

Case Study 1:

Wholesale Nursery Reclaimed Water Treatment Trial

South Australia



Background

One of Adelaide's largest wholesale nurseries uses reclaimed storm water for the irrigation of the nursery. The water is collected in a wetland and then stored in an aquifer for delivery as required.

To comply with nursery industry standards, any reclaimed water must be treated prior to use within the nursery to ensure the destruction of moulds, fungi, foreign seeds and spores and other potential contaminants. This has been traditionally undertaken by UV treatment of the water or by the addition of a minimum of 2 ppm of chlorine or in some cases, a combination of both.



The original Trial Cell (Gen 1)

Challenge

To effect the treatment of the total flow of water using the Hydro-dis® system to achieve the required disinfection for compliance with industry standards at commercially attractive rates.

Outcome

The original trial set up in October 2006 has produced preliminary results that are very promising particularly with regards to a reduction in surface moulds on some plants and algae on the ground. The next stage of the trial will be laboratory analyses of known contaminants to verify the technique.

To finalise the trial Hydro-dis® is about to commission independent testing for Pythium Phytophthora and Fusarium to meet final certification requirements of the Nursery & Garden Industry Australia (NGIA).