



Division of Chemicals and Polymers

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Serving Australia in the Chemical, Polymer
and Water Treatment Industries.

24 August 1995

Mr Roger J Holmes
General Manager
Rainpure Pty Limited
40/9 Powells Road
BROOKVALE NSW 2100

Dear Mr Holmes,

The CSIRO Division of Chemicals and Polymers which undertakes research for Australia's water and waste water treatment industries, has evaluated Rainpure's Water Purification Technology by testing the Rainpure M24 Water Purification Unit.

We were advised the unit would process any source water and we tested it with three raw water sources - Melbourne tap water, river water and polluted sea water.

In all cases the product water not only conformed with, but surpassed the current World Health Organisation guidelines for drinking water quality for all chemicals, with the exception of pH. The WHO, however, points out that the recommended levels for pH are only a guide. In this case the variance was due to dissolved carbon dioxide and this is not a cause for concern for human consumption, but only for prevention of corrosion in distribution pipelines.

Elimination of bacteria was also claimed for the Rainpure Technology. The test showed that all three product waters also met WHO guidelines for both *E. coli* and total coliforms. In the sea water, total coliforms were reduced from a count of 920 to less than 1 and in river water from 16,000 to less than 1.

Conductivity of the water which measures parts per million of total dissolved solids was also measured. For both the tap water and the river water, total dissolved solids showed readings of 0.9 and 2.03 parts per million of total dissolved solids. Even the sea water was reduced from 31,000 parts per million to 10.7 parts per million of total dissolved solids.

Among the chemicals we tested for were heavy metals. In all three tests the heavy metal component of the water was reduced to the WHO guideline level or lower.

Whilst we did not compare the unit with other forms of purification, we can point out that the unit does not have any filters, membranes or cartridges to change or keep clean. It does not use any chemicals and does not require the water supply to be under pressure.

Whilst we did not specifically test the unit for blue green algae and radioactivity, we are aware of test work undertaken by the Division of Water Resources on blue green algae and by ANSTO on radioactivity showing that the unit eliminates both blue green algae and radioactive particles.

In summary, the technology which has been invented and developed in Australia by Australians for the Australian company Rainpure was found to be capable of producing a very high quality water from relatively clean or contaminated feed waters, suitable for both drinking water and industrial use.

Yours sincerely,



Peter B Millikin
Business Manager
CSRIO Division of Chemicals and Polymers

cc. Tom Spurling
Neil Furlong
Luis Kolarik