

ENVIRONMENTAL Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

DWGB-26-10

2020

Water Efficiency: Laundry Facilities

Laundry facilities vary in size from industrial operations to self-service machine businesses. Laundry operations can use the water efficiency practices in this fact sheet to save water and the costs associated with water supply and wastewater discharge. A large amount of energy goes into heating water for washing. Reducing the amount of water used in laundry operations will also save on energy costs. A comprehensive audit should be performed to assess the facility's water system and identify locations where these practices can be employed to conserve water. The NHDES fact sheet DWGB-26-16 "Water Efficiency: Business or Industry Water Use and Conservation Audit" provides information about performing water audits.

- Wash full loads only.
- Reduce water volumes for partial loads.
- Install a system to reuse rinse water for wash water make-up. Computer controlled rinse water reclamation systems can save as much as 25% over conventional systems.
- Employ a rinse water or wash water treatment system to allow reclamation and reuse of the water in laundry operations. These systems treat wastewater for reuse in initial wash cycles and can save up to 50% of total water use for the entire system.
- Investigate washing systems that internally reuse rinse water and wash water in a continuous batch or "tunnel" type process with counter current flow. These washers can reduce water use by as much as 60% when compared with washer-extractor types. They also use less chemicals and energy and are less labor-intensive.
- Install a laundry system that uses ozone rather than detergent as a cleaning agent. These systems work on a closed loop process and use cold water only. Water needed for the rinse cycle is reduced since no detergent is present.
- Schedule wash loads carefully to minimize the need to adjust the chemical/detergent composition and machine variables. Develop methods using minimum water requirements based on load soil conditions and treatment requirements.
- Install water saving devices on all fixtures.
- Inspect and repair valves, sensors, and other controls regularly.
- Use static rinse tanks where feasible.
- Meter flows through the cleaning systems for more effective operations control. By metering

flows, minimum flow rates can be accurately maintained.

- Back-flush filter systems only when necessary.
- Replace conventional machines in laundromats with water-saving horizontal-axis machines. These washers rotate laundry rather than agitating it and use much less water.
- Post water efficiency signs telling customers how they can save water and money by washing full loads only or by lowering the water level settings on partial loads.

Crystal Laundry in Manchester saves approximately 675,000 gallons of water per month by using a horizontal flow “tunnel-type” washing machine that reuses rinse waters for bleaching and washing. This washing system is capable of using approximately 40% less water than a conventional type machine, based on equivalent cleaning requirements.

For More Information

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at www.des.nh.gov.

References

New England Interstate Water Pollution Control Commission; *MRI Water Conservation Technical Bulletin #8, Water Conservation Best Management Practices Laundry Facilities*; New England Interstate Water Pollution Control Commission; Lowell, MA; 1996.

U.S. Department of Defense; *MIL-Handbook-1165, Water Conservation*; U.S. Dept. of Defense; 1997; pp 51-55.

Vickers, Amy; *Handbook of Water Use and Conservation*; WaterPlow Press; Amherst, MA; 2001; pp 278-278.

Note: This fact sheet is accurate as of June 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.