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Courses



# TURNING TAILINGS INTO OPPORTUNITIES: REAL-WORLD CASE STUDIES

Based on material from the **Tailings Management Professional Certificate**  
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# INTRODUCTION

Explore inspiring real-world examples of how tailings storage facilities have been transformed from liabilities into assets through innovative rehabilitation and repurposing strategies.

We delve into examples from Australia, Chile, and South Africa, where innovative approaches have been taken to rehabilitate and repurpose tailings sites.

Learn how these projects turned environmental challenges into opportunities for renewable energy production, wildlife habitat restoration, and community engagement.

**Explore the comprehensive curriculum of the Tailings Management Professional Certificate by clicking below:**

1

**Module 1**

Introduction to tailings management

2

**Module 2**

Geotechnical considerations

3

**Module 3**

Geochemical & water considerations

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**Module 4**

Governance and surveillance

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**Module 5**

Tailings management for closure

6

**Module 6**

Socio-economic considerations

# CASE STUDY

1

## Australia's Renewable Energy Success

In Australia, a former mining site was transformed into a solar farm after the mine closure. The operators realized that the expansive land area and existing infrastructure could be repurposed for renewable energy generation. By integrating solar panels on the rehabilitated land, they not only mitigated the long-term environmental impact but also generated a new revenue stream. This case demonstrates the potential for post-closure value generation through sustainable land use conversion.

2

## Chile's Electricity Generation Plant

In Chile, a mining company successfully partnered with renewable energy experts to establish a wind farm on a decommissioned tailings storage facility. The wind farm utilised the existing infrastructure and provided an eco-friendly power source for the surrounding community. By taking advantage of the site's location and resources, the company not only improved its environmental standing but also contributed positively to the local energy supply. This case study illustrates how innovative partnerships can create win-win scenarios for environmental stewardship and economic benefits.

# 3

## South Africa's Habitat Restoration

In a region of Africa, a mining company collaborated with environmental agencies and local communities to rehabilitate a tailings facility into a vibrant ecotourism destination. By restoring the land's natural habitat and introducing wildlife conservation efforts, they attracted tourists interested in sustainable travel experiences. This endeavor not only reversed the ecological impact of mining but also provided sustainable livelihoods for nearby communities. This case study exemplifies the potential for turning rehabilitation projects into drivers of local economies and biodiversity conservation.

# 4

## Land Reclamation for Agricultural Revival

### Midwest, USA (1990s - Present)

In the Midwest region of the United States, a mining company took proactive measures to rehabilitate a tailings disposal site that had been inactive since the 1990s. Recognising the potential of the land, the company collaborated with soil experts and agronomists to reclaim the area for agricultural use. Through soil testing and strategic land reshaping, they successfully revitalised the soil's fertility and structure. The reclaimed land now supports thriving crop cultivation, contributing not only to food production but also to the local economy. This case underscores the transformative impact of land reclamation for sustainable agriculture.

THIS RESOURCE IS BASED ON  
MATERIAL FROM THE

# Tailings Management

PROFESSIONAL CERTIFICATE



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