



The **solution** for water shortages

May 1, 2008

Dear Mr. Johns,

We are responding to your request for more detailed information on the water savings experienced when combining the Unimac washer/extractor with the BRAC Commercial greywater recycling system (CGW).

Based on the recent data collected from our own research and development, this combined system will reduce the volume of water required for laundry services by over 40%. An electronic device developed by BRAC Systems Inc. accomplishes this by diverting the Unimac's rinse cycle water to the BRAC system where it is filtered, disinfected and stored. The stored water is then used for the next wash loads 2 soak cycles and 2 wash cycles. The BRAC System would collect 1.5 USG of rinse water for every pound of clothes washed and be able to reuse 1.3 USG of that for the next loads soak and wash cycles. This process is continuously repeated, thus reducing the potable water consumption by over 42%.

Collecting the wash cycle's water separately and reusing it to flush toilets can produce an additional saving of 20%.

Here is an example for a prison with 1,000 inmates and the potable water savings on a weekly, monthly and yearly basis:

- An average person washes 12 pounds of clothes per week.
- 3.1 USG of water needed to wash 1 LB. of clothes. *

INMATES: 1,000 x 12 LBS. = 12,000 LBS. of clothes per week.

- $12,000 \times 3.1 \text{ USG} = 37,200 \text{ USG}$ of water used per week for laundry.
- $37,200 \times 42\% = 15,624 \text{ USG}$ of water saved per week.
- $(37,200 \times 42\%) \times 4 \text{ weeks} = 62,496 \text{ USG}$ of water saved per month.

The annual savings of potable water based on these criteria would be an astonishing **812,448 USG**.

* Using the Unimac UW series commercial washer/extractors.

Owen Arthur Buglass
General Manager