

## Case Study 3:

# Cooling Tower Disinfection

**Adelaide, South Australia.**



Gen 1 Cell

## Background

The air conditioning system for the building relies upon three cooling towers each independently supplying cooling water to three chillers. This water requires microbiological treatment to comply with Australian standards and this treatment has historically been by the use of a chemical biocide being dosed by a timer controlled dosing pump. This technique of chemical dosing has resulted in varying degrees of effectiveness due primarily to the requirement of manually checking that chemical is available (ensure that the container is not empty or the pump line blocked), the potential for bacteria to develop a tolerance to the biocide and the potential for bio-film build up in the water circuit.

## Challenge

To treat the water by the use of a Hydro-dis<sup>®</sup> unit to disinfect the water and to prevent the build up of bio-films.

## Outcome

During the successful 12 month trial period independent laboratory tests confirmed consistently lower bacterial counts in all three towers without the use of chemical biocides. As a result of the successful trial, three Hydro-dis<sup>®</sup> units were installed and commissioned in February 2007.

