SAFETY ALERT

Incident Title: Shoring Box Safety

Date of Incident: November 2017

Incident Description and Details:

In November 2017 a Queensland worker was seriously injured when he was crushed by ground collapse in a trench.

Contributing Factors

The collapse of any un-shored section of trench can be caused by a variety of factors including the type of ground, ground-water, rain, and loading applied to the ground. Where a trench has been excavated below a shoring box, the weight of the shoring box can increase the likelihood of the ground collapsing because the trench wall has a load applied within its zone of influence.



Photograph 1: Unprotected trench below the shoring box.

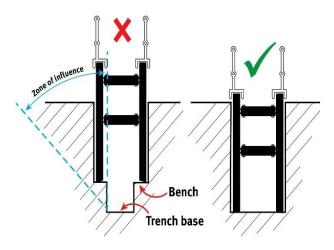


Illustration showing correct shoring.

ACTION REQUIRED

Shoring boxes are an effective way of preventing trench collapse but they will only protect workers who are between the shields of the shoring box.

Shoring boxes or any other trench support system should:

- Extend for the complete depth of the trench
- Be installed in accordance with the manufacturer's instructions.

There may be conditions where a shoring box can be terminated above the base of the excavation, such as where rock that is structurally sufficient to prevent slippage into the trench and is free of defects like cracks or joints. Each individual situation must be assessed and signed off by a geotechnical engineer.