



AusIMM
Courses



CHECKLIST: KEY ASPECTS OF TAILINGS FACILITY STABILITY AND EROSION CONTROL

Based on material from the **Tailings Management Professional Certificate**
For full details visit www.ausimm.com/courses



Checklist: Key Aspects of Tailings Facility Stability & Erosion Control

This checklist outlines essential considerations for ensuring the stability and erosion control of tailings facilities. It serves as a practical guide for managing and maintaining secure tailings storage facilities.

Site Assessment and Design

Evaluate the geological, geotechnical, and environmental conditions of the site before constructing the tailings facility.



Ensure the design considers factors such as soil type, climate, water sources, and seismic activity.



Engineering Controls

Implement engineering controls to manage tailings, such as dams and liners.



Regularly inspect and maintain these controls to prevent breaches or failures.



Tailings Management Practices

Adopt best practices for tailings management, including proper tailings deposition techniques.



Monitor and control the density, moisture content, and placement of tailings to maximise stability.





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Water Management

Develop effective water management systems to control the flow of water within and around the tailings facility.

Prevent water infiltration into tailings that could lead to erosion and piping instability.

Erosion Control Measures

Implement erosion control measures such as vegetative cover, erosion-resistant liners, or riprap to protect against surface erosion.

Regularly inspect and maintain erosion control measures to ensure their effectiveness.

Monitoring and Surveillance

Establish a robust monitoring and surveillance system to detect early signs of instability or erosion.

Use sensors, remote monitoring, and manual inspections to track changes in tailings facility stability.



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Emergency Response Plan

Develop and regularly update an emergency response plan in case of a breach or instability.



Ensure all personnel are trained on emergency procedures and evacuation protocols.



Regulatory Compliance

Stay informed about and adhere to local and national regulations and guidelines for tailings facility stability and erosion control.



Conduct regular audits to ensure compliance with regulatory requirements.



Community Engagement

Engage with local communities and stakeholders to address concerns and communicate emergency response plans.



Foster transparency and open communication regarding tailings facility operations.





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Closure and Rehabilitation

Plan for the eventual closure of the tailings facility from the outset, including closure design and cost estimation.



Implement closure and rehabilitation measures to maintain the site's environmental integrity once operations cease.



Continuous Improvement

Encourage a culture of continuous improvement by regularly reviewing and updating tailings management practices.



Learn from past incidents or case studies to enhance facility stability and erosion control.



Tailings Management

PROFESSIONAL CERTIFICATE

Learn how Tailings Management can realise significant value to operations; how to assess closure risks; opportunities to realise value and maintenance programs to drive relinquishment.



WORLD-CLASS FACULTY



98% SATISFACTION RATE



PD HOURS



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THIS RESOURCE IS BASED ON
MATERIAL FROM THE

Tailings Management

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