BACKGROUND

Trans Mountain Pipeline ULC proposes to increase the capacity of their pipeline system from the current 300,000 bbls/day to an estimated 890,000 bbls/day, to be shipped by Panamax vessels. In order to obtain an operating license from the National Energy Board, TMPL demonstrate the risk reduction measures that will be implemented, including spill response to a marine incident.

PROJECT DESCRIPTION

Tetra Tech EBA together with WCMRC developed an innovative approach to evaluate and improve the spill response strategy in case of a marine incident. This approach used an oil spill model incorporating the assignment of spill response assets. The asset assignments were determined by an experience oil spill response expert, and were adjusted as the spill evolved into the model, to determine the outcome of various decisions.

RESULTS

The simulations demonstrated powerfully the need for a commitment to early response, adequate equipment, advanced planning and numerical simulation tools.

This leading-edge approach allowed the identification of areas for improvement in the mitigation strategy. Locations of the WCMRC warehouses and caches as well as potential acquisition of an Offshore Supply Vessel were majors outputs of this approach, meeting the requirements of a systems approach, as recommend in the BC Government Oil Spill Preparedness report.