

# Waterwise Checklist



## Industrial laundering operation water conservation

This checklist provides water conservation options, and raises awareness of water issues. Specific information is available in the Waterwise Business series of Information Sheets.

### Getting started

This checklist is intended for use by facilities primarily engaged in supplying laundered uniforms (shirts and pants), garments, shop towels, mats, mops, barber and beauty shop towels, and restaurant bar towels to industrial or commercial users.

Water is vitally important to this industry, acting as the universal medium for the removal of soil and odour.

To reduce water consumption in an office or commercial/industrial setting, consider the three-step process below:

- 1 Educate and involve employees on water conservation through team briefs, management meetings etc.
- 2 Locate all water using sources (bathrooms, wash sinks, hoses, dish washing machines, HVAC, cooling water, etc.) in your building and estimate how much water is used.
- 3 Identify and implement water conservation options by establishing a Water and Environment Team (W.E.T).

It is important that employees understand how their job affects the amount of water used in their work environment. Seek ideas from those most involved with the daily operations and activities of the organisation. Make water conservation partly their responsibility by asking them to identify where water is used.

Once the areas of water consumption have been determined, employees can help to implement conservation measures.

Specific information is presented in Waterwise Business Information Sheet – *Water Efficiency Program*.

### Immediate and no or low cost conservation options:

- Monitor daily water usage in order to identify excess use.
- Increase employee awareness of the need to conserve water.
- Wash only full loads.
- Turn off and isolate steam supply to equipment when it is not in use.

### Short term options

- Determine if one washer or method of washing uses more water than others and schedule larger jobs on the most water efficient washers.
- Instruct maintenance personnel to routinely inspect and repair any leaking water or steam lines as well as pumps and valves.
- Implement soil-sorting procedures to ensure that heavily soiled materials are correctly sorted to minimise overwashing of lighter loads or to eliminate the need for rewashing.
- Conserve wash water by programming for each load both the number of cycles and the water fill level per cycle depending on whether fabrics are light, medium or heavily soiled.
- To reduce the use of rinse water, evaluate wash formulas to reduce the amount of water needed to clean each unit of laundry.

### Long term options

- Install continuous batch washers with countercurrent flow. This uses up to 70 percent less water and steam than conventional washer extractors of similar capacity.
- Retrofit conventional washers with a holding tank to capture final rinse waters. This option provides an estimated water saving of 30 percent.
- Reuse cooler rinse waters in the pre-soak cycle to remove soils in light-coloured garments before using hot water in wash cycles which can further set the soil into the garment.
- Minimise overall water usage by installing automated liquid injection wash systems or retrofitting existing equipment where possible.
- Consider the installation of ozone systems for water, chemical and energy reductions. Ozone systems inject ozone gas into the wash waters which act as an oxidant and biocide allowing the usage of water at cold temperatures.
- Modify industrial piping to reuse non-contact cooling water and steam condensate.
- Identify and set targets for the re-use of water.

# Waterwise Checklist



## Success story

A hotel achieved significant savings within five months after installing an ozone laundry system. The hotel, which has three washers and launders about 15 loads per day, reported a saving of approximately \$7,600. According to the facilities director, the ozone unit contributed to reductions in hot water usage, allowing the hotel to eliminate the need for an existing boiler. The ozone system also led to reductions in energy consumption and chemical usage.

## Technical links

- LaundryESP – <http://www.laundryesp.com/> - designed to build on the industry's existing strengths of recycling and reusability and its more efficient use of resources (water, energy and wash chemicals) when compared to home laundering.
- Industrial Launderer Magazine – <http://www.ilmagonline.com/>
- Pacific Northwest Pollution Prevention Resource Center's Industrial Laundry Links – <http://www.pprc.org/pprc/sbap/laundry.html#links> – includes information of interest to industrial launderers to prevent pollution and comply with environmental regulations.

## References

DPPEA FY02-07 – North Carolina Division of Pollution Prevention and Environmental Assistance.

## Further information

Key Customer Relationship  
Management Customer Services Division  
Water Corporation  
PO Box 100  
Leederville WA 6902  
Ph: 1310 39  
E-mail: [cust\\_centre@watercorporation.com.au](mailto:cust_centre@watercorporation.com.au)