

# SAFE AND SUSTAINABLE TAILINGS MANAGEMENT TRAINING

## Course Objectives and Outline

Tailings dams are a critical element in most mine operations and require sustainable management over the life of the mine in line with modern day "risk management" approaches.

Very little formal education is included in University/College courses, leaving a knowledge gap around tailings management.

Recent failures show that TSFs need to be properly designed and then in partnership with the operator, that they are correctly constructed, commissioned, operated and closed. Many Tailings guidelines have been revised to improve holistic management of TSFs, including technical, social, environmental and governance responsibilities, with ultimate responsibility at an executive level.

This training will provide up-to-date information on how to plan, implement, operate and sustainably manage tailings dams in a safe and effective manner consistent with various Government and "duty of care" obligations.

**Attendees will be issued with full course notes and a certificate of attendance, detailing hours of attendance.**

### WHO SHOULD ATTEND

This training is designed for those involved in design, construction, operation, maintenance and decommissioning of tailings dams.

Delegates should include mine management and operation personnel working with the mining industry.

### COURSE FEE

ZMK3500 PER DELEGATE

FREE ENTRY FOR SENIOR MANAGERS AND EXECUTIVES FOR SESSION TWO

## TAILINGS PROGRAMME

07h30 - 08h00	Registration Arrival Tea and Coffee
08h00 - 08h20	Welcome and Introduction
08h20 - 09h20	Design Considerations
09h20 - 09h40	Consequence Classification, Dam Breach Assessments, Risk Management
09h40 - 10h10	Geotechnical Investigations
<b>10h10 - 10h40</b>	<b>Morning Refreshments</b>
10h40 - 11h15	Slope Stability
11h15 - 11h45	Operation of Tailings Dams
11h45 - 12h15	Monitoring of Tailings Dams
<b>12h15 - 13h30</b>	<b>Lunch and closure of session one</b>

## SESSION TWO SENIOR MANAGERS TRAINING

15h30 - 16h15	Lessons from recent tailings dam failures
16h15 - 17h00	Emerging Governance Requirements for Mining Companies

## COURSE PRESENTER



**ANDREW  
COPELAND, Pr Eng**

TECHNICAL DIRECTOR:  
MINING

Andrew Copeland is a Director of KP RSA and the Technical Director Mining of KP Africa and is based at Knight Piésold's Head Office in Johannesburg.

He has had extensive exposure to international mining industry and to the full chain of mining activities and project stages.

Andrew is a technical specialist in the area of mineral residue management and has a thorough understanding of the associated infrastructure, environmental, social and economic aspects, including paste and thickened tailings.

He has substantial experience in civil geo-technics, heap leach facilities and mine infrastructure. Andrew has also written guidelines and standards for mine residue facilities and carried out numerous audits around the world. Andrew is the Engineer of Record at a number of tailings facilities.

## KNIGHT PIÉSOLD COUNTRY HOST



**PATRICK  
KAMPENGELE,  
Pr Eng**

MANAGING DIRECTOR:  
ZAMBIA