

City of Vancouver Submission to the National Energy Board Emergency Response Consultation

Overview

The City of Vancouver (Vancouver) welcomes the opportunity to provide comments and recommendations to the National Energy Board (NEB) on the issue of emergency response and preparedness.

The City of Vancouver is the most densely populated urban marine centre in Canada, with over 630,000 residents and 70,000 businesses. Vancouver contributes more than \$40 billion (3 % of national GDP) per year to the Canadian economy. Vancouver is situated within a geographically complex region that is vulnerable to a number of natural hazards, including but not limited to earthquakes, landslides, extreme weather and flooding. These and other factors contribute to a complex environment for risk assessment and emergency management.

The NEB approves and regulates infrastructure that, in addition to delivering some energy resources to Canadians, also facilitates the export of unrefined products, such as diluted bitumen, to foreign markets. In both cases, the infrastructure regulated by the NEB transports a range of products that have the potential to pose catastrophic risk to local communities and the environment. The City of Vancouver is concerned that the risk to communities posed by current NEB regulated pipelines and facilities has not been comprehensively assessed, and that industry emergency plans are insufficient to protect the health, safety and security of the public and environment.

The City of Vancouver's submission includes:

- Recommendations for the NEB based on Vancouver's experience in emergency management, and the recent M/V Marathassa oil spill.
- Information and recommendations to improve the quality of emergency management plans and preparedness for the NEB and the companies it regulates in order to better protect the public and the environment.
- Examples of information that should be included in emergency response plans and manuals to support local first-responders in mitigating the consequences of spills, fires and explosions from NEB regulated infrastructure.

The City of Vancouver has asked numerous questions of Trans Mountain Pipeline in the Trans Mountain Expansion Project Application (the "TMEP") hearing process regarding emergency management plans and programs. A majority of these questions have not been answered adequately, and, in most cases, the NEB has not compelled Trans Mountain Pipeline to provide further information on critical issues including public health and safety or emergency response capabilities. In preparing this submission, the City of Vancouver has not, nor does it intend to, revisit all of the issues it has already raised with the NEB in the TMEP hearing process. Furthermore, the comments provided below are not intended to be conditions for approval of future projects, nor do they represent conditions that will resolve the risk posed by current operations. Some projects will present unacceptable risks to communities regardless of the amount of planning or investment in preparedness and response.

Comprehensive risk assessments that fully analyze the range of socio-economic and environmental consequences of worst-case oil spill scenarios as well as the cumulative effects of smaller, more frequent, oil spill incidents, must be the foundation of emergency management plans and programs for the NEB and the companies it regulates.

M/V Marathassa Spill Response

Vancouver's recent experience responding to the consequences of the M/V Marathassa oil spill in English Bay highlighted particular concerns that have relevance to the NEB. During this spill, the Responsible Party initially refused to take responsibility and the Canadian Coast Guard (CCG) was required to take on the role of lead agency. The CCG, like the NEB, is the lead federal agency tasked with overseeing, and in some cases managing, a response. The CCG will assume management of the spill in the case that the Responsible Party is unable or unwilling to respond. Similarly, the NEB is required to "verify that there is adequate and appropriate clean-up and full remediation of any environmental effects resulting from the incident. The company must conduct, to the Board's satisfaction, a complete clean-up and remediation of any adverse environmental effects" (NEB, 2015 at <https://www.neb-one.gc.ca/sftnvrnmnt/mrgnc/index-eng.html>)

The CCG does not currently maintain a plan for a coordinated, multi-agency response to an oil spill in the densely populated Burrard Inlet. In the case of the M/V Marathassa oil spill, the lack of regional, collaborative risk assessments, planning and exercising resulted in a delayed notification and response that did not address the specific needs of the local community or the unique sensitivities of the local environment. Although the CCG is responsible for "ensuring an appropriate response", there are no standards or criteria established to measure what is "appropriate."

For example, there were no agreed upon endpoints for clean-up and remediation prior to the incident. The process for establishing endpoints during the response was also unclear. In addition, there were no standard protocols for gathering ephemeral data or conducting the sampling required to inform a robust environmental impact assessment (EIA). Despite the best efforts of representatives from all levels of government and First Nations to develop a scope of work for the EIA, the Responsible Party has not yet presented an acceptable plan and initiated an EIA over two months after the spill occurred. While industry must invest in emergency preparedness and response, it is absolutely critical that the government agencies and departments with authority over environmental emergencies also engage in joint planning and preparedness. This includes conducting exercises with local communities, first responders, and industry.

After-action reporting processes for the M/V Marathassa oil spill are ongoing, and the issues highlighted above are not exhaustive. The City of Vancouver anticipates that the lessons learned from the M/V Marathassa oil spill will be useful for the NEB in improving emergency management practices.

Multi-Agency Risk Assessment, Emergency Planning and Response

Vancouver has serious concerns about the lack of coordinated, multi-stakeholder emergency planning led by the NEB as the lead agency responsible for regulation, approval and emergency management of inter-provincial and trans-boundary oil and gas pipelines and facilities.

In particular, Vancouver is concerned about the absence of the following:

- An overarching plan or framework that clearly defines the roles and responsibilities of all preparedness and response agencies and government departments, including local government, First Nations, and first responders;
- An open and transparent risk assessment process to inform the NEB's own emergency preparedness and response, as well as that of other levels of government;

- An open and transparent process for assessing the consequences of environmental emergencies **and** the consequences of potential response options on local communities and ecosystems;
- Area and geographic preparedness and response plans that provide a mechanism for resourcing, planning, training, and exercising with local authorities to specifically address preparedness and response to environmental emergencies within their unique jurisdictions.

All of these planning and assessment practices need to be incorporated into the NEB's emergency response and preparedness regime.

Furthermore, the City of Vancouver advocates for clear legislation and regulatory processes to:

- Assess and address the risks and consequences of downstream and upstream emergencies occurring as a result of the products transported through NEB regulated systems, for example, oil spills from oil tankers or explosions on board LNG vessels;
- Ensure that cumulative risks of NEB regulated infrastructure are assessed when changes are made to any aspect of the system or facility, including changes in the type and/or volume of product transported;
- Mandate frequent risk assessments and the incorporation of best practices, technology and information in the prevention, preparedness and response to risk and hazards;
- Require that the precautionary principle is employed to protect the public and the environment from risks and hazards that are not fully understood.

The current practice of relying on industry to devise its own risk assessments and to invest in emergency preparedness and response does not serve the interest of the public. Requiring companies to publicly disclose their emergency response plans is an obvious step to improving the system. However, this is only one small part of a larger transformation that must take place through the NEB to integrate international best practice in risk assessment and emergency management for the protection of Canadian citizens, communities and the environment.

Consideration of Safer and Sustainable Energy Alternatives

The NEB has confirmed that “the NEB’s first priority is public safety and security and environmental protection” (NEB, 2015). Given these priorities, the City of Vancouver expects that the NEB will consider, for all current and proposed projects, energy alternatives that decrease the risk of environmental emergencies to local communities while continuing to provide service to Canadians. Energy alternatives that minimize impacts to climate change must also factor into the consideration of alternatives. In many cases, there are alternatives that can do both.

Local communities like Vancouver are acutely aware of the risks of climate change. Adaptation to and mitigation of climate change factor into emergency management plans and programs, land use regulations, public works, transportation management, and many other areas of City responsibility. In addition to direct impacts of spills, fires and explosions, the National Energy Board and the companies it regulates must consider the upstream and downstream impacts to climate from the extraction and end-use of products transported via pipelines and other infrastructure. Climate change in this context is a double edged sword - it leads to increased risks to communities, and also exacerbates the risks that natural hazards pose to pipelines and facilities.

The NEB's own emergency plans must take into consideration the increased risk to NEB regulated infrastructure and the public and environment, as a result of climate-induced events such as flooding, extreme weather events and landslides.

The economic benefits for corporations from the export of oil and gas products to foreign markets must be tertiary to the health and safety of Canadians and the environment, and the provision of sustainable energy for Canadians.

Transparency in Industry Risk Assessments and Emergency Plans and Response Capacity

Emergencies, including spills, fires, and explosions, occurring to and from existing NEB regulated infrastructure have the capacity to result in significant consequences to public health and safety, the economy, and the environment. The City of Vancouver is concerned that these risks are increasing and that they have not been adequately assessed by the industry that creates them. For example, the transition of the transport of refined oil products and conventional crude oil to primarily diluted bitumen via aging NEB regulated infrastructure has occurred without sufficient knowledge about its fate and behaviour, and with no assessment of the consequences of a spill of this product to local populations.

With respect to the companies regulated by the NEB, and in particular oil pipelines and facilities, the City of Vancouver has serious concerns about the limited scope, and the lack of transparency and public engagement required in the development of Hazard, Vulnerability, Risk and Assessments (HRVAs), and in the development and exercising of emergency and contingency plans. Vancouver makes the following recommendations with respect to transparency of emergency preparedness and response plans for the protection of local communities.

Risk Assessment and Planning

With respect to risk assessment and planning, companies must:

- Engage in a public process including local authorities and potentially impacted stakeholders to ensure that the risk assessments upon which contingency plans are based accurately reflect the risk, not only to the company's infrastructure and staff, but also to surrounding populations and environments.
- Develop and test, with local authorities, plans to manage all predictable elements of a response within a region, including but not limited to:
 - notification of local authorities and the public;
 - dissemination of public information throughout the response and recovery;
 - emergent volunteers;
 - wildlife response and rehabilitation;
 - waste disposal;
 - access to land and waterways for response;
 - short and long term monitoring of public health;
 - testing of air and water quality;
 - environmental monitoring protocols;
 - shoreline assessment and clean-up (marine and freshwater); and
 - protection of sensitive sites and ecological, social, cultural and economic values.
- Develop and test business continuity plans to ensure capacity to respond under adverse conditions; third party response contractors must do the same.

- Pre-identify Incident Command Posts, and demonstrate the capacity to fill all positions within a fully expanded Incident Command Structure with specified timeframes and to employ the best available technology in the management of the incident.
- Provide control point and geographic response plans based on industry best practices for all environments that may be impacted by an oil spill or emergency. Response time should be calculated and tested for all personnel and equipment to control point locations.
- Develop recovery and remediation plans for multiple scenarios and conduct assessments of the consequences of proposed clean-up and response methods for communities.
- Include in emergency response plans response to the range of hazards that could impact their operations. For example, where earthquake risk exists, companies must assess the impacts of the earthquake on their staff and contractors, and develop contingencies to be able to respond to pipeline ruptures in that context.
- Publicly release after-action reports and improvement plans from all drills, exercises, near-misses, and incidents.
- Be subject to surprise drills and exercises.

Response Capacity and Equipment

With respect to response capacity and equipment, companies must:

- Be required to employ the best available technology for prevention, preparedness and response.
- Test plans, equipment, and demonstrate capacity to respond to oil spills for the full range of products shipped, including sunken and submerged oils.
- Maintain response equipment that is effective in all operating conditions, and be able to demonstrate the ability to deploy equipment in all operating conditions as per specific GRPs and Control Point Plans.
- Provide the terms of mutual aid and third party contractor agreements and make accessible the full details of equipment, capacity and transportation.
- Maintain real-time and accessible databases of response equipment and personnel.
- Identify conditions that would preclude response to an incident, including but not limited to weather and marine conditions, traffic and transportation impediments, and risks to first responders.

The City of Vancouver recommends that the NEB review and implement protocols and standards for emergency management that are, at a minimum, as stringent as those in Washington State, and that the NEB regularly review and build on emergency management programs based on global best practices.

Procedures and Information Required for First Responders

The City of Vancouver adheres to the British Columbia Emergency Response Management System (BCERMS). The eight response goals of BCERMS are as follows:

1. Provide for the Safety and Health of all Responders
2. Save Lives
3. Reduce Suffering
4. Protect Public Health
5. Protect Government Infrastructure
6. Protect Property
7. Protect the Environment

8. Reduce Economic and Social Losses

These goals apply to local responders across BC, and should be incorporated into company response manuals.

The current system limits the capacity of local authorities to assess the risk to the public, the environment and first responders. In order to mitigate the consequences of an incident, including an oil spill, fire or explosion, on the public, emergency procedure manuals must be developed in consultation with local first responders. These manuals must include, at a minimum:

- Clear and agreed upon notification protocols for local authorities and first responders.
- Protocols for access to real-time information about the product, including MSDS and all precautionary measures required in the event of a spill.
- The location and plans to deploy air and water monitoring equipment and plans appropriate for the range of products that may be transported.
- Personal Protective Equipment appropriate to respond to all scenarios.
- Pre-determined evacuation areas and routes developed through worst-case scenario based planning.
- Identification and Geographic Response Plans for local resources at risk and sensitive sites.
- Location of corresponding equipment required to implement GRPs, and priorities for deployment.
- Pre-determined priorities for shoreline protection and established end-points for clean-up and remediation.
- Pre-determined plans to initiate environmental monitoring and assessment procedures, including sampling of the spilled product, water, soil, sediment and air quality.

Conclusion

The issues the NEB proposes to address through this consultation are of critical importance to Canadians and local governments. No further consideration of new or proposed projects should be undertaken until the risk assessment and emergency management issues identified in this submission have been resolved to the satisfaction of local communities. The City of Vancouver appreciates the opportunity to comment on these issues and urges the NEB to continue to engage and consult with local governments responsible for public health and safety, and stakeholders and members of the public that are most impacted by oil spills and other emergency incidents.