

Innovation in the Water Industry and the Impact of Disruptive Technology

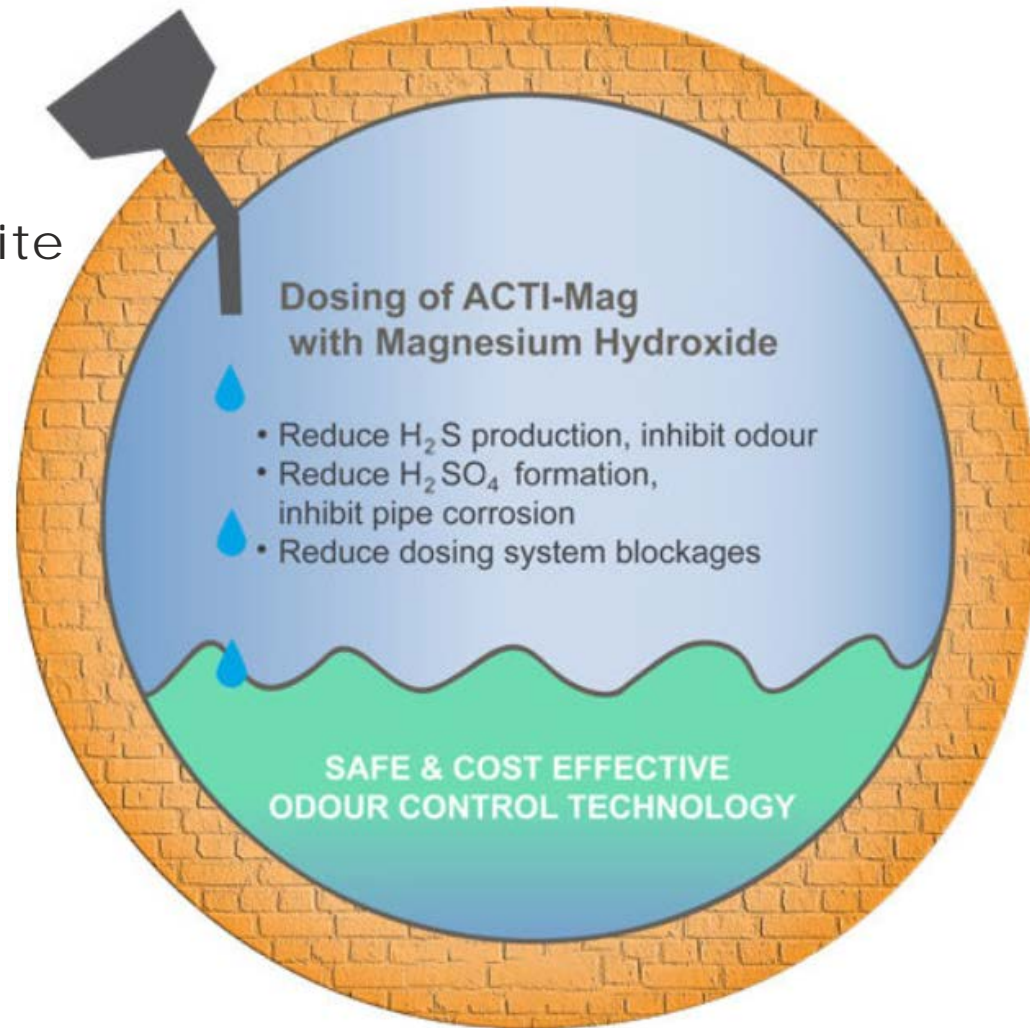
Pipe Disinfection System

- Oxyzone
- Engineering Excellence Award
- Sydney Water
- Ozone gas
- Disinfection of new mains and repairs
- Quicker (hours vs days)
- More reliable results
- Environmental friendly
- Reduced costs



H₂S Odour Control (ACTI-Mag)

- Calix
- Magnesium oxide
- Calcination of Magnesite
- Increases pH
- Industrial application
- Cost effective
- Available in NZ



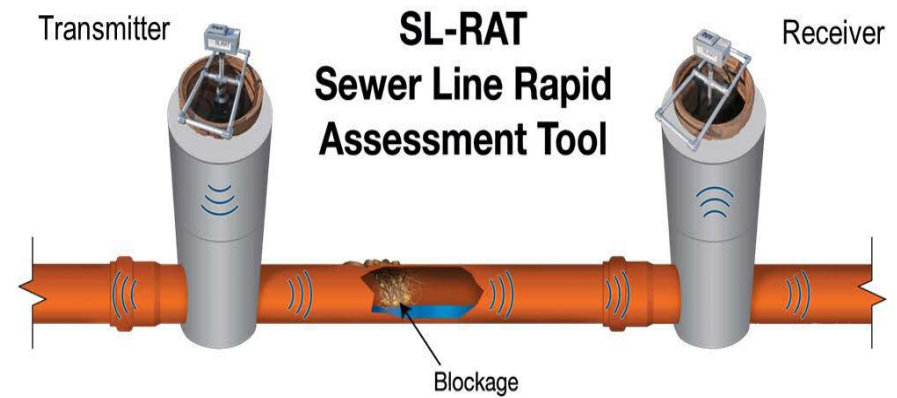
H₂S Corrosion Control (Protecta-Mag)

- Concrete protection
- Manholes, Wet wells, Inlet structures
- Higher viscosity
- Elevated pH
- Deferment of asset renewals
- 7 year guarantee
- Available in NZ



Sewer Assessment Tool (SL-Rat)

- Infosence
- USA EPA
- Austek
- Sydney Water
- Greater coverage
- Optimisation of CCTV
- Higher productivity
- Lower cost
- Simple to use



Energy Neutral Wastewater Plants

- Sewage contains 5 times energy to treat
- 20% recovery = energy neutral
- University of Queensland
- Lodomat Technology
- Acidified nitrites
- Break apart biomass
- Pre-mixing
- No chemicals
- 10% biosolids reduction
- 30% gas increase

Watercare plans to run treatment plants on biogas

28 Feb, 2016 4:00pm

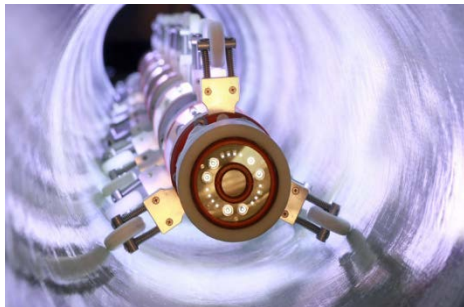


Rosedale treatment plant.

Pipe Rehab Techniques

Berolina

- Reinforced glass fibre
- UV cured
- Structural
- 50 year design
- 150mm to 1600mm



Tunneline

- Cast in-situ
- Reinforced concrete
- Culverts
- 1.2 m to 9.0 m



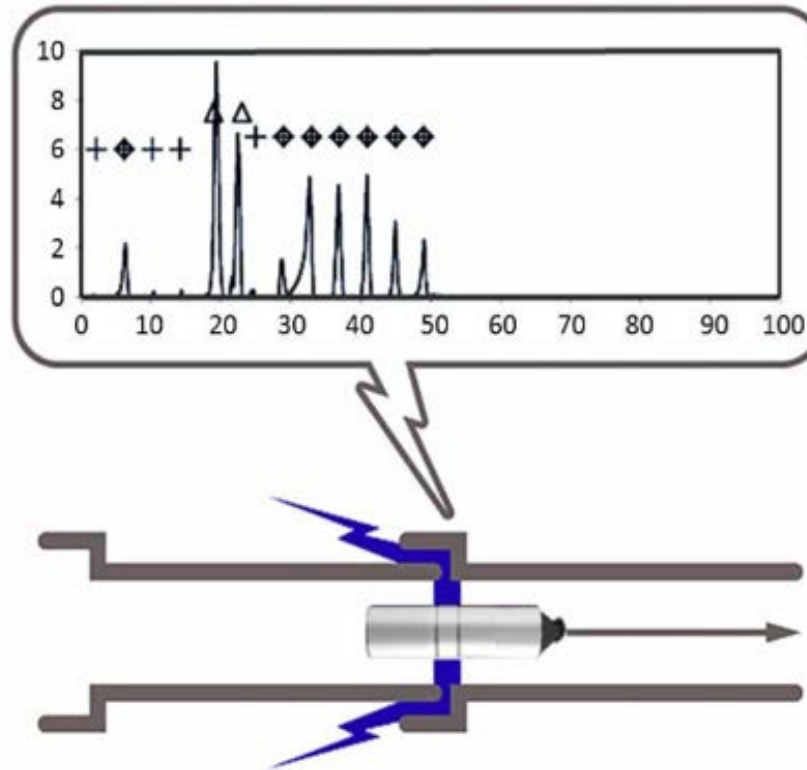
Starline

- Fabric hose + fibreglass
- Inversion process
- Pressure pipes
- 50 year design
- AC water mains

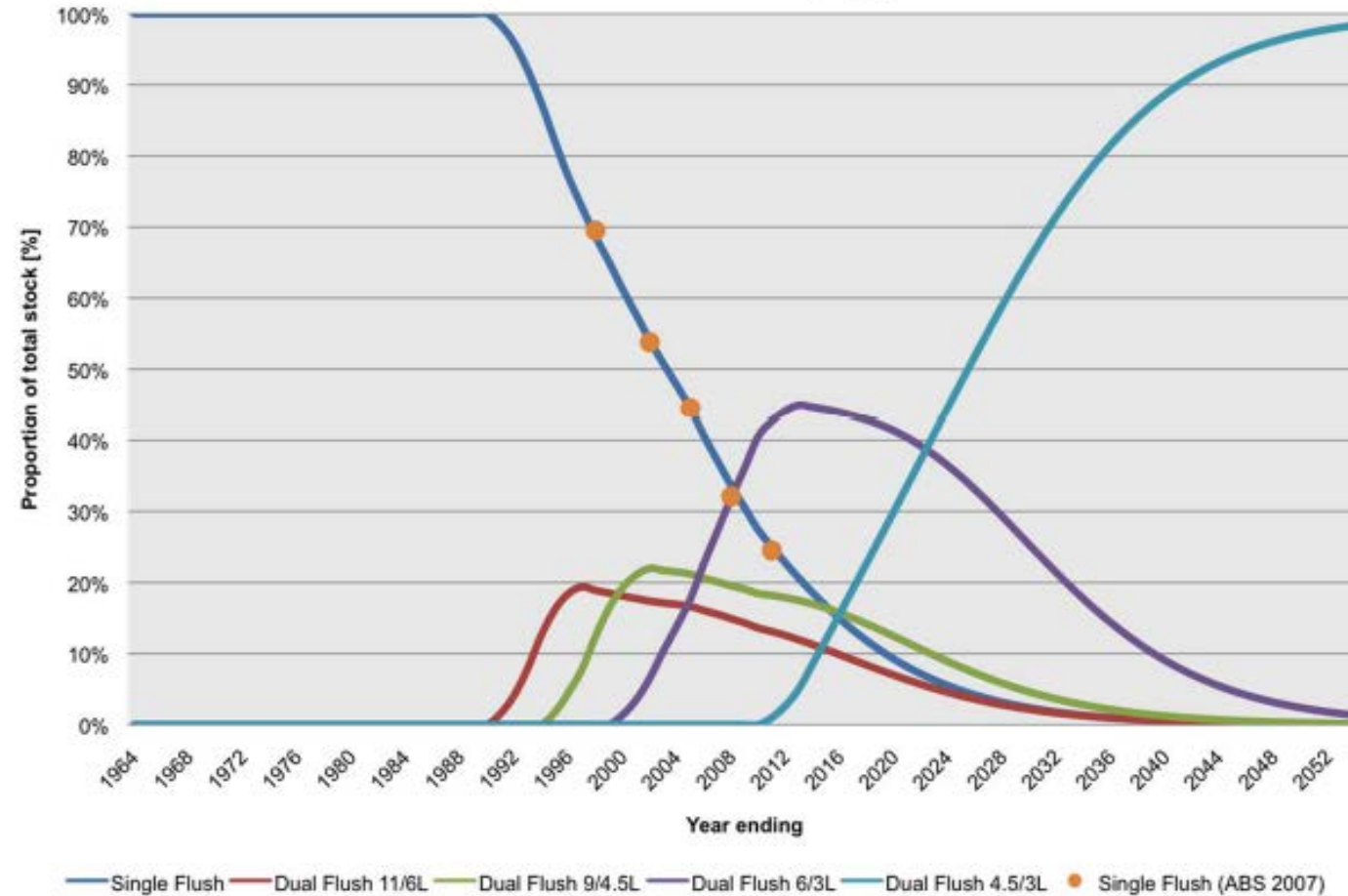


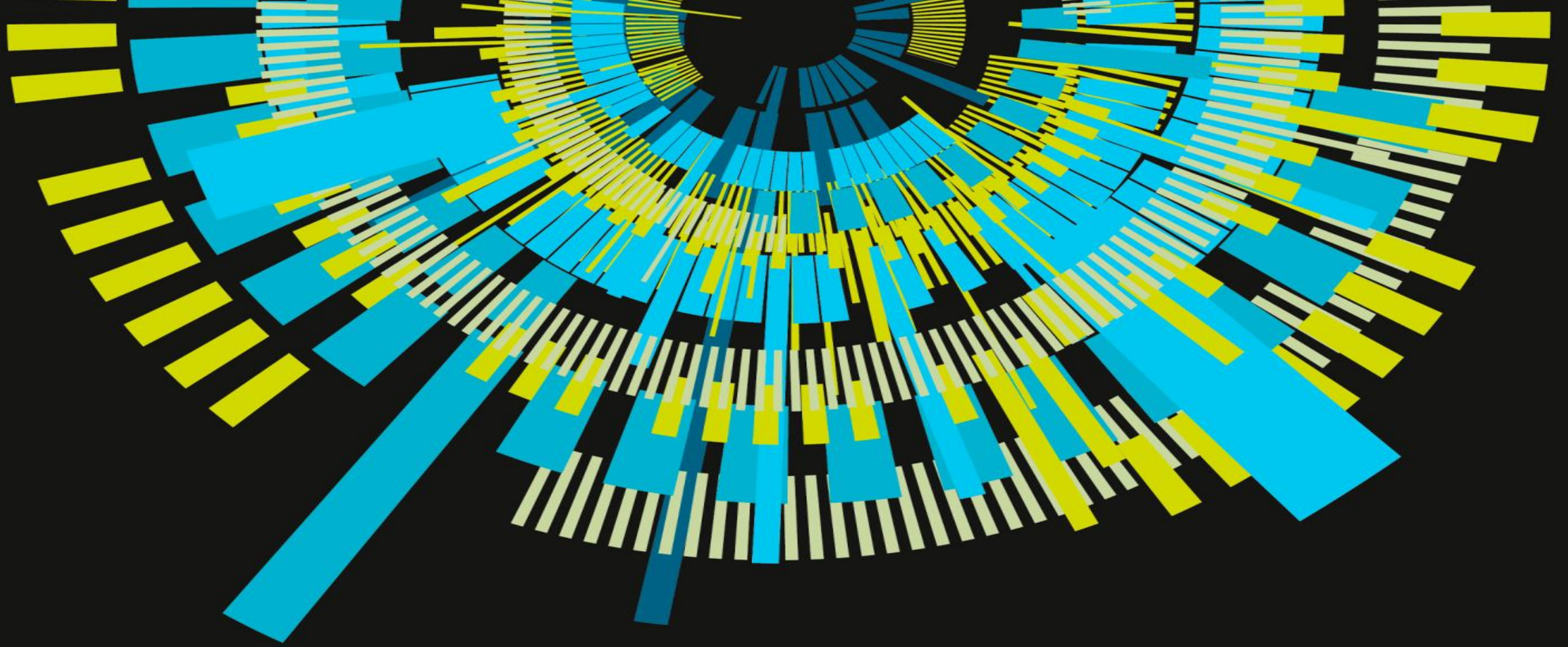
Leak Detection in Sewers

- Electro Scan
- Low voltage
- High frequency
- Melbourne office
- Electricity losses
- 150 to 750mm dia
- Accurate to 10mm



Impact of Disruptive Technology





Thank You