

water reuse in the Alice



Water Reclamation Plant

The Alice Springs Water Reclamation Plant utilises a process known as dissolved air flotation (DAF) to remove solids (predominantly algae) and then disinfect with chlorine to treat the water for the Alice Springs Water Reuse Project.

The plant is capable of clarifying and disinfecting effluent drawn from the wastewater stabilisation ponds at a flow rate of three to six million litres per day.

How does the plant work?

Effluent (wastewater from the last ponds in the waste stabilisation process) is pumped to a mixing tank where the pH of the effluent is corrected by the addition of sulphuric acid. Polymer and coagulant are also added to assist in the removal of solids from the water. At the entrance of the DAF tank, water saturated with dissolved air is mixed with the effluent, and small air bubbles are formed which rise to the surface bringing with it the coagulated solids. These solids, in the form of a thick sludge layer, are then skimmed off the surface with a continuously operating scraper. The sludge is then pumped away and fed back into the incoming sewage flow to the waste stabilisation ponds. The clarified water is then chlorinated and sent to the reclaimed water tank.

What happens with the reclaimed water?

The reclaimed water is pumped to Blatherskite Park for irrigation and to the the Soil Aquifer Treatment basins located at the Arid Zone Research Institute (6.2km away) for further treatment, underground storage and subsequent reuse for purposes such as horticultural production.



Dissolved Air Flotation Tank

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