PRESENTATION – CANADIAN RAILWAY APPROACH TO SPILL PREPAREDNESS & RESPONSE

The lunchtime keynote presentation by **Captain Scott Schaefer (Rtd)** provided insights on the Deepwater Horizon spill from an incident commander's perspective. The incident command post coordinated the effort of the 26,800 personnel involved in the response.

## DISCUSSION GROUP 3 – RISK ASSESSMENTS, SPILL CONTINGENCY PLANNING AND GEOGRAPHIC RESPONSE PLANS

- ♦ **Todd Hass, Chad Bowe chop and Fred Felleman** provided a summary of a collaborative project to assess risk associated with vessel traffic in the boundary waters between Washington State and British Columbia.
- ♦ **Elise DeCola and Brian House** reviewed their experience with the Massachusetts Marine Oil Spill Program in building an integrated spill response system for first responders.
- ♦ **Randall H. Scott**, described the value of a self-assessment process to enhance the effectiveness of emergency plans.

The following points were presented in summaries of small group discussions:

- ♦ *Key factors that constitute a world class risk assessment:*
  - World class – means scientifically defensible, broad involvement (inclusive), coordination and buy-in, awareness of other jurisdictions and cross border/jurisdiction cooperation, ensuring that all parameters are met or exceeded, decisions are informed by the risk assessment and – sustainable funding (for continuous improvement, as well undertaking specific risk assessment activities)
- ♦ *Who needs to be involved in planning processes:*
  - While all stakeholders whose interests are impacted need to participate, the right people need to be involved at the right time
  - Local interests need to be involved early in risk assessment and contingency planning
  - Additional participants with expertise, knowledge or related responsibilities should be included as needs arise
- ♦ *Approval of risk assessments and contingency plans:*
  - Baseline standards should be developed by regulatory agencies – contingency plans need to be approved to ensure accountability
  - Plans need to be coordinated and consistent
  - The approving organization needs to have technical expertise, staff, funding and resources, legal expertise and public accountability
- ♦ *How should plans be evaluated:*
  - Ability to execute the plan
  - Defined performance measures and set standards
  - Currency and continuous improvement



## DISCUSSION GROUP 4 – NATURAL RESOURCES DAMAGE ASSESSMENTS (NRDA) & SCIENCE, TECHNOLOGY AND MONITORING

- ♦ **Cindy Ott** outlined an approach to assessing public health risk during spill events involving risk assessment, monitoring plans and the collection of reliable and appropriate data for immediate and long term needs.
- ♦ **Curtis Brock** provided a case study of response and remediation using treatment endpoints following a 2012 pipeline spill to the Red Deer River, Alberta.
- ♦ **David Campbell** discussed the potential role of the CSA Group in developing consensus based standards for environmental protection in oil spill response.

The following points were presented in summaries of small group discussions:

- ♦ *Best practices to monitor impacts to human health and the environment during a spill event:*
  - Pre-planning and collection of baseline data (included in geographic response plans)
  - training and equipping first response teams
  - community engagement
  - occupational and offsite monitoring for human health
  - continuous and long term monitoring initiated at first response
- ♦ *Advantages and disadvantages of adopting a Natural Resources Damage Assessment process:*
  - Advantages – allows for clarity, transparency, collaboration and flexibility for restoration; more accepting of public input for determining endpoint (of remediation); may reduce litigation; provides a systematic approach to address “injury concerns”; and may assist in filling gaps not currently addressed with current restoration processes
  - Disadvantages – potential for complexity; could be seen as a penalty rather than compensation for restoration; could be used as a government funding sources or become politicized; and may create an expectation that restoration efforts will be over and above to the true level of injury
- ♦ *Principles to guide restoration and level of restoration:*
  - Strive to achieve “Net Environmental Benefit”
  - Fair, achievable and scientifically defensible
  - Some form of liability closure
  - Strive for pre-incident conditions of the environment
- ♦ *Factors to be considered to determine if funds are to be managed by government or industry:*
  - Flexibility, transparency of use and efficiency
  - Public input with government oversight
  - Clear understanding of what purposes the fund could be used for
  - Third party funds held in trust by an independent group

## DAY THREE– COMMUNICATIONS, COOPERATION AND COLLABORATION

### PLENARY SESSION 5– ENGAGEMENT & COMMUNICATIONS –BUILDING RELATIONSHIPS & MEANINGFUL DIALOGUE

- ♦ **Leah George-Wilson** provided a Tsleil-Waututh First Nation (Burrard Inlet) perspective on risks of spills and response to spill incidents.

- ♦ **Timothy (TJ) Greene** and **Chad Bowe chop** summarized the Makah Tribe (Washington State) experience and perspective on engagement related to spill prevention and response.
- ♦ **Chris Battaglia** reviewed wildlife recovery lessons learned from the 2010 Kalamazoo River pipeline leak.
- ♦ **Coleen Doucette** outlined the need for oiled wildlife response planning and some suggested best practices for BC.
- ♦ **Nhi Irwin**, described the volunteer coordination system established in Washington State as a result of 2011 legislative direction to the Department of Ecology.

Small group discussions addressed four topics: collaboration; strategic direction; effective communications; and volunteers.

### **COLLABORATION**

Participants identified best practices and principles to guide the development and approval of planning documents. Suggested best practices included:



- ♦ Clear lead authority with (the full time job of) planning and integration of response plans
- ♦ An inclusive and facilitated process for involvement of all stakeholders
- ♦ A tiered set of plans with a framework for integration
- ♦ Clear and comprehensive identification of risks and hazards, as well as resources and stakeholders for preparation and response
- ♦ A system that provides opportunities for and encourages participation and relationship building
- ♦ Funding to support planning and training

### **STRATEGIC DIRECTION**

Suggestions included:

- ♦ Build on existing standards – legislate standards and establish an accountability framework
- ♦ Harmonize between different levels of government and agencies – clarify roles, ensure funding for preventative measures and plans, focus on first responders
- ♦ Clarify and communicate definitions and focus on “world class outcomes”
- ♦ Undertake an analysis of current regulation and practices for duplication and gaps
- ♦ Compile data from reported spills and analyze trends to inform planning and other processes
- ♦ Use risk informed approaches – establish and provide stable funding for advisory committees for high risk/value areas

## EFFECTIVE COMMUNICATIONS WITH THE COMMUNITY DURING A SPILL EVENT

Suggestions included:

- ♦ Have a plan and tools in place before the event
- ♦ Be familiar with the tools and have designated personnel to rapidly address queries
- ♦ Provide an accessible one window approach for the public to obtain timely information
- ♦ Recognize that remote communities have explicit needs and distinct communications methods
- ♦ Make direct contact with concerned parties through public meetings and question & answer sessions
- ♦ Have back up plans and redundancies

## EFFECTIVE INVOLVEMENT OF VOLUNTEERS

Suggestions included:

- ♦ Pre-spill community outreach and identification of volunteer tasks and protocols – a simple registration system, followed by ICS training and worthwhile use of volunteers' time
- ♦ Work with non-profit organizations to leverage volunteers (with agreements in place before an event) – coordinate on-site training and equipment distribution
- ♦ Establish and follow privacy guidelines for volunteer information, draw on local knowledge, utilize convergent volunteers when appropriate
- ♦ Manage expectations and messages (e.g., handling oiled wildlife, measures to protect sensitive sites) – keep public engaged and aware of current situation
- ♦ Well funded volunteer coordination with alternatives for compensation (e.g., registration, credits, non-profit organization support)
- ♦ Contingency planning – in the event that a spill requires additional capacity
- ♦ Inventory/capacity – linked to training and preparation (skill sets, needs, registration and tracking of volunteers before, through and after an event)
- ♦ Communication and awareness of risks involved with volunteering – role of volunteer, liabilities, security (equipment, other)

## CLOSING REMARKS

The *Honourable Terry Lake*, Minister of Environment commented that planning is the foundation for effective spill preparedness and response – the British Columbia government is not interested in duplicating efforts, creating overlapping jurisdictions or undermining existing systems that are working well in the province. This process is based on communication, cooperation and collaboration.

