

# CA CODE OF REGULATIONS: TITLE 20 SECTION 1602(X)(1) SPRAY SPRINKLER BODIES

EFFECTIVE: OCTOBER 1, 2020

## 1. What does Title 20 require for spray sprinklers sold in California?

Beginning October 1, 2020, all Spray Sprinkler Bodies (SSB) must meet specific **performance requirements** and contain the proper **markings** in order to be legally sold in California. Further, all products manufactured on or after this date must be certified to the California Energy Commission's (CEC) appliance efficiency database known as the "**Modernized Appliance Efficiency Database**" (MAEDbS) before they can be offered for sale in California. The manufacturer is responsible for testing basic appliance models.

## 2. What are the benefits of pressure regulated spray bodies?

The CEC estimates that annually there are over 30 million SSBs sold in CA for turf irrigation where some of these SSBs are pressure regulation and some are not. Pressure regulation spray bodies can reduce water waste caused by misting and overspray. Pressure regulation can also help improve distribution uniformity.

## 3. What are the specific performance requirements for SSBs?

Compliant SSBs will contain pressure regulating devices and shall adhere to a flow rate and pressure performance criteria including a minimum outlet pressure listed under Section 2 of the [WaterSense® Specification for Spray Sprinkler Bodies Version 1.0, September 21, 2017](#).

## 4. How can products be listed on the Modernized Appliance Efficiency Database (MAEDbS)?

Candidate SSBs must be tested to demonstrate adherence to the performance criteria. The approved test method is provided under Appendix B of the [WaterSense® Specification for Spray Sprinkler Bodies Version 1.0, September 21, 2017](#). Testing must be conducted by an approved third-party test lab. You can find more information about the MAEDbS [here](#).

*continued on reverse*

## CEC DEFINITIONS

### SPRAY SPRINKLER –

A device used to irrigate landscape that consists of a spray sprinkler body and a nozzle or orifice and discharges water through the air.

### SPRAY SPRINKLER BODIES –

The exterior case or shell of a sprinkler incorporating a means of connection to the piping system, designed to convey water to a nozzle or orifice. It does not contain components to drive the rotation of the nozzle or orifice during operation and lacks an integral control valve.

### SPRAY NOZZLE –

The spray nozzle controls the volume of discharge, spray pattern as well as the area covered (shape) by the distribution of the water, and the droplet size.



# CA CODE OF REGULATIONS: TITLE 20 SECTION 1602(X)(1) SPRAY SPRINKLER BODIES, CONTINUED

## 5. Do SSBs sold in CA have to be WaterSense certified?

No. While Title 20 requires products meet the WaterSense performance requirements, it does not require devices be U.S. EPA WaterSense certified and labeled. However, if SSBs are to be sold in CA, they must be certified to the MAEDbS.

## 6. What are the marking requirements?

Each SSB must be marked permanently and legibly to indicate the presence of an internal pressure regulator and the marking should be visible after installation. In addition, the following information must be present and visible on each SSB and the SSB packaging: manufacturer's name, brand name or trademark, model number, and date of manufacture.

## 7. Do the requirements apply to rotors or valve-in-head sprinklers?

No. The requirement only applies to spray sprinkler bodies with or without nozzles.

## 8. How will Title 20 for SSBs be enforced?

Fines will be levied for SSBs sold or offered for sale in CA and not certified to MAEDbS.

## 9. How does this rule impact water agencies?

Non-complaint Title 20 SSBs shall not qualify under an agency's rebate and/or incentive programs, however this should not be much of an issue since only compliant units will be allowed to be sold. Current costs for pressure regulated SSBs with a 4" stem will increase by approximately \$3 in the year 2020<sup>1</sup> and could therefore increase project costs for irrigation upgrades. Agencies should consider how their conservation programs will address this cost increase. Additionally, any agency-sponsored irrigation audits and/or landscape professional trainings should be used as an opportunity to inform interested parties about the regulation.

Agencies should also provide information to customers on the unintended consequences of replacing only a single or subset of spray sprinklers within an irrigation zone, which could result in poor spray uniformity (aka distribution uniformity). In turn this poor uniformity could cause over-watering to cover up the dry spots that may occur with the reduced pressure SSBs.

## 10. How does this regulation affect distributors and online sellers?

Distributors and online sellers cannot sell non-compliant SSBs after October 1, 2020. They can however, sell through items manufactured prior to this date without penalty.

## 11. How does this regulation affect landscapers and irrigation technicians?

As a best management practice, landscape professional need to consider changing out all SSBs under a single irrigation valve when replacing a broken or malfunctioning spray sprinkler. This is to ensure matched precipitation rates, optimal performance of the system, and optimal distribution uniformity. Not doing so will disrupt sprinkler uniformity which in turn could lead to over-irrigation and/or runoff due to reduced distribution uniformity and customer over watering to cover the dry spots.

## 12. Where can I get more information about the regulation?

Title 20 has a Compliance Assistance Hotline. In CA call toll free: (888) 838-1467. E-mail questions to [appliances@energy.ca.gov](mailto:appliances@energy.ca.gov). You can access the Title 20 regulations for Spray Sprinkler Bodies [here](#), the CEC docket log [here](#) and general information including issued by the CEC [here](#).

<sup>1</sup> As reported by the NRDC: <https://www.nrdc.org/experts/ed-osann/ca-sets-standards-new-lawn-sprinklers-curb-waste> (August 19, 2019)