

1. Record Nr.	UNINA9910366651903321
Autore	Oboni Franco
Titolo	Tailings Dam Management for the Twenty-First Century : What Mining Companies Need to Know and Do to Thrive in Our Complex World // by Franco Oboni, Cesar Oboni
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-19447-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (285 pages)
Disciplina	622.28
Soggetti	Waste management Environmental monitoring Sustainable development Natural disasters Geotechnical engineering Quality control Reliability Industrial safety Waste Management/Waste Technology Monitoring/Environmental Analysis Sustainable Development Natural Hazards Geotechnical Engineering & Applied Earth Sciences Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Two Recent Catastrophic Tailing Dams Accidents -- Examples of Recent Catastrophic Hydro-Dam Accidents -- Historic Failures "Statistics" -- What the Public Wants; Public Reactions -- Justifying the Need for new Approaches -- Let's start with some serious Don'ts! -- System Definition -- Hazard Identification -- Defining Probabilities of Events -- Dam Stability Failures -- Consequences -- Tolerance and Acceptability -- Risk Assessment for the Twenty-First

Sommario/riassunto

This book presents a comprehensive approach to address the need to improve the design of tailings dams, their management and the regulation of tailings management facilities to reduce, and eventually eliminate, the risk of such facilities failing. The scope of the challenge is well documented in the report by the United Nations Environment Program (UNEP) and GRID Arendal entitled "Mine Tailings Storage: Safety Is No Accident," which was released in October 2017. The report recommends that "Regulators, industry and communities should adopt a shared, zero-failure objective to tailings storage facilities..." and identifies several areas where further improvements are required. In this context, the application of cutting-edge risk-assessment methodologies and risk-management practices can contribute to a significant reduction and eventual elimination of dam failures through Risk Informed Decision Making. As such, the book focuses on identifying and describing the risk-assessment approaches and risk-management practices that need to be implemented in order to develop a way forward to achieve socially acceptable levels of tailings dam risk.
