

The Canadian
Geotechnical Society



La Société Canadienne
de Géotechnique

CGS Luncheon Presentation

A Discussion on the Evolution and Application of Quantitative Risk Informed Dam Safety Decision Making

Presented by:

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Presentation Abstract:

The use of risk informed decision making in the dam safety industry has been growing since the introduction of a formal (albeit simplified) risk assessment process by the US Federal Energy Regulatory Commission (FERC) in 2000. This Probable Failure Modes Analysis (PFMA) technique is widely used throughout the United States and elsewhere but recently has come under some criticism. However, despite the shortcomings with this, and other, simplified risk assessment methodologies, when used in conjunction with standards-based analyses and sound engineering judgement the qualitative approach to risk informed dam safety management and prioritization offers great value. These approaches can be further enhanced through the use of a semi-quantitative approach that makes use of a new risk screening tool to assess the probability of failure of potential failure modes in a transparent and scientific manner.

About the Presenter:

Richard is Hatch's Principal Consultant for Dams and Waterpower. He has a post graduate degree in geotechnical/civil engineering and over 42 years experience in all aspects of the design and construction of hydroelectric facilities, dams, underground structures and rock/overburden excavations. Two of the embankment dam designs Richard was involved with, the Rehabilitation of the Shikwamkwa and Kenogame dams situated in Northern Ontario and Northern Quebec, respectively, were each awarded one of Canada's highest honors for consulting engineering. Richard has worked in Canada, the United States, Chile, Peru, Uganda, Ethiopia, Guinea, Brazil, Guatemala, Columbia, El Salvador, Costa Rica, Indonesia, India, Nepal and Iran, leading design studies and serving as Construction Manager for the implementation of varied heavy civil projects. Richard is a recognized leader in the field of dam safety. He has carried out more than 300 dam safety and due diligence assessments for individual dams and entire hydroelectric facilities and has assisted a number of international organizations in the development of dam safety guidelines and regulations.

Date: Tuesday, March 2, 2021
Time: Presentation at 12:00 PM
Registration Fee: Free Event!
Location: MS Teams Meeting

For event information, please visit:

<http://www.cgsmanitoba.ca/lunch-seminars/upcoming/>

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- This event qualifies for 1 Professional Development Hour. The event is classified as 'Informal Activity' under EGM's CPD Program.
- Please note that if you are unable to attend, someone else can be sent in your place. We are accepting walk-ins depending on seating availability.
- If you wish to be added to the mailing list, please send an email to cgs.manitoba@gmail.com