

Schedule

Short Course 3 – Risk Assessment – Current state of practice for tailing dams

No.	Item	Start	Duration (min)
	Introduction	8:00	
	Workshop opening, Wider program of risk-related ICOLD activities, purpose of workshop, agenda review	08:10	10
Part 1	Risk Assessment Overview	08:10	
1.1	Why we conduct RA, objectives and methods	08:10	15
1.2	What is Risk - a measure of uncertainty, measure of consequence and probability	08:25	15
1.3	Question of Probability - Classical, Relative frequency, Bayesian theorem	08:40	15
1.4	Triplets of scenario, probability, consequences, representative failure scenarios	08:55	15
1.5	Risk tolerability questions - is a line on F-N plot defensible and does it meet the equity criteria?	09:10	25
1.6	Steps in risk assessment and what is and is not covered in B130, B194 and ANCOLD 2022	09:35	15
	Morning Tea	09:50	20
Part 2	Prepared example - Risk Identification	10:10	
2.1	Dam description and definition of problem - potential piping through the dam body	10:10	15
2.2	Piping assessment - owner's practice	10:25	45
2.3	Group activity 1 - Development of piping failure mode - event tree, fault tree, bowtie	11:10	45
2.4	Identification of risk controls	11:55	20
	Lunch	12:15	40
Part 3	Prepared example - Risk analysis	12:55	
3.1	Estimation of system responses	12:55	25
3.2	Estimation of probability of occurrence	13:20	25
3.3	Group activity 2 - Estimate of failure probability of embankment piping	13:45	45
	Afternoon Tea	14:30	20
Part 4	Prepared example - Risk Evaluation	14:50	
4.1	Defensible decision making - basic requirements	14:50	20
4.2	Assessment of risk controls to assist in decision making (what is ALARP)	15:10	30
4.3	Group activity 3 - selection of control measures to be implemented to mitigate the risk of piping	15:40	20
4.4	Societal confidence in dam risk assessments	16:00	20
4.5	Architecture of Dam Safety Management Systems	16:20	10
	Panel discussion	16:30	30