COURSE 3: TAILINGS DAM BREACH ANALYSIS –
Addressing the Challenges from Owner, Regulator, Practitioner and Researchers Perspectives

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SCOPE AND OBJECTIVE:
This workshop will provide an overview of the technical and non-technical challenges, as faced by practitioners, owners and regulators, associated with conducting and presenting the results of tailings dam breach analyses. Dam breach analyses and inundation studies are typically conducted to determine the dam consequence classification and for emergency response planning but there are no generally accepted best practise method(s) for tailings breach analyses and thus there is a wide variation in how they are conducted and how the results communicated. Case study presentations will be used to illustrate the challenges and variability of breach analyses. Forum discussions, facilitated by industry leaders, will be held in the afternoon with the goal of defining the challenges and collaboratively developing action plans to address these challenges.

The methodology proposed in the draft CDA bulletin will be the foundation of the discussions and this workshop will be a follow-up to the workshop at CDA 2019 conference, however attendance at the CDA 2019 workshop is not a pre-requisite; attendees will be provided with Martin et.al. (2019) to familiarize themselves with the proposed methodology recommended in the draft CDA bulletin.

The workshop is intended to develop a path forward, with input from dam owners, experts, regulators and researchers.

PRESENTERS AND FORUM FACILITATORS:
- Mohammad Al-Mamun, Tetra Tech, Calgary, AB, Canada
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- Scott McDougall, University of British Columbia, Vancouver, BC, Canada
- Rob Schryburt, Ministry of Natural Resources and Forestry, ON, Canada
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ABSTRACT
Due to several recent tailings dam failures public scrutiny around tailings dam safety is growing which has led several jurisdictions and many mining companies to re-evaluate the state of practice in dam
breach analyses and inundation studies. Dam breach analyses and inundation studies are typically conducted to determine the dam consequence classification and for emergency response planning. But there are no generally accepted best practise method(s) for tailings breach analyses and thus there is a wide variation in how they are conducted. The variations of the results of such studies has implications for downstream communities and the environment.

The CDA Mining Dam Committee has taken several initiatives in the area of tailings dam safety management including preparation of a technical bulletin on tailings dam breach analyses. The objective of this workshop is to discuss the current practice of dam breach analyses from a holistic point of view utilizing the framework proposed in the CDA technical bulletin with a goal to develop practical solutions for the mining industry. The workshop will look at the technical, regulatory and operational challenges of breach analyses and will comprise several well documented recent case studies and useful “if/else” analyses with the application of advanced technologies. The workshop is intended to develop a path forward, with input from dam owners, experts, regulators and researchers.

The workshop will be organized as a collaborative effort between dam owners, regulators, expert professionals and academia.

**Who should attend:** This workshop will benefit novice to experienced professionals who have a basic understanding of tailings dams and dam safety management and will be tailored for dam owners, engineers of record (EOR), dam safety professionals, emergency management personnel, regulators, and graduate level university students.

**ADDITIONAL CONTRIBUTORS**

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**COURSE FEE**

- General: $475
- Student: $225