

## Mining operator suffers serious eye injury with high pressure grouter

### Details

A service crew operator was grouting a cable bolt in the back of an underground drive. To protect his face and eyes, he wore goggles with an attached face shield.

After filling the hole with grout, the pump was stopped, the grout hose tap was turned off and the breather tube was tied off. The operator then attempted to kink and tie off the filler tube, but was unable to do so.

He proceeded to remove the hose nozzle from the filler tube and after doing so, was struck in the face by a stream of high pressure grout. The grout struck the face shield from behind, forcing the shield and goggles off his face and covering the operator in grout.

As a result of the accident, the operator was hospitalised and required eye surgery.

### Contributing factors

An investigation into this accident found:

- the nozzle was removed from the filler tube while the system was still pressurised. This may have been caused by a failure to fully turn off the grout hose tap; or by inadvertently turning the tap on while removing the nozzle from the filler tube
- the face shield and goggles did not provide adequate protection from the force of the grout stream when applied from behind and below the operator.

### Recommendations

- Review grouting procedures and ensure that operators engaged in grouting cable bolts:
  - tie off the grout hose and breather hose before removing the nozzle
  - fully turn off the grout hose tap before removing the nozzle from the filler tube.
- Review the personal protective equipment used when grouting to determine its effectiveness in a similar situation.
- Consider the use of a suitable eye wash solution as an alternative to water to rapidly neutralise the effects of the grout.

If you would like further information contact Workplace Standards Tasmania on:  
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A handwritten signature in black ink that reads "F.K. Sears". The signature is written in a cursive style with a large initial "F" and "S".

Fred Sears  
Director of Major Infrastructure  
Chief Inspector of Mines  
Workplace Standards Tasmania  
1 May 2009