

INQUIRY INTO A SUSTAINABLE WATER SUPPLY FOR SYDNEY

Organisation: Water Innovations Pty Ltd

Name: Mr Ross Woodfield

Telephone:

Date Received: 9/01/2006

Subject:

Summary

Inquiry Into A Sustainable Water Supply For Sydney

-Terms Of Reference, paragraph d. The Costs And Benefits of desalination and alternative sources of water including recycled wastewater groundwater, rainwater tanks, stormwater harvesting and EVAPORATION CONTROL.

Dear Mr. Ian Cohen MLC,

Water Innovations Pty Ltd would like to identify a new water sourcing technology for you and your Committee's consideration as part of the Inquiry into a sustainable water supply for Sydney.

The technology can be described as a green, cheap and efficient alternative to all other water sourcing options offered under your terms of reference.

Water Innovations Pty Ltd - Evaporation & Hydrological Interception System.

Water Innovations Pty Ltd, a Brisbane based company have invented and patented a device that could be the world's most cost effective and universally practical solution for water conservation.

Water Innovation's technology solves two of the world's most serious water conservation problems, which are water evaporation and the build up of Blue Green Algae in large water supplies.

The system represents "worlds best" technology, the only physical barrier which can be deployed on any size water storage.

The Technology

Water Innovations Pty Ltd has developed a patented evaporation and environmental control system using freely floating ballasted modules which tessellate and self arrange on any water storage. The simple application of this system together with onsite manufacture, cost effectiveness and its across the board application to any size water surface, distinguishes the solution by its simplicity, completeness and practicality.

The Water Innovations Pty Ltd evaporation and hydrological interception system is an effective and workable solution with the following benefits:

- The modules are able to be manufactured on site, reducing logistic and transport costs
- The module polymer is food grade and therefore is safe to be used on potable water dams
- The polymer is UV stabilized for maximizing the exposed life of the module
- The modules are self tessellating and can be corralled
- The modules are ballasted to resist lift generated in high wind conditions
- The modules incorporate fluted ridges to spoil laminar flow of air over their exposed surface reducing wind lift
- The modules are pyramidal in section thereby assisting the non adhesion of debris and rain water
- The modules are mirrored in design through their equators enabling all orientations and can be flipped without loss of effectiveness

To example the beneficial effect of the cover, the following summary is based on:

Warragamba Dam - Surface Area Approx. 7,500Ha

Modular Cover 3,750 Hectares (approx. 50% surface area)

@ AUD\$12.00 Per M2 Cover cost (exc. GST).

@ average 4.5mm per day evaporation.

Daily Saving : 170 Megalitres

Yearly Savings : 62,000 Megalitres

25 year Savings : 1,550,000 Megalitres

Amortised infrastructure cost over 25 years : AUD\$ 300.00 per megalitre saved.

In cost comparison terms, Water Innovation's Evaporation and Hydrological Interception System can save the equivalent output of desalination and waste/storm water reclamation at less than one third the cost and without the greenhouse effect on the environment.

We are happy to supply further information if required and or attend committee hearings to this end.

Kind Regards,

Ross Woodfield.

WATER INNOVATIONS PTY LTD.

PO Box 347

Nathan QLD 4111

Phone: 07 3895 8777

www.waterinnovations.com.au