

Every Drop Counts

Smart Water Use

www.nysefc.org/smartwateruse



Smart Water Use Tips for the Beverage Industry

Please note that these suggested measures are not intended to supersede more stringent federal, state, Tribal, or local health and safety regulations.

General

- Appoint a water conservation coordinator with the responsibility and authority for a water conservation program.
- Increase employee awareness of water conservation by explaining the importance of individual actions to the success of the program.
- Increase employee awareness of water conservation.
- Make the plant manager and other employees aware of the water conservation coordinator's function.
- Read water meter daily to monitor and report the success of water conservation efforts.
- Seek employee ideas for water conservation using contests, rewards, and suggestion boxes.

Survey the Facility

- A plant survey helps to establish facility water savings potential by identifying areas where water is wasted or where water could be reused.
- Determine flow rates in floor gutters and whether the flows are adequate to prevent solids accumulation.
- Determine the capacity of each continuous discharge not yet being reused.
- Determine the capacity of each water-containing unit and frequency of emptying.
- Identify all points where water is used, including hose connections.
- Determine the quantity of water used at each point.
- Identify the major water lines. Determine the quality, quantity, and temperature of water carried by each.

Evaluate Survey

- Review the information developed during the survey.
- Identify the major water-using operations.
- Review the water re-use practices currently employed and develop plans to improve re-use.
- Evaluate the feasibility of installing cooling towers.
- Study the potential for screening and disinfecting reclaimed water to increase the number of times it can be re-used.

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Equipment

- Install high-pressure low-volume nozzles on spray washers.
- Use fogging nozzles to cool product.
- Install in-line strainers on all spray headers; inspect nozzles regularly for clogging.
- Adjust pump cooling and flushing water to the minimum required.
- Determine whether discharges from any operation can be substituted for fresh water supplied to another operation. Discharges that can potentially be re-used are:
 - final rinses from tank cleaning, keg washers, fermenters;
 - bottle and can soak and rinse water;
 - cooler flush water, filter backwash; and
 - pasteurizer and sterilizer water.
- Areas of possible re-use include:
 - first rinses in wash cycles;
 - can shredder or bottle crusher;
 - filter backflush;
 - caustic dilution;
 - boiler makeup;
 - refrigeration equipment defrost; and
 - equipment cleaning, floor and gutter wash.
- Use conveying systems that use water efficiently.
- Handle waste materials in a dry mode if possible.
- Replace high-volume hoses with high-pressure, low-volume cleaning systems.
- As equipment wears out, replace with water-saving models. See [EPA WaterSense product list](#).
- Equip all hoses with spring loaded shutoff nozzles. Be sure these nozzles are not removed.
- Instruct employees to use hoses sparingly and only when necessary.
- Adjust overflows from recirculation systems by controlling the rate at which make-up water is added through the following methods:
 - install float-controlled valve on the makeup line;

continued

New York State

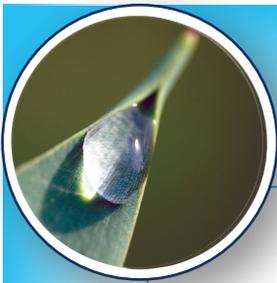
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- close filling line during operation;
- provide surge tanks for each system to avoid overflow;
- turn off all flows during shutdowns (unless flows are essential for cleanup);
- use solenoid valves to stop the flow of water when production stops. The valves could be activated by tying them to drive motor controls.
- adjust flow in sprays and other lines to meet minimum requirements.

Outdoor Maintenance (including landscaping, pools and spas, turf management, and other outdoor water management issues)

- See the Tips for Outdoor Maintenance page for more information.

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