SA Water

Adelaide Desalination Project Fact Sheet

Project overview and timeframes

The South Australian Government is building a seawater desalination plant to help secure Adelaide's drinking water supply.

In March 2007, the Government established a Desalination Working Group. A number of elements were investigated by the working group including:

- Impact of drought and climate change
- River Murray water availability
- Feasible options and optimal technology
- Capacity required
- Possible locations
- Integration with existing water supply network
- Cost scenarios

Adelaide Desalination Project

The construction of a desalination plant is just one of the strategies being employed by the Government to secure Adelaide's water supply. The plant will:

- Be independent of rainfall
- Ensure community confidence in supply
- Provide high standard of environmental performance
- Allow expandability of plant

The $1.8 billion plant will deliver up to 300 million litres of water each day - or about 100 billion litres per annum - using reverse osmosis technology. The plant will incorporate intake and outlet pipelines to draw raw seawater into the facility and return discharge concentrate to the Gulf.

An important part of the Adelaide Desalination Project is the construction of a pipeline to transfer desalinated water to the existing supply network, via Happy Valley.

AdelaideAqua is the multinational consortium selected to design, build, operate and maintain the Adelaide Desalination Plant for 20 years.

Desalination Plant Location

The Port Stanvac site was selected through a multi-criteria analysis of sites along Adelaide's coastline. This site was recommended by the Desalination Working Group due to:

- Relatively deep seawater
- Marine dispersion characteristics
- Better access to the water supply network
- Suitable land availability
- Lower construction cost

Project status

Numerous environmental studies have helped shape plans for the desalination plant and are detailed in the project's Environmental Impact Statement.

An Independent Environmental Technical Review Panel has helped us ensure the environmental investigations are technically sound and scientifically robust.

Key studies undertaken as part of the environmental assessment process include:
- Marine ecological characteristic study
- Water quality monitoring for baseline assessment and for treatment process design
- Hydrodynamic modelling of brine dispersion
- Ecotoxicological studies of discharge

The temporary pilot plant is continuing to test water quality and technical processes.

Work is already well underway at the site and the project remains on track to deliver first water in December 2010. Initially the plant will produce about 15 million litres a day and this will progressively increase to the full capacity of 100 billion litres a year by late 2012.

More information:

For more information visit the project website at www.sawater.com.au, email desalination@sawater.com.au or call 1800 812 362.