EPR Rehabilitation of Asbestos-Cement Pipeline

Goulburn Valley Water and Intelligent Water Networks have co-funded the world first trial of EPR for rehabilitation of an asbestos cement (AC) water main in Fair Street, Shepparton.

EPR is **E**ncapsulation **P**ipe **R**eline and the process in this trial is pipe reaming the AC pipeline with EncapsulAC. This captures the AC pipe fragments and surrounding soil in a safe, identifiable and coagulated mass sitting outside a new Polyethylene pipeline.

The trenchless reaming process comprises:

- old pipe as pilot hole for drilling rods
- connecting the new polyethylene pipe to the rods
- flow points out of cutting head injects fluid at it rotates and rods pulled back
- creating a congealed mass enveloping the PE pipe comprising granulated old AC pipe, surrounding soil and vibrant blue coloured fluid.

The trial project is the rehabilitation of 230m of 100mm diameter AC water main, constructed in 1968, located in a nature strip in a residential area.

This presentation will review success and lessons learnt including:

- Approval process
- Project team members
- Communication plan
- Scope of works
- Construction program
- Rehabilitation efficiency
- Comparison to other options
- Standard guidelines
- Sampling analysis results

EPR could become a future viable option for rehabilitation of AC pipes.