

# Learning Bulletin –High Potential Near Miss Pipe failure under test pressure – Eight20

## What Happened?

Temporary pipework failed at a non-bolted flange when subject to a pressure test causing damage to the internal fittings of a pumping station. A permanent valve was replaced with temporary pipework to facilitate swabbing and chlorination of 300mm main. Due to a lack of communication and a change to the programme the valve was not replaced prior to the pressure test being undertaken. No personal were working in the dry well, however sub-contractor staff were in the MCC room a floor above within the pumping station. Damage was caused to pipe stand supports and concrete base.

## Why did it really happen?

- Testing of phase 1 was brought forward without correct planning and consultation and the subcontractor was not present at the commissioning meeting the morning of the incident
- The testing and commissioning RAMS did include controls and third-party interface, these were not implemented on the day of the incident
- Lack of consultation with the Principal Designer on design change
- Sub-contractor failed to obtain written confirmation of the change in design and implement a revised test and commissioning plan



Temporary section of pipe

Point of failure

## What can I do differently?

- All those taking part in the activity must be briefed on the Safe System of Work
- Ensure all steps have been followed which are specified within the RAMs prior to any pressure test taking place
- When there is a temporary modification to any design the Principal Designer MUST be consulted and written confirmation obtained from the Principal Designer.
- A Test and commissioning plan is to be reviewed to reflect any change of design and programme
- Ensure that when there is a change to the programme of works, ALL stakeholders are to be consulted and communicated on the updated design, test and commissioning plan