ALERT 98-15

Trapped Fluid Hazards

WHAT HAPPENED:

A motorman was removing a threaded two-inch to one-inch swedge from a two-inch ball valve and nipple. The swedge threads were tight, so heat was applied to the ball valve with a torch. The swedge was broken loose and turning freely. As the motorman put the pipe wrench down on the workbench, the worker assisting him closed the ball valve. This caused a sudden gush of hot water and steam, striking the motorman on the forearm.

WHAT CAUSED IT:

When heat was applied to the ball valve, trapped water in the body of the valve was brought to a boiling point, causing steam and pressure behind the ball in the valve.

CORRECTIVE ACTION:

When heating any kind of valve, check the valve first for trapped fluids. Open and close the valve several times and leave the valve half-open while heating.

The Corrective Actions stated in this alert are one company’s attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

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