

Emerging Technologies & Innovation TAG

Hosted by Isle Utilities

IWA Brisbane

Session 1: Monday 10th of October 2016

Conference room 12

Chairman: Ignaz Worm - Managing Director Europe, Isle Utilities

Jury:

- *Brian Krishna, Sales & Industry Marketing Director Xylem*
- *Joke Cuperus, CEO PWN*
- *Helen Stratton, Deputy Director, Australian Rivers Institute*
- *Jim Livas, National Engineering & Technology Manager, John Holland*
- *Sandra Hall, Deputy Director, Advanced Water Management Centre (tbc)*

Agenda

10:00 Introduction by Isle **Isle Utilities**

10:05 Kick off by Brian Krishna **Xylem**

10:10 Clear Water Science-Memfree **Vivian Robinson**

Memfree removes pollutants from water that is otherwise not suitable for drinking, cleaning to nano-filter level without using either membranes or chemicals. Water flows continuously into an open top vessel equipped with several chambers of controlled electro-flocculation capability. As it flows through the first chambers a Treat process liberates dissolved hydrocarbons and captures chemical pollutants. A Clean process then floats the captured chemicals and suspended solids to the surface, from where they are automatically removed. A single one-hour pass typically removes about 99+% of most pollutants, salt and a few small molecules excluded. Greater removal rates are achieved with post treatment settling. Non-chemical post treatment disinfection is available if required.

10:35 Geointeractive **Robert Lee**

Hazardous underground infrastructure needs to be physically inspected each year to prevent any critical failures occurring and include main waste water pipes, underground pump stations and manhole chambers. Specialist teams put themselves at risk to visually inspect the conditions at that given time. These areas are often difficult to get to and lack GPS making feature detection subjective. GeoInteractive are developing ways to remotely inspect and record a full comprehensive view of these underground assets as a full photo-realistic 3D record removing the need to expose workers to dangerous areas. The approach is efficient, objective, safe and cost effective compared to traditional inspections. Features can be accurately geo-located allowing for monitoring over time and added to asset management systems. Our 3D Photomapping is suitable for any empty or partially emptied large confined area and includes waste and storm water pipes; pump stations, manhole chambers and reservoirs that have been emptied.

11:00 LG Sonic **Marija Pejic**

LG Sonic products provide an environmentally friendly solution to monitor and control algae and biofouling in lakes, drinking water reservoirs, and other applications by making use of ultrasound technology. The algae control devices from LG Sonic emit specific ultrasonic parameters in order to control algae and biofouling in lakes, reservoirs, and industrial applications. Eliminate up to 90% of existing algae and prevent new algae. Chemical-free solution that is safe for fish and other aquatic life. Treat large water surfaces, such as lakes and reservoirs an requires little maintenance to prevent frequent site visits

11:25 Closing by Isle Utilities **Ignaz Worm**