

Cleaning and sanitation can represent a large portion – up to 40 percent or more, of water used at commercial and industrial facilities. A significant amount of water can be consumed by washing building exteriors, sidewalks, or vehicles, as well as cleaning manufacturing floors and process equipment. This fact sheet provides general tips to help industries reduce the amount of water used for cleaning and sanitation processes.

Water Efficiency Opportunities

- **Sweep, vacuum, or blow paved areas rather than hosing them off.** Not all areas need to be cleaned with water or cleaned on a regular schedule. Try substituting a broom, vacuum, or other dry clean-up method instead of using water.
- **Sweep and shovel solid materials from the floor.** Remove large particles and waste from the manufacturing floor with a shovel or broom before rinsing with water.
- **Use an automatic shut-off nozzle for hoses.** Use an automatic low-flow shut-off nozzle when cleaning with water is required. High-efficiency wash-down spray nozzles that use up to 40% less water than standard models are available.
- **Consider using a pressure washer** instead of a standard hose and nozzle.
- **Use low-flow “fogging” nozzles** to rinse parts efficiently.
- **Maintain and/or replace spray nozzles when needed.** Spray nozzles can become clogged, corroded, or damaged due to heat and wear. Measure the flow rate, check the spray pattern, and monitor pressure to ensure maximum efficiency.
- **Reduce exterior washing.** Change the building exterior and window cleaning schedule from "periodic" to "as required."
- **Wash vehicles less often.** Wash vehicles only when they need to be washed. Consider using a commercial car wash that recycles water.
- **Inventory all cleaning equipment.** Identify cleaning equipment currently on-hand. Determine the number and types of units provided, evaluate their frequency of operation, and install more water-efficient equipment where possible.
- **Discontinue "wet" carpet cleaning.** Use "dry" or powder methods to clean carpets instead of steam-cleaning or other water-intensive methods.
- **Repair equipment.** Keep equipment in good repair to maximize efficiency. This includes repairing leaky hoses and dripping faucets.
- **Inventory all cleaning chemicals used in the facility.** Ensure products are being used correctly and switch to chemicals that provide better cleaning with less water.
- **Clean large tanks and pools without draining.** In some cases, suction hoses can be used to clean tanks and pools without the need to drain water.
- **Use a water broom.** This device connects to a hose and is driven by standard water pressure. It can use 10% of the water of a hose alone. Some water broom attachments can be connected to a power washer for washing down large surface areas at commercial and industrial facilities.
- **Install clean-in-place (CIP) systems** (typical for food industry). CIP systems are designed to automatically clean and disinfect equipment without major disassembly and assembly work. CIP systems can reduce water use, reduce cleaning time, and increase operator safety. There are a number of methods for optimizing CIP systems including using rotating spray nozzles, monitoring solution conductivity, reusing final rinse water, and customizing the cleaning program or filtration.
- **Purge piping with “pigs” or air.** Use plastic projectiles (called “pigs”) or compressed air to purge piping residuals before flushing with water.



If you have questions or would like additional technical assistance, email or call the conservation program at:
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