

## **Appendix H:**

### **Suggested Best Management Practices for Restaurant and Food Service**

Commercial and institutional kitchens use water primarily for food and drink preparation, food warming, dishwashing, ice machines, ice cream and frozen yogurt machines, garbage disposers, and scrapping troughs. Additionally, water is used for washing, cleaning, and sanitizing processes (including laundry), plumbing fixtures in restrooms, cooling and heating systems, and landscapes.

#### **General Practices**

Water conservation will be most successful when everyone participates and shares in the responsibility. Encourage employees, contractors, suppliers, and customers to utilize water conserving measures.

- Train employees to conserve water, and post signs in the kitchen and other work areas promoting water conservation
- Serve water to your customers only when requested; Place signs, either in central locations, on menus, or on tables, informing customers of your water conservation ethic
- When fixtures wear out, replace water and energy efficient models
- Recycle water whenever feasible and consistent with regulatory requirements
- Install on-demand, point-of-use hot water dispensers to reduce the need to run faucets that are slow to produce hot water

#### **Water Audits**

Conduct regular audits on water-using fixtures, features, and behaviors, being certain to include the following:

- Record the number and type of water-using appliances or pieces of equipment, such as dishwashers, garbage disposers, ice makers, faucets, and food scrapping troughs
- Determine the average number of loads per day completed by each water-using appliance and piece of equipment
- Determine the average number of meals served per day
- Determine the amount of time faucets and other continuous-flow appliances are used each day
- Identify pipe sizes and estimate flow rates of incoming water supply lines
- Catalog dripping faucets, puddles, and leaks
- Promptly repair leaks and malfunctioning equipment

**Food and Drink Preparation**

- Kitchen faucets should use a maximum of 2.5 gpm at 80 psi; if higher flows are needed for utility sinks install a fingertip control valve for aerated or full flow operations
- Reduce or eliminate using water to thaw food; if water must be used, reduce flows to minimum need
- Turn off continuous flows used to clean drains trays such as those utilized in beverage islands, unless required by law
- Install hands-free or foot activated valves and faucets
- Use the minimum amount of dishware, glasses, utensils, and cookware needed so as to reduce dishwashing loads
- Avoid using water to melt ice in strainers
- Wash vegetables and fruits in ponded water; avoid using running water
- Install automatic shutoff faucets for bar sinks
- Eliminate excess water flow by installing pressure reducers on the disposal's water supply lines per manufacturer's specifications

**Ice Makers**

- Replace old icemakers with an air-cooled, water efficient model
- Use ice flake machines rather than ice cube machines; ice flake production uses less water
- Use softened water in ice machines to minimize bleed-off
- Collect spent cooling water from water-cooled ice machines and use it for non-potable purposes such as mopping floors

**Ice Cream and Frozen Yogurt Machines; Walk-in Coolers and Freezers**

- Replace water-cooled units with air-cooled units, or install storage tanks and re-circulating systems to reuse waste water
- Connect water-cooled machines to existing chilled water systems, if possible
- Turn off the machines when not in use, if possible

**Dishwashing**

- Presoak and wash items in basins of water instead of under running water
- Fit hoses used to wash sinks and kitchen areas with throttling valves on the spigot to reduce water use; these valves should be checked regularly for leaks

- Use full loads in sanitizers, sterilizers, dishwashers, and washing machines consistent with sound sanitary practices and infection control requirements
- Scrape or brush dishes and cookware rather than using running water or pre-rinse sprayers, when possible
- Replace pre-rinse sprayers with water-saving 1.6 gpm sprayers
- Install pressure reducing valves on dishwasher supply lines when water pressure exceeds the pressure recommended by the manufacturer
- Operate scraping troughs only during dish washing operations
- Wash full loads only in rack-type machines
- Turn dishwasher off when not in use
- Replace older dishwashers with new water and energy efficient equipment

#### **Food Disposers**

- Replace disposers with garbage strainers if possible
- Scrape food from dishes and cookware into trash receptacles when possible
- Use the minimum acceptable flow of water through the disposer by installing electronic sensors to detect food in the grinding chamber and by installing solenoid valves to stop the flow of water when the disposer is off
- Reuse water from the dishwasher in the mixing chamber of the disposer
- Eliminate excess water flow by installing pressure reducers on the disposer's water supply lines per manufacturer's specifications
- Replace older disposer models with a model with pre-set controls to reduce the amount of time the disposer is operated
- Investigate eliminating disposers, scraping troughs, and conveyors wherever possible