

## New BC Water Use Determination Requirements - Are Cross-Border Strategies Aligning?

Erin Robson, SLR Consulting

Recent changes to the British Columbia regulatory process for determining applicable water uses at contaminated sites appear to be aligning BC with the process that has been in place in Alberta for a number of years. But is the approach really the same? This presentation analyzes the key similarities and differences between the two regimes and provides attendees with a summary of the requirements in both Provinces.

As contaminated sites consulting professionals in a global economy, we often work on multi-disciplinary project teams that may cross Provincial and National borders. One of the most common jurisdictional borders for those of us attending WaterTech is the BC / Alberta border. It is essential that we understand the applicable provincial requirements in each regime where we work and the similarities and differences between them.

The BC Ministry of Environment (MOE) recently released a new Protocol in December 2015, effective February 1, 2016, which will align the determination of water standards more closely with the system in Alberta. Some of the key similarities include: prescribed minimum thicknesses, hydraulic conductivities and yields for Drinking Water Aquifers; prescribed minimum thicknesses and hydraulic conductivities for confining layers protective of underlying regional aquifers; and prescribed minimum distances from receptors. However, these two processes also have subtle differences.

Through hypothetical case study scenarios, this presentation will show how those differences may impact the regulated water uses depending on site-specific hydrogeological and geological properties, and discuss where judgement can be applied by a qualified professional. SLR has also generated summary reference charts and flow charts for comparison of the procedures for determining applicable water uses for Drinking Water, Irrigation, Livestock and Aquatic Life in both Provinces.

We hope that attendees will find this information relevant and useful for future standards determinations on both sides of the border.

### Erin Robson, M.Eng., P.Eng.

Ms. Robson is a hydrogeologist and professional engineer with 15 years of experience in environmental consulting. Currently based in Kamloops, BC, Ms. Robson's work in the consulting industry has taken her to commercial and industrial sites across British Columbia, Alberta and Alaska. Additionally, she is a member of SLR's hydrogeological services department and is responsible for conducting and reviewing hydrogeological investigations across SLR's Canadian operations. She has extensive experience with contaminated site assessment, remediation data gap analysis, and provides technical and management expertise for a variety of commercial and industrial projects. Erin has actively participated in developing remedial action plans, involving in situ, ex situ and risk assessment approaches and has developed numerous groundwater models, addressing fate and transport of contaminants. Her experience includes both federal and provincial regulatory frameworks. In addition to being a licensed Professional Engineer in British Columbia, Erin is also on the Yukon Environment External Review Roster for Hydrogeological Assessments.