

# Commercial, Industrial, and Institutional Facilities Water Use Self-Assessment Checklist<sup>1</sup>

What efforts has your facility already made in water efficiency? Several questions for facility managers are listed below to help gauge a facility's present water efficiency performance.

## Top Management Commitment and Resources

- Is water efficiency included in the company's environmental policy statement?
- Are water efficiency responsibilities delegated?
- Are quantitative goals established and tracked?
- How are water efficiency goals communicated to employees?
- What incentives and feedback loops exist for employee participation, suggestions, and increased awareness?
- Has your facility taken advantage of available help and resources from your utilities, assistance programs, vendors, or consultants?

## Water Efficiency Survey

- Do you know the actual breakdown of your water uses: cooling and heating, domestic uses, process rinsing, cleaning activities, kitchens, laundries, landscaping, water treatment regeneration, evaporation, leaks, and others?
- Do you know your life cycle water costs for supply water, wastewater treatment, sewer/discharge, and heat and mechanic energy losses?
- Are you doing simple things such as leak inspections, eliminating unnecessary uses, and using timers? Are these practices institutionalized?

## Identifying Opportunities – Target Areas for Water Reduction

### DOMESTIC

- Are code conforming 1.6 gpf commodes, 0.5-1.0 gpm faucet aerators, and low flow 2.5 gpm showerheads in use?

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<sup>1</sup> *Water Efficiency Manual for Commercial, Industrial, and Institutional Facilities*; joint publication of the North Carolina Department of Environment and Natural Resources, and the Land-of-Sky Regional Council; August 1998

## HEATING/COOLING

- Has once-through cooling water used in air conditioners, air compressors, vacuum pumps, etc., been eliminated with the use of chillers, cooling towers or air cooled equipment?
- Has blow-down/bleed-off control on boilers and cooling towers been optimized?
- Is condensate being reused?

## PROCESS RINSING AND CLEANING

- Have you considered improved rinsing techniques such as counter current systems, sequential use from high quality to lower quality needs, conductivity flow controls, improved spray nozzles/pressure rinsing, fog rinsing, or agitated rinsing?
- Is water cut off when not in use by flow timers, limit switches, or manually?
- Is the life of an aqueous bath being maximized via filtration and maintenance control?
- Are “dry clean-up” practices used instead of hosing down, and first pass pre-cleaning conducted with squeegees, brushes, or brooms?

## ON-SITE WATER REUSE

- Is water quality matched with water quantity?
- Have reuse applications been examined for process water, landscaping irrigation, ornamental ponds, flush water, and cooling towers?

## LANDSCAPING

- Are low-flow sprinklers, trickle/drip irrigation, optimized watering schedules and water placement, preventative maintenance, and xeriscaping techniques in place?

## KITCHENS

- Are “electric eye” sensors for conveyor dishwashers installed?
- Have new water and energy efficient dishwashers been examined?

## **Water Efficiency Action Plan**

- Have you performed a cost analysis on water efficiency opportunities?
- Do you have a prioritized implementation schedule?
- Are water users informed of the changes and communication channels open for feedback?

### **Tracking and Communicating Results**

- Do you post monthly water usage rates to employees and management?
- Are your water efficiency achievements being recognized in case study articles, media coverage, mentoring to other businesses, business environmental exchange programs, or in award programs?