

RULE 142 - WATER EFFICIENCY STANDARDS

A. Water Efficiency Standards.

1. All New Construction of New Structures shall install and maintain plumbing fixtures and conservation standards as set forth in this Rule.
2. No plumbing fixture shall be replaced with fixtures which allow greater water use.
3. All new and replacement water fixtures shall comply with then-current California plumbing and energy standards/codes when more restrictive than the District's.

B. Former Rules. Water Permit requirements change periodically to reflect current efficiencies. Sites with uncompleted Water Permits that have not received a final inspection shall at a minimum comply with the requirements in place at the time the Water Permit was issued unless required to install more efficient fixtures as a result of a subsequent triggering event (e.g. new/amended Water Permit or Change of Ownership/ Use).

C. Residential Water Efficiency Standards for New Structures.

All Residential New Structures receiving a Water Permit, shall meet or exceed the following standards:

1. High Efficiency or Ultra High Efficiency Toilets shall be installed;
2. Urinals, when installed in a Residential use, shall be designed to flush with one (1) gallon of water. After January 1, 2016, newly installed Urinals shall flush with no more than 0.125 gallon per flush;
3. Showerheads, Rain Bars, or Body Spray Nozzles must be designed and manufactured to emit a maximum of 2.0 gallons per minute of water;
4. All shower fixtures should be equipped with scald protection valves rated for 2.0 gallons per minute Showerheads;
5. High Efficiency Clothes Washer(s) and High Efficiency Dishwasher(s) shall be required when installed in a Residential use;
6. Lavatory Sink faucets shall emit a maximum of 1.2 gallons of water per minute at 60 psi;
7. Kitchen Sink, Utility Sink, and Bar Sink faucets shall emit a maximum of 1.8 gallons of water per minute at 60 psi. Faucets may have the capability to temporarily increase flow to 2.2 gallons per minute for filling pots and pans, but must default back to a maximum flow rate of 1.8 gallons per minute measured at 60 psi;

8. Instant-Access Hot Water Systems shall be installed;
9. All hot water pipes shall be insulated;
10. Sodium chloride (salt) water softeners shall be discouraged in New Construction. Alternate technologies such as potassium chloride shall be recommended. When a sodium chloride water softener is to be installed within the MPWMD, the unit shall use demand-initiated regeneration which senses when the resin must be re-charged, either electronically or with a meter that measures and calculates usage. This requirement shall be specified on the Construction Drawings;
11. Landscaping.
 - a. All New Construction shall install and maintain Landscaping that complies with the California Model Water Efficient Landscape Ordinance as revised (California Code of Regulations, Title 23, Water, Division 2, Department of Water Resources, Chapter 2.7, Model Water Efficient Landscape Ordinance) or with local or District Landscape requirements if more restrictive.
 - b. Plants shall be grouped in hydrozones.
12. Irrigation System Efficiency.
 - a. Weather-Based Irrigation System Controllers (e.g. Smart Controllers) shall be installed, used and maintained on Sites where there is an Irrigation System.
 - b. Weather-Based Irrigation System Controllers shall include functioning Soil Moisture Sensors and a Rain Sensor as components of the system.
 - c. Drip Irrigation shall be utilized for watering all non-turf irrigated plantings.
 - d. Rotating Sprinkler Nozzles shall be utilized for turf irrigation.
 - e. Overhead spray irrigation shall not be used to water non-turf Landscaping, including trees and shrubs.
 - f. Irrigation Systems shall operate with at least 75 percent efficiency for overhead spray devices and at least 81 percent efficiency for drip systems.
 - g. Rainwater collection/irrigation systems are encouraged to supplement irrigation for new Landscaping. New Structures shall be encouraged to include one or more rainwater Cisterns and a system to provide at least 75 percent of exterior irrigation during normal rainfall years. Systems must be compliant with local catchment system standards.

- h. Graywater collection/irrigation systems are encouraged to supplement irrigation for new Landscaping. Systems must be compliant with local catchment system standards, including Monterey County Department of Environmental Health.
- i. All Sites utilizing a Graywater reuse system shall install and maintain a backflow prevention device as required by any Water Distribution System Operator that supplies water to the Site.

D. Non-Residential Water Efficiency Standards for New Structures.

All Non-Residential New Structures receiving a Water Permit shall meet or exceed the following standards:

1. High Efficiency or Ultra High Efficiency Toilets shall be installed;
2. Urinals shall be Pint Urinals or Zero Water Consumption Urinals and shall be clearly specified on the final Construction Drawings. Zero Water Consumption Urinals shall be encouraged in settings where there is a regular maintenance staff;
3. Showerheads, Rain Bars, or Body Spray Nozzles must be designed and manufactured to emit a maximum of 2.0 gallons per minute of water;
4. All shower fixtures should be equipped with scald protection valves rated for 2.0 gallons per minute Showerheads;
5. Public Washbasins shall emit a maximum of 0.5 gallon of water per minute at 60 psi. Private Washbasins (e.g. hotel or motel guest rooms and hospital patient rooms) shall emit a maximum of 1.2 gallons of water per minute at 60 psi. All other sinks shall emit a maximum of 2.2 gallons of water per minute at 60 psi unless higher flow is required by Health and Safety Code;
6. Public Washbasins equipped with automatic shut off devices or sensor faucets shall operate with a maximum flow of 0.25 gallons per cycle;
7. High Efficiency Clothes Washers shall be installed when a Clothes Washer is installed in a New Structure permitted under this Regulation;
8. High Efficiency Dishwashers or High Efficiency Commercial Dishwashers shall be installed and maintained on the Site when a Dishwasher is installed in a New Structure permitted by a Water Permit;
9. Instant-Access Hot Water System(s) shall be installed for hot water access points to ensure that hot water is available within ten (10) seconds;
10. All hot water pipes shall be insulated;

11. Sodium chloride (salt) water softeners shall be discouraged in New Construction. Alternate technologies, such as potassium chloride shall be recommended. When a sodium chloride water softener is to be installed within the MPWMD, the unit shall use demand-initiated regeneration which senses when the resin must be recharged, either electronically or with a meter that measures and calculates usage. This requirement shall be specified on the Construction Drawings;
12. Water Efficient Pre-Rinse Spray Valves shall be utilized when a pre-rinse spray valve is installed;
13. There shall be no single-pass water use systems in ice machines, hydraulic equipment, refrigeration condensers, X-ray processing equipment, air compressors, vacuum pumps, etc. Air-cooled or better technology shall be installed when available;
14. Water cooled refrigeration equipment shall be prohibited when there is alternative cooling technology available at the time the Water Permit is issued;
15. Cooling Towers shall be equipped with conductivity controllers that are used to increase the number of cycles that can be achieved;
16. Boilerless steamers or connectionless steamers shall be installed in place of boiler-based steamers when a steamer is installed in New Construction;
17. Landscaping.
 - a. All New Construction shall install and maintain Landscaping that complies with the California Model Water Efficient Landscape Ordinance as revised (California Code of Regulations, Title 23, Water, Division 2, Department of Water Resources, Chapter 2.7, Model Water Efficient Landscape Ordinance) or with local or District Landscape requirements if more restrictive.
 - b. Plants shall be grouped in hydrozones.
18. Irrigation System Efficiency.
 - a. Weather-Based Irrigation System Controllers shall be installed, used and maintained on Sites where there is an Irrigation System.
 - b. Weather-Based Irrigation System Controllers shall include functioning Soil Moisture Sensors and a Rain Sensor as components of the system.
 - c. Drip Irrigation shall be utilized for watering all non-turf irrigated plantings.
 - d. Rotating Sprinkler Nozzles shall be utilized for turf irrigation.

- e. Overhead spray irrigation shall not be used to water non-turf Landscaping, including trees and shrubs.
 - f. Irrigation Systems shall operate with at least 75 percent efficiency for overhead spray devices and at least 81 percent for drip systems.
 - g. Rainwater collection/irrigation systems are encouraged to supplement irrigation for new Landscaping. New Structures shall be encouraged to include one or more rainwater Cisterns and a system to provide at least 75 percent of exterior irrigation during normal rainfall years. Systems must be compliant with local catchment system standards.
 - h. Graywater collection/irrigation systems are encouraged to supplement irrigation for new Landscaping. Systems must be compliant with local catchment system standards, including Monterey County Department of Environmental Health.
 - i. All Sites utilizing a Graywater reuse system shall install and maintain a backflow prevention device as required by any Water Distribution System Operator that supplies water to the Site.
19. The implementation of water conservation Best Management Practices shall be integrated into construction and operation of the project to the extent possible.
20. The use of Alternative Water Sources for indoor toilet flushing and other uses allowed by the Jurisdiction shall be encouraged.

E. Residential and Non-Residential Change of Ownership, Change of Use, and Expansion of Use Water Efficiency Standards

Sites that have a Change of Ownership, or receive a Water Permit for a Change of Use or Expansion of Use shall meet or exceed the following standards:

- 1. High Efficiency or Ultra High Efficiency Toilets shall be installed;
- 2. Urinals shall be at a minimum High Efficiency Urinals (when installed prior to January 1, 2016). Newly installed Urinals shall be Pint Urinals or Zero Water Consumption Urinals. Zero Water Consumption Urinals shall be encouraged in settings where there is a regular maintenance staff;
- 3. Showerhead flow rates shall meet or exceed water efficiency standards for New Structures;

4. Bathroom faucet flow rates shall meet or exceed water efficiency standards for New Structures;
5. Kitchen faucet flow rates shall meet or exceed water efficiency standards for New Structures;
6. Remodels or relocations of water fixtures or appliances that involve hot water shall be encouraged to install an Instant-Access Hot Water System and insulate all new hot water pipes;
7. Pre-rinse spray valves shall meet or exceed the District's definition for Water Efficient Pre-Rinse Spray Valves;
8. Changes of Use and Expansions of Use that require a Water Permit shall not install any single-pass water use systems in ice machines, hydraulic equipment, refrigeration condensers, X-ray processing equipment, air compressors, vacuum pumps, etc. Air-cooled or better technology shall be installed when available;
9. Changes of Use and Expansions of Use that require a Water Permit shall not install any water cooled refrigeration equipment when there is alternative water efficient cooling technology available at the time the Water Permit is issued;
10. Automatic Irrigation Systems, with the exception of Weather- Based Irrigation Systems, shall be retrofit to include a Rain Sensor;
11. The implementation of Non-Residential Best Management Practices shall be integrated into construction and operation of Non-Residential uses to the extent possible.

Rule added by Ordinance No. 30 (7/13/87); amended by Ordinance No. 71 (12/20/1993); Ordinance No. 125 (9/18/2006); Ordinance No. 141 (11/16/2009); Ordinance No. 151 (11/19/2012); Ordinance No. 170 (5/16/2016)