Watershed Council's Analysis of the Risk Analysis Draft Report

Overall

The report is comprehensive and thorough and it was drafted in a timely manner. We commend Dr. Meadows and his team of researchers for all their hard work, effort and time. Completion of this report is vital to the upcoming decisions about the future of the Line 5.

Worst Case Scenario

We appreciate the approach taken with respect to the "worst case" scenario to attempt achieve the maximum possible loss level and using different worst case scenarios based upon the task being evaluated. The methodology accurately captures the fact that Line 5 in the Straits of Mackinac are a low probability, high consequence scenario. However, we believe assumptions made resulted in conservative estimates. Oil spills are rarely detected immediately. In addition, the tiers of failure are based upon Enbridge properly following operating procedures. History of oil spills, including Enbridge incidents in Michigan, has shown that human error comes into play more often than not and operating procedures are not always properly implemented in emergencies

Unknowns Due to Synthetic Crude

Enbridge transports synthetic crude derived from the oil sands in Western Canada through Line 5. We have little, if any at all, science on how this particular product behaves in a freshwater environment in the event of a spill. The National Academies released a report, "Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response," that concludes that bitumen, if spilled, has unique properties that affect its behavior in the environment. What we do not know is if weathering of the synthetic crude would be similar to weathering of diluted bitumen and if it would also generate a residue similar to the initial bitumen that may be more likely to submerge, which would impact both the fate and transport and ability to contain and cleanup an oil spill in the Straits.

Risk to the Great Lakes is More than Just the Straits

The report should acknowledge that the risk to the public trust waters of the Great Lakes does not solely come from the twin pipelines located on the State-owned bottomlands in the Straits. The text mentions that line 5 crosses navigable waters and is located near Great Lakes shorelines, but fails to state that a leak or rupture along this portion could still result in an oil spill in Lakes Michigan-Huron and the Straits of Mackinac. This is emphasized Task X. U.S. Coast Guard (USCG) personnel and emergency managers both pointed to the stretch of the pipeline along U.S. Highway 2 near Lake Michigan's northern shore as their worst-case scenario, citing a combination of less robust technology – pipeline wall thickness and monitoring equipment, as well as higher vulnerability to an errant strike and potential access problems for containment and cleanup equipment, as well as difficult terrain and environment for cleanup activities.

Energy Analysis

The section on Effects to Michigan's Energy Supply should not rely on the Dynamic Risk Alternative Report which has been regarded as a highly flawed analysis. The team should review and amend the section Effects on Michigan's Energy Supply, as appropriate, based upon a recent report "Assessment of alternative methods of supplying propane to Michigan in the absence of Line 5" prepared by London Economics International LLC.

Tip of the Mitt Watershed Council
426 Bay Street
Petoskey, MI 49770

231-347-1181
info@watershedcouncil.org
watershedcouncil.org/line5