

Incident Investigation Summary

Responsible Manager: Simon Cowling, Project Engineering Manager, Transmission Services Gas
Incident Reference No: 292498

Failure of a grit blast nozzle “dead mans lever” shut off device

This Summary is issued to disseminate incident investigation findings and recommendations/ learning for consideration and (as appropriate) action by other operating units, contractors, etc.

What happened?

Whilst carrying out grit blasting operations on an NTS site, the operator was experiencing problems with intermittent air flow. He laid the blast hose and nozzle on an access platform adjacent to where he was working. As he moved away the blast nozzle activated causing the hose to rise up. As he was close by, he was able to secure it with his hand and signal to the pot man to isolate the blast hose with the dump valve. There was no injury to any person and the equipment was immediately quarantined.

Why Did This Happen?

The blast nozzle has a built in safety device “dead mans lever” that should activate when the blast nozzle is not being used. On this occasion the dead mans lever did not function correctly which could have led to a more serious incident had the grit blaster not been adjacent to the grit blast nozzle when it activated.

Investigation outcome

After discussing improvements to the design of the dead mans lever with the manufacturer it was agreed that an upgraded grit blast nozzle with an additional trigger mechanism which is activated before the dead mans lever should be used.



Old type lever mechanism



New type enhanced double lever mechanism

Action :

All grit blast nozzles used in Gas Transmission and Distribution shall be replaced by this new higher specification unit available from Hodge Clemco (part number RM2000)

Grit blast equipment is covered by PSSR and PUWER, further guidance is available via HSE operational circular information document 634/7, direct pressure blasting equipment.

Circulation: Gas Network Investment, Maintenance Delivery Gas, Pipeline Maintenance Centre, Distribution and Construction

Issue Date: October 2012

Review Date: October 2013

For further information regarding this bulletin please contact the Responsible Manager detailed above or James Harrison for Gas Distribution.