

Alberta Pipeline Spill Risk Concerns

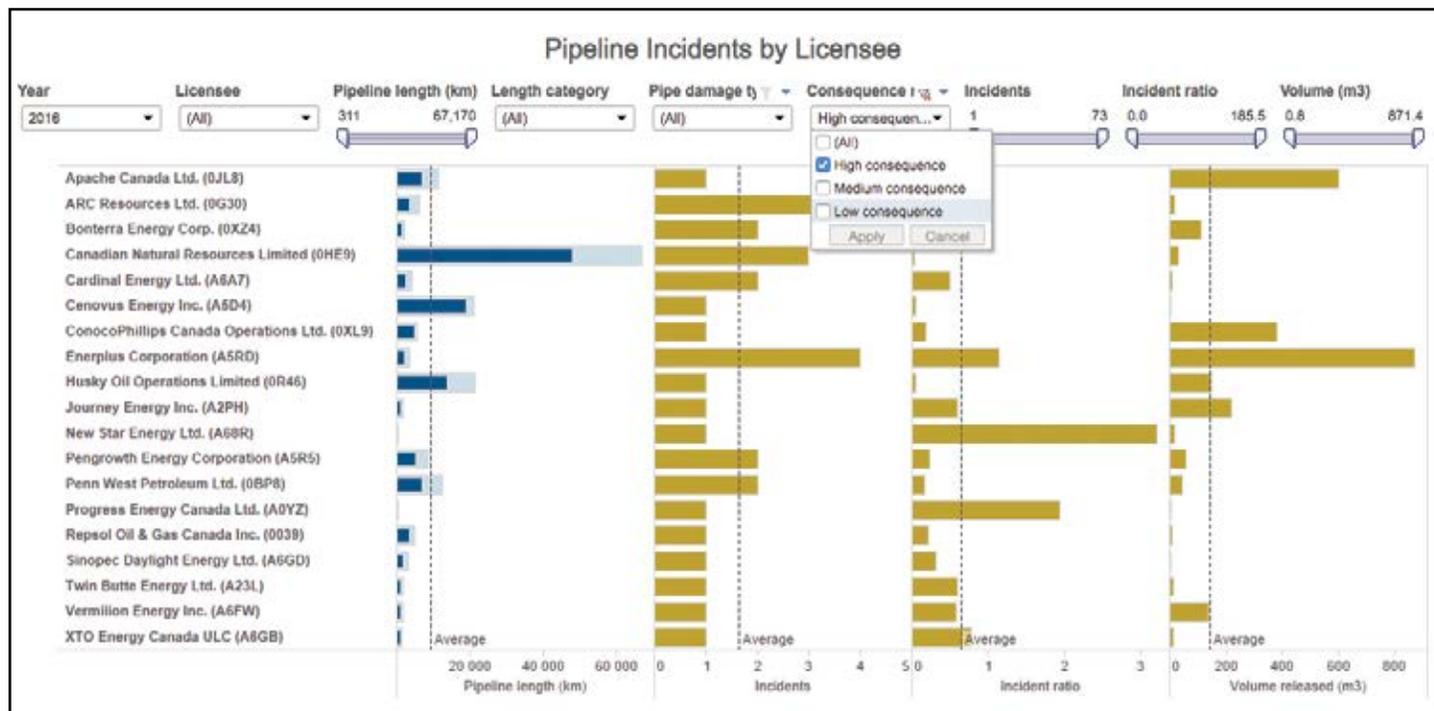
On February 21, 2017, the Alberta Energy Regulator (AER) released a new Pipeline Performance Report. The AER reported spills and 'hits' (where no substance is actually released) for the 420,000 kilometres of pipelines it oversees, a distance about ten times the earth's circumference.

The report provides totals for 'high', 'medium', and 'low' consequence pipeline incidents annually since 2007. For 2015 and 2016, it also reports incidents

by company, with some description of each incident, such as spill volume, type of substance released, consequence rating, and area affected. While this report is a step forward in transparency, significant concerns remain about the quality of AER's pipeline spill data.

In terms of transparency, the AER's report should also have identified spill counts in sensitive environment and habitat types. The AER is now the lead agency responsible for regulating the energy industry in accordance with the *Water Act*, *Environ-*

mental Protection and Enhancement Act, and *Public Lands Act*. In November 2016, AWA and other members of the Alberta Environmental Network were informed that the AER was analyzing pipeline incident data according to the sensitivity of the affected area. Sensitivity included species at risk habitat, wetland category of lands, First Nations reserve and Métis settlement areas, protected areas, and Class A waterbodies. This important risk-based information should have been included in the AER's report.



2016 High consequence pipeline incidents by company. SOURCE: AER PIPELINE PERFORMANCE REPORT, FEBRUARY 2017.

Instead, the AER provided an inappropriately narrow perspective on wildlife impacts. This perspective is presented in a 'Wildlife-Livestock-Priority' category. In that category, of the 933 total pipeline incidents reported in 2015 and 2016, 858 (92 percent) had no effect, 62 (7 percent) had no classification, 12 were classified as 'Animal(s) affected' and one was classified as 'Animal(s) injured or killed'. Habitat impacts were ignored.

The report provided only a very coarse environmental location: 'air/land,' 'flowing water' or 'muskeg/stagnant water'. This last term is presumably an outdated reference to wetlands. Spill impacts and frequency also should be reported based on proximity to headwaters and by natural region, to identify areas of particular environmental risk as a focus for future incident reduction. Overall, this report demonstrates that our energy regulator needs to modernize and improve its re-

porting on environmental impacts to align more accurately with its mandate.

Another recent investigation of AER pipeline spill data raised concerns that cumulative impacts of pipeline spills are not adequately managed. In early February 2017, ecologist Dr. Kevin Timoney presented his findings on AER pipeline spill and cleanup records. Indigenous Traditional Ecological Knowledge holders worked with Timoney to investigate nine pipeline spill sites on Dene Tha traditional territory in the Hay River watershed of northwest Alberta. The spills occurred between the 1970s and 2012. Timoney's investigation found that on those sites lingering impacts from the spills were significantly worse overall compared to AER's records. This was the case for both spill volume recovery rates and wildlife habitat impacts. These discrepancies raise worrying questions about the quality of Alberta's pipeline spill cleanup certification processes.

Timoney's research also analyzed AER data on 35,000 crude oil and saline water spills across Alberta from 1975 to 2013. The analysis suggests that Alberta's pipeline spill records generally overstate spill volume recovery rates and understate harmful impacts on wildlife and their habitat. One risk identified from unreliable cleanup data is that harmful effects to soils and vegetation, which can be especially persistent with saline water spills, are not being properly documented or managed. This may lead to a significant gap in managing cumulative pipeline spill effects over time in more sensitive and higher-risk environments. These findings suggest that the AER needs to improve its assessment protocols in order to reduce risks to the environment and local communities. It also needs to provide more accurate, relevant information to the public about pipeline spill impacts.

- Carolyn Campbell