Science Advisory Board for Contaminated Sites in British Columbia
Department of Chemistry, University of Victoria
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Workshop Program:

Adapting Contaminated Sites Management to a Changing Climate

September 25, 2019, 7:45 am – 4:30pm

SFU Harbour Centre
Earl and Jennie Lohn Policy Room
515 West Hastings Street, Vancouver, BC

Abstract:

A key emerging and future trend in contaminated sites management is adaption to climate change. We will explore how climate change is affecting our natural environment and groundwater systems, how chemical fate and transport in the subsurface may be affected by climate change, implications for site investigations, and how remedies at contaminated and mine waste sites may be vulnerable to climate change and extreme weather events. Emerging practices to identify adaptation measures to improve assurance of climate resilience will be discussed. The influence of climate change with respect to sea level rise and changes in weather patterns will be considered. Groundwater and surface water interactions are important to characterize in British Columbia given our water dominated landscape. A sub-theme will be groundwater contamination sources and new and emerging field and mathematical approaches to characterize groundwater seepage and impacts on water bodies, where assessment includes a climate change lens. The workshop will include both emerging policy and higher-level issues for climate change and practical approaches for addressing this issue in contaminated sites management.

Please join to hear leading practitioners and thought leaders from Canada and United States on this evolving and increasingly important topic.

7:45 – 8:25 **Registration and Hot Breakfast**

8:25 – 8:30 **Welcome and Review of the Day's Activities**
Ian Hers, Golder Associates, Vancouver, BC, Canada

8:30 – 9:15 **Key Note Speaker:**
Building Climate Resilience into US EPA's Superfund Program: Experiences to Date
Carlos Pachon, USA EPA, Washington, DC, USA

9:20 – 9:50 **Protecting BC's Groundwater Resource for Use Under Future Climate Conditions**
Annette Mortensen, Ministry of Environment and Climate Change Strategy, Surrey, BC, Canada

9:55 – 10:25 **Contaminated Sites Management at the Vancouver Fraser Port Authority – Climate Change Considerations**
Kate Schendel, Vancouver Fraser Port Authority, Vancouver, BC, Canada

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10:25 – 10:40 **Refreshment Break**

10:40 – 11:10 **Evaluating Risk and Opportunity with Mine Rock Stockpile and Cover System Performance for our Changing Climate Conditions**
Mike O'Kane, O'Kane Consulting, Calgary, AB, Canada

11:15 – 11:45 **Deep Freeze – Accounting for Potential Climate Changes in the Freeze Program at Giant Mine**
Tauhid-Brian Thomas, AADNC/AANDC, Ottawa, ON, Canada

11:45 – 1:00 **Buffet Lunch and Networking**

1:00 – 1:30 **Sea Level Rise Guidance for Waste Management Unit Closure**
Anju Wicke, Geosyntec Consultants, San Francisco, CA, USA

1:35 – 2:05 **Climate Change and Management of Petroleum Hydrocarbon Sites: Tools for Informed Decision Making**
Parisa Jourabchi, ARIS Environmental Ltd., Vancouver, BC, Canada

2:10 – 2:40 **Incorporating Climate Change Uncertainty into Decision Making**
Sean Capstick, Golder Associates, Toronto, ON, Canada

2:45 – 3:15 **Changes to the Conceptual Site Model as a Result of Changing Climate Conditions**
Tiona Todoruk, Advisian, Long Beach, CA, USA

3:15 – 3:30 **Refreshment Break**

3:30 – 3:55 **Break out groups: What are important adaptation measures to improve climate resilience for contaminated sites?**

3:55 – 4:20 **Facilitated Discussion/Q&A: Adapting Contaminated Sites to a Changing Climate**

4:20 – 4:30 **Wrap Up**

Note to Workshop Attendees: Materials are distributed on a flash drive. For convenience, the flash drive contains electronic copies of the presentations and a number of key references.