



SHORT COURSE ON TAILINGS DAM BREACH ANALYSIS

1 pm to 5 pm, October 3rd, 2024

The Canadian Dam Association (CDA) published a technical bulletin on Tailings Dam Breach Analysis (TDBA) in 2021. The bulletin provides a process, outlined key steps as well as the hydrotechnical, geotechnical, rheological and modelling aspects that are relevant for these analyses. The bulletin is now available for purchase at cda.ca.

Short Course

The Tailings Dam Breach Working Group (WG) who prepared the bulletin is giving a training course on the use and application of the bulletin. The objectives of the course are:



Promote the science of Tailings Dam Breach Analyses and build awareness on the risk of tailings dam failures;



Present and promote the use of the bulletin;



Provide training to dam safety professionals on TDBA to undertake such studies for their sites and or projects;



Share experiences and collect comments from participants to advance current state of practice for TDBA



Course Description

The course will focus on the tailings dam specific issues and challenges that are critical to capture in such studies, which become more apparent from some of the recent catastrophic tailings dam failure, including Brumadinho dam failure in 2019 in Brazil.

The main topics to be covered in the course are:

- A brief overview of the Bulletin and TDBA process;
- 2. Terminologies
- 3. Failure scenarios and modes/ mechanisms of tailings dam breach;
- 4. Geotechnical issues of tailings relevant to TDBA;
- 5. Rheological behavior of tailings;
- 6. Challenges to breach modelling and outflow hydrograph/volume estimation;

- 7. Selection of TDBA modelling cases;
- 8. Modelling of breach runout process (hydraulic modeling);
- 9. Geo-mechanical models and their limitations;
- 10. Scope and requirements of sensitivity analysis;
- 11. Inundation mapping and reporting;
- 12. Common mistakes and pitfalls

Course Instructor

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Target Audience

Dam owners and operators of mining facilities, regulators, NGOs, emergency planners, risk assessors and the consultants who provide services to the owners will find this course particularly valuable. The course is intended to meet requirements for continuing professional development.



The Bulletin is available for purchase in print or PDF format, through Shop CDA at www.cda.ca



