

2.4.5.1.1.3 WATER CONSERVATION PRACTICES FOR INSTITUTIONAL USE.

The Applicant's plan shall address the following water conservation practices for Institutional use, if relevant to the institution:

A. Recycle brine from RO or filter backwash for cooling, reuse process water, install a recycling and filtering system to reuse carwash water; reuse water used to wash products; reuse water created via processing; reuse water from settling ponds.

B. Monitor and maintain water-using equipment and valves on water lines; install automatic-close valves in equipment when not in use; check pressure and install pressure-reducing valves to match equipment needs; conduct regular checks for leakage; use shut-off nozzles on hoses; use closed loop system for equipment cooling.

C. Retrofit power generation systems to use water-conserving fuel types and reduce water needed for emission control; utilize seawater or non-fresh water for once-through cooling; utilize continuous-flow, closed-loop cooling when possible.

D. Install water meters in various work areas and read monthly to identify leaks as well as monitor conservation efforts.

E. Install or retrofit to low volume showerheads and toilets, install waterless urinals; install low-volume faucet aerators or faucet motion sensors; retrofit flush valves to 1 gpm; repair leaks and drips immediately.

F. Replace continuous flow equipment in kitchens, bars and cafeterias; install low flow dishwashers and only wash full loads; use automatic shut-off faucets; presoak dishes and utensils in basins or retrofit to low-volume pre-rinse sprayers; thaw frozen products using swivel aerator instead of running water, monitor/replace ice dispensers to reduce waste, serve water in bars and restaurants only upon request.

G. Avoid excessive blowdown by adjusting boiler and cooling tower blowdown rate to maintain total dissolved solids at manufacturer's specifications; capture and reuse steam condensate as boiler feed or cooling tower make-up; use ozone as a cooling tower treatment to reduce make-up water; shut off water-cooled air conditioning units when not needed; replace water-cooled equipment with air-cooled systems; connect heating/cooling equipment to a closed-loop system rather than using a municipal supply.

H. Use full loads in sanitizers, dishwashers, sterilizers and laundry washing machines; retro-fit steam and autoclave sterilizers with water reclamation and automatic shut-off devices; evaluate the wash formula and number of machine cycles for efficiency; use water-efficient horizontal-axis or continuous batch-reclamation washing machines; use "dry," powder methods for carpet cleaning when possible; clean windows as required rather than on a set schedule, clean work space and outdoor walkways with water brooms instead of hoses.

I. Irrigate outdoor areas early in the morning or in the evening using low-volume irrigation systems; adjust nozzles to avoid overspray, install an irrigation meter to monitor water use and possible leaks; use automatic rain shut-off devices; reduce irrigation schedule for cooler weather and the rainy season; use mulch around low-maintenance landscape plants that require minimal supplemental irrigation; reuse industrial waste water or process water for irrigation if possible, utilize reclaimed water when feasible.

J. Lower swimming pool and spa water levels to avoid splash-out; reduce the water used to back-flush pool filters; use a pool cover to reduce evaporation and heat loss when the pool is not being used.

K. Create water conservation suggestion boxes for employees; install signs in restrooms and cafeterias that encourage water conservation; assign an employee to evaluate water conservation opportunities and effectiveness; train staff on water efficient use of machines and equipment