

EMERGENCY PREPAREDNESS AND RESPONSE

FACT SHEET



Spill prevention is a key priority for the Northern Gateway Project (NGP). The onshore spill prevention and response planning measures to be implemented on the Project will help to ensure that pipeline operations will be a model of world-class safety and environmental standards. Prevention measures that have been incorporated into Project design and planning for construction and operation of the pipelines include the following:

- routing the pipelines to avoid hazardous or sensitive areas
- designing and constructing the pipelines and facilities to reduce any potential geotechnical and hydro-technical issues
- installing the pipelines underground through approximately 99% of their length and installing secure fencing to protect above-ground infrastructure (e.g., pump stations, valve sites and tunnels)
- conforming to design codes
- conducting routine aerial and ground monitoring
- extensive testing of pipelines (weld inspection, coating/backfill inspection, hydrostatic testing)
- using internal pipeline inspection technology to identify potential pipeline integrity issues
- maintaining cathodic protection
- installing remotely controlled shut-off valves
- constructing berms at pump stations to contain potential spills
- enclosing pump stations in buildings that include sumps for containing small spills
- marking the right-of-way (ROW) clearly at public roads, railways, and navigable watercourse crossings

Spill prevention measures have been developed during the planning process for the Project based on consultation with experts, a review of previous incidents and root cause, and with the latest proven technology.

Spill Response Planning

The following key points provide an overview of Northern Gateway's emergency response commitments for the pipelines:

- development of emergency response plans
- provision of emergency response equipment and training
- regular testing of response equipment and replacement or improvement of equipment as new technology becomes available
- regular response training exercises with Northern Gateway operations personnel and local emergency response providers
- identification and priority protection of areas of environmental, socio-economic, or cultural importance
- establishment of control points downstream of pipeline river crossings (pre-selected locations for deployment of intercept booms and deflection booms)

Plans are being developed that will provide communities along the right-of-way and downstream of watercourse crossings with an incident response capability plan developed specifically for the Project.

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Response Plans

Enbridge's existing emergency response protocols will be augmented by project-specific emergency response plans. These include an overarching General Oil Spill Response Plan (GOSRP) and a Pipeline Oil Spill Response Plan (OSRP).

The following key response actions will be detailed in the Pipeline OSRP:

- safety
- notification (regulatory, fire, police and emergency response)
- incident management
- source control
- assessment
- containment, recovery and protection strategies
- equipment deployment
- protection of wildlife and fish, sensitive habitats and important traditional harvesting sites
- cleanup and decontamination
- demobilization and emergency response conclusion

The Pipeline OSRP will also include the following supporting spill response documents:

- field oil spill response guides for pipeline crews
- tactic response sheets that identify strategies specific to priority protection or response sites downstream of major river crossings.

Pipeline operations and maintenance personnel, management and contracted response organizations along the pipeline route and at the Kitimat Terminal will participate in emergency response training, exercises and drills.

Response Equipment and Resources

Northern Gateway will maintain response equipment along the pipeline route, packaged for transport by ground or air.

Supplies will potentially be located at pump stations, and in or near larger communities close to the pipeline ROW.

Personnel and logistical resources will also be organized, including specialized support for winter conditions. Equipment supplies will include:

- safety equipment (personal protective equipment and decontamination, gas monitoring, fire equipment)
- boom (various sizes for different conditions)
- skimmers (for different oil types, water depths and operating platforms)
- pumps
- temporary storage
- hand tools
- logistical support materials

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Protection of Sensitive Areas

Protection of environmental, socio-economic, and cultural sensitivities will be prioritized, and response strategies will be developed to limit potential adverse effects. Control points and tactic sheets will also be developed to respond to spills that have the potential to reach flowing water. Control points are locations where emergency responders can effectively deploy equipment to intercept and minimize downstream movement of oil.