Safety Alert

INCIDENT TITLE: **Near Miss:** Failed Seal in Valve on Compressed Air Line

TIME AND DATE OF INCIDENT: 4th June 2014

INCIDENT DETAIL

At Waitaki Power Station, while preparing to use a compressed air blowpipe to clear drill holes for grouting, a seal in a butterfly valve failed. This caused several metres of hose and the metal blowpipe on the end to whip around violently. This was exacerbated by the presence of water in the hose.

Fortunately the worker nearby was not struck by the hosepipe and was able to isolate it from the compressor.

On subsequent examination by Meridian staff, it was noted that the valve failed due to disintegration of a rubber washer allowing compressed air to flow straight through it.

PHOTOGRAPHS

Picture on left shows the hose with the blowpipe on the end. Picture on the right shows the internals of the butterfly valve and the space where the washer/seal should have been.

IMPORTANT INFORMATION

The type of valve was a butterfly valve. The valve was rated to safely handle the compressed air pressure.

The valve body or connections did not fail. The rubber seal within the valve failed.

Butterfly valves on high pressure compressed air systems should be checked for perished seals and replaced if necessary

IMMEDIATE INTERIM ACTIONS

The following precautions are recommended:

- Visually inspect rubber seals on high pressure systems e.g. compressed air lines
- Beware of old/preassembled compressed air connections
- Replace butterfly valves in this application with equivalently rated ball valves
- When pressurising hoses maintain contact with operator at the end

This Safety Alert is issued by the Corporate Safety & Health Team. For further information please contact:

Caroline Rea - Project Manager - 021902827
Projects Delivery Team

meridian