

# SAFETY ALERT

**DATE: August 2022**

## Stranded worker rescued from active tailings dam.

This safety alert provides safety advice for the NSW mining industry.

### Issue

A 14-tonne amphibious excavator became immobilised about 200 m offshore on an active tailings dam, leaving the operator stranded for 7 hours on 29 June 2022. The incident occurred at Ravensworth coal preparation plant, in the NSW Hunter Valley. The emergency procedure relied on an all-terrain vehicle (ATV) as the sole means of rescuing people from the dam but when needed to be used, the ATV could not be driven on the dam.

### Circumstances

The excavator was immobilised after one of its tracks was damaged. The rescue plan for the excavator operator relied on the ATV, but the ATV could not gain traction across the tailings and was unable to travel far from the shore before having to return.

The excavator became immobilised at 3.30pm and at 10.16pm, a four-person rescue team entered the dam to rescue the operator, using ply boards and a rope tethered to the bank.

The rescue team, comprised of NSW Mines Rescue and Ravensworth mine members, had controls in place because of the potentially unstable surface of the dam.

At 10.33pm, the rescue team and excavator operator returned safely to the shore. The operator was uninjured.

### Investigation

The investigation has identified:

1. The capability of the rescue vehicle was not tested before the amphibious excavator started work on the active tailings dam.
2. The risk assessment and rescue/emergency plan for the amphibious excavator task did not consider contingency plans beyond the use of the rescue vehicle.

3. An assessment of risks to the rescue team entering the active tailings dam occurred but did not include a geotechnical assessment of the tailings material.

Figure 1: Amphibious excavator stranded on the active tailings dam.



## Recommendations

Mine operators should:

1. carry out a risk assessment on works undertaken on active tailings dams. The risk assessment should include considering:
  - a. rescue/emergency procedures including contingency plans if the primary means of rescue fails.
  - b. the inclusion of a geotechnical assessment of the tailings material.
2. carry out capability testing of rescue devices (or rescue vehicles), before work on tailings dams begins
3. require all equipment brought on site for works on tailings dams to pass the mine's introduction to site process and be fit for purpose.

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<b>Mine safety reference</b>	SA22-02
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