



SECTION 31

WATER EFFICIENCY REQUIREMENTS

These regulations identify the types of water efficiency requirements for water service and the procedure for notification to Applicants that water efficiency measures are required. The most current and water-efficient requirement of EBMUD, local, state or federal regulations in effect on the date the District receives payment for new or upgraded service shall apply.

A. DETERMINATION OF FEASIBILITY OF WATER EFFICIENCY MEASURES

The District will review applications for new standard services and determine the applicability of, and compliance with, water-efficiency requirements. Applicants for expanded service shall be required to meet the water-efficiency requirements for all new water service facilities and may be required to retrofit existing water service facilities or uses to comply with all requirements. Applicant shall maintain design documents and construction and installation records and furnish a copy of said documents and records to the District upon request. The District may inspect the installation of water efficiency measures to verify that the items are installed and performing to the required water efficiency levels. The Applicant or their representative may be present during any District inspection.

B. WATER EFFICIENCY REQUIREMENTS FOR NEW DEVELOPMENT OR EXPANDED SERVICE

Water service shall not be furnished to any Applicant for new or expanded service, or for any change in customer classification (such as a change from industrial to commercial, residential to commercial, or the like) that includes new or retrofitted water using equipment, unless all the applicable water-efficiency measures hereinafter described in this Section 31 and required by applicable local, state and/or federal law have been reviewed and approved by the District. All the applicable and required water-efficiency measures shall be installed at Applicant's expense.

C. INDOOR WATER USE

- a. All Applicants shall comply with these regulations and those required by applicable local, state and/or federal law including the California Green Building Standards Code (CAL Green). Installation of after-market flow restrictors does not satisfy CAL Green fixture flow rate requirements.
- b. Toilets shall be high-efficiency or dual flush models rated and (third party) tested at a maximum average flush volume of 1.28 gallons per flush (gpf), and be certified as passing a 350 gram or higher flush test as established by the U.S. Environmental Protection Agency WaterSense Specification or other District-accepted third party testing entity. Pressure-assisted type toilets shall be high-efficiency rated at a maximum 1.0 gpf. No flush or conversion devices of any other kind shall be accepted.



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- c. Wall mounted urinals shall have a maximum rated flow of 0.125 gpf or less, or be zero water consumption urinals.
- d. Floor mounted urinals shall have a maximum rated flow of 0.5 gpf or less.
- e. Single showerheads shall have a maximum flow rate of 1.8 gallons per minute (gpm) at 80 pounds of pressure per square inch (psi).
- f. Multiple showerheads serving a single shower enclosure shall have a combined flow rate of not more than 1.8 gpm at 80 psi or shall be designed to allow only a single showerhead to be operated at one time.
- g. Residential lavatory faucets shall have aerators or laminar flow control devices (i.e., orifices) with a maximum rated flow of 1.2 gallons per minute or less.
- h. Public lavatory faucets shall have aerators or laminar flow control devices with a maximum rated flow of 0.5 gallons per minute or less.
- i. Wash fountains shall have a maximum flow rate of not more than 1.8 gpm per 20 inches of rim space.
- j. Metering faucets shall not deliver more than 0.20 gallons per cycle.
- k. Kitchen faucets shall have aerators or laminar flow control devices (i.e., orifices) with a maximum rated flow of 1.8 gallons per minute or less with optional temporary flow of 2.2 gpm.
- l. Clothes washing machines shall be front loading horizontal axis or top loading models with a water factor rating of 4.5 or less. A water factor rating of 4.5 means a maximum average water use of 4.5 gallons per cubic foot of laundry.
- m. Residential dishwashers rated as standard size (i.e. 307 kWh/year) shall use less than or equal to 5.0 gallons/cycle. Dishwashers rated as compact size (i.e., 222 kWh/year) shall use less than or equal to 3.5 gallons/cycle.
- n. Cooling towers not utilizing recycled water shall be equipped with recirculating systems and operate at a minimum of five (5) cycles of concentration. Newly constructed cooling towers shall be operated with conductivity controllers, as well as make up and blowdown meters.



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- o. Food steamers in all food service facilities shall be boiler less or self-contained models using ≤ 3.0 gallons per hour where applicable.
- p. Ice machines shall be air-cooled or use no more than 20 gallons of water per 100 pounds of ice and shall be equipped with a recirculating cooling unit.
- q. Commercial refrigeration shall be air-cooled or if water-cooled, must have a closed looped system. No once through, single pass systems are permitted.
- r. Pre-Rinse dishwashing spray valves shall have a maximum rated flow of 1.6 gpm or less.
- s. Food disposers shall modulate the use of water to no more than 1 gpm when the disposer is not in use and shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
- t. Commercial dishwashers or ware washing equipment shall be currently labeled an EnergyStar rated water efficient model meeting the maximum water consumption limits as specified in the table below:

Machine Type	High Temp Requirements	Low Temp Requirements
Under Counter	≤ 0.86 GPR	≤ 1.19 GPR
Stationary Single Tank Door	≤ 0.89 GPR	≤ 1.18 GPR
Pot, Pan, and Utensil	≤ 0.58 GPSF	≤ 0.58 GPSF
Single Tank Conveyor	≤ 0.70 GRP	≤ 0.79 GPR
Multiple Tank Conveyor	≤ 0.54 GRP	≤ 0.54 GRP
Single Tank Flight Type	$\leq \text{GPH} \leq 2.975x + 55.00$	$\leq \text{GPH} \leq 2.975x + 55.00$
Multiple Tank Flight Type	$\leq \text{GPH} \leq 4.96x + 17.00$	$\leq \text{GPH} \leq 4.96x + 17.00$

*GRP (gallons per rack); GPSF (gallons per square foot); GPH (gallons per hour)

- u. Conveyor and in-bay vehicle wash facilities shall reuse a minimum of 60% of water from previous vehicle rinses in subsequent washes.
- v. Self-service vehicle wash facilities shall use spray nozzles with a flow rate of 3.0 gpm or less.
- w. Swimming pools and spas shall be covered when not in use, unless public health and safety concerns exist.



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D. OUTDOOR WATER USE

- a. All Applicants shall comply with all District water service regulations and those required by applicable local, state and/or federal law including the Model Water Efficient Landscape Ordinance (MWELo).
- b. Applicants shall submit, at a minimum, a scaled site plan that identifies the property address, parcel boundaries, building footprints, hardscape, softscape, meter location, and location of each hose bib. If an application for service is submitted without a detailed landscape plan for the entire premises, the District will estimate the new irrigable landscape area to determine the potential irrigation demand (default demand) for inclusion in the total domestic water demand calculation. Projects subject to MWELo shall also provide a compliant landscape documentation package as required by the ordinance.
- c. All premises with 500 square feet or more of new irrigable landscape area shall install a modular weather-based smart controller with rain or soil moisture sensor, an irrigation connection with a manual shutoff valve, a backflow prevention device, a pressure regulator where pressure exceeds the operating range of system components, and sleeves allowing irrigation to extend to all landscape areas.
- d. All non-residential premises with 500 square feet or more of new irrigable landscape shall also install a flow sensor with master shutoff valve.
- e. All residential premises with more than 5,000 square feet of new irrigable landscape area shall also install a flow sensor with master shutoff valve.
- f. As provided in Sections 1 and 3 of the Regulations, unless determined by the District that a District-dedicated irrigation meter is required, a private dedicated irrigation meter shall be required for residential premises with an irrigable landscape area of 5,000 square feet or more.
- g. As provided in Sections 1 and 3 of the Regulations, unless determined by the District that a District-dedicated irrigation meter is required, a private dedicated irrigation meter shall be required for non-residential premises with an irrigable landscape area of more than 1,000 square feet but less than 5,000 square feet.
- h. As provided in Sections 1 and 3 of the Regulations, a District dedicated irrigation meter shall be required for non-residential premises with an irrigable landscape area of 5,000 square feet or more.



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E. PENALTIES/CONSEQUENCES

Failure of Applicant to conform to this Regulation and the water-efficiency requirements stated herein may require the Applicant to resubmit a revised water service application and water-efficiency plan at the Applicant's expense. The District may withhold water meter(s) and account activation until the District approves compliance with these requirements.