BPCF 2005 Alert : Uncontrolled Release From Powder Silo

WHAT HAPPENED

Planned maintenance on a butterfly valve at the base of a hydrated lime powder silo required the closure of a manual slide valve.

The slide valve had been installed some months earlier to avoid having to empty the silo before maintenance work could be undertaken and to achieve isolation of the powder from the working area.

The slide valve would not close easily and it was necessary to strike it with a hammer to move it within its housing.

This had been almost achieved when powder started to escape from the slide valve. Attempts were made to knock the slide further through to complete the seal but the area became engulfed in hydrated lime and the maintenance staff had to withdraw from the area.

Due to the amount of material released from the silo the emergency response plan was initiated

and the area evacuated. Emergency services were called and the slide valve was finally knocked fully in to place by emergency services personnel working with our operatives using breathing apparatus.

The emergency response plan was effective in minimising the risk of injury and damage to the environment resulting from the spillage.

The spillage was removed by specialist contractors using vacuum equipment.

LEARNING POINTS / ACTIONS TAKEN

Check that you have an effective emergency plan to deal with an uncontrolled release from a silo.

If there are no manual slide valves fitted on the silos no further action is required.

If you have manual slide valves these need to be examined in order to establish if they are of a similar design to those in this incident and appropriate action taken to eliminate.

(See additional pdf)

LOCATION:AGGREGATE DREDGERACTIVITY:ACCESS & EGRESS & WORKING AT HEIGHTSUB ACTIVITY:N/A

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