

water reuse in the alice

Achievements so far...

Water recycling commences

With the completion of the Water Reclamation Plant and the Soil Aquifer Treatment (SAT) basins, initial trials were conducted in early 2008 to test the water quality being produced by the plant. In May 2008, the reclaimed water was sent down the pipeline to the SAT basins at Arid Zone Research Institute to infiltrate through the ground to the aquifer beneath.

Licences issued and trials commence

NT Worksafe and the Department of Health and Community Services issued Power and Water with the necessary licences to allow the plant to be loaded with water treatment chemicals and for trials of the plant operations to begin.

Dissolved air floatation plant and civil works completed

Construction of civil works (roads and buildings) was completed in October 2007, along with mechanical equipment being installed. Electrical wiring of the plant was finalised in December 2007.

Soil Aquifer Treatment basins completed

In May 2007, the construction of four Soil Aquifer Treatment basins was completed at the Arid Zone Research Institute, ready to accept reclaimed water from the treatment plant when it commences normal operation.

Production and monitoring bores drilled

Production and monitoring bores have been drilled at the Arid Zone Research Institute in preparation for water recycling. The production bores will produce recycled water for horticulture, while the monitoring bores will keep track of the recycled water location and depth.

Funding approval for stage two

In August 2005 the Power and Water Corporation Board of Directors approved \$4.1 million for stage two of the 'Water Reuse in the Alice' project. That will treat the effluent from the Alice Springs waste stabilisation ponds before it is pumped to the Arid Zone Research Institute. This brings Power and Water's funding commitment to \$10.4 million.

Mosquito numbers continue to drop

Since the start of the Water Reuse in the Alice project, mosquito numbers in the Ilparpa swamp area have dropped dramatically. The Department of Health and Community Services have been monitoring the figures and stated in the 2003/2004 Alice Springs Vector Surveillance and Control Annual Regional Report that "The drainage scheme in conjunction with the effluent discharge practices, dramatically reduced mosquito breeding in the swamp."

www.powerwater.com.au

Call 1800 245 092 | ABN 15 947 352 360

Last updated May 2008

water reuse in the alice

Public Environment Report is approved

The Minister for the Environment has approved the Public Environment Report that was submitted by Power and Water Corporation and the Department of Primary Industry, Fisheries and Mines. The Assessment Report by the Office of Environment and Heritage did direct the proponents to submit environmental management plans that will be regularly monitored and audited throughout the life of the project to further ensure there are no adverse environmental effects as a result of Water Reuse in the Alice.

New storage tank constructed for project

A three megalitre storage tank has been constructed at the waste stabilisation ponds. This tank will store the recycled water before it gets pumped down to the Arid Zone Research Institute.

Soil aquifer treatment trials completed

Hydrogeologists from the Department of Natural Resources, Environment and the Arts, and water recycling experts from the CSIRO conducted extensive tests in 2004 on the suitability of soil aquifer treatment systems for the Water Reuse in the Alice project. Their results found that the proposed site for underground water storage in a natural geological formation at the Arid Zone Research Institute would be ideal. Benefits from storing water underground, as opposed to aboveground in a storage tank include:

- No water loss from evaporation
- The recycled water is further purified as it is infiltrated into the underground aquifer
- No mosquito breeding
- Larger amounts of water can be stored
- Water can remain underground for many years and pumped out when it is most needed

Purple pipeline completed

A 6.2 kilometre pipeline from the waste stabilisation ponds to the Arid Zone Research Institute was completed in July 2004. The pipeline is coloured purple to highlight that it contains recycled water.

Power and Water fund Ilparpa swamp rehabilitation

In 2003 Power and Water committed \$220,000 to help rehabilitate Ilparpa swamp. The Ilparpa swamp sub-committee was formed to create an action plan and use these funds to assist the rehabilitation process.

Power and Water announces Water Reuse in the Alice

In February 2003 Power and Water announced it will fund stage one of the Water Reuse in the Alice project with \$6.3 million. This innovative project will stop dry weather overflows into Ilparpa swamp from the Alice Springs waste stabilisation ponds and recycle effluent water so it can be reused as irrigation in horticulture, rather than letting it go to waste.

The Department of Primary Industry, Fisheries and Mines join as a project partner. They will investigate and manage the horticulture side of the project.

Drain constructed to tackle mosquito breeding

In 2001 Power and Water and the Alice Springs Town Council constructed a drain at Ilparpa swamp so a new pumping strategy to interrupt mosquito breeding cycles could be implemented. This has resulted in a large reduction of mosquito numbers in the area.

How can I find out more?

For further information about the 'Water Reuse in the Alice' project phone 1800 245 092.