

# Spray Sprinkler Bodies

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Energy Commission Business Meeting



Sean Steffensen, P.E.  
Appliances Office  
Efficiency Division  
August 14, 2019  
California Energy Commission



# California Environmental Quality Act (CEQA)

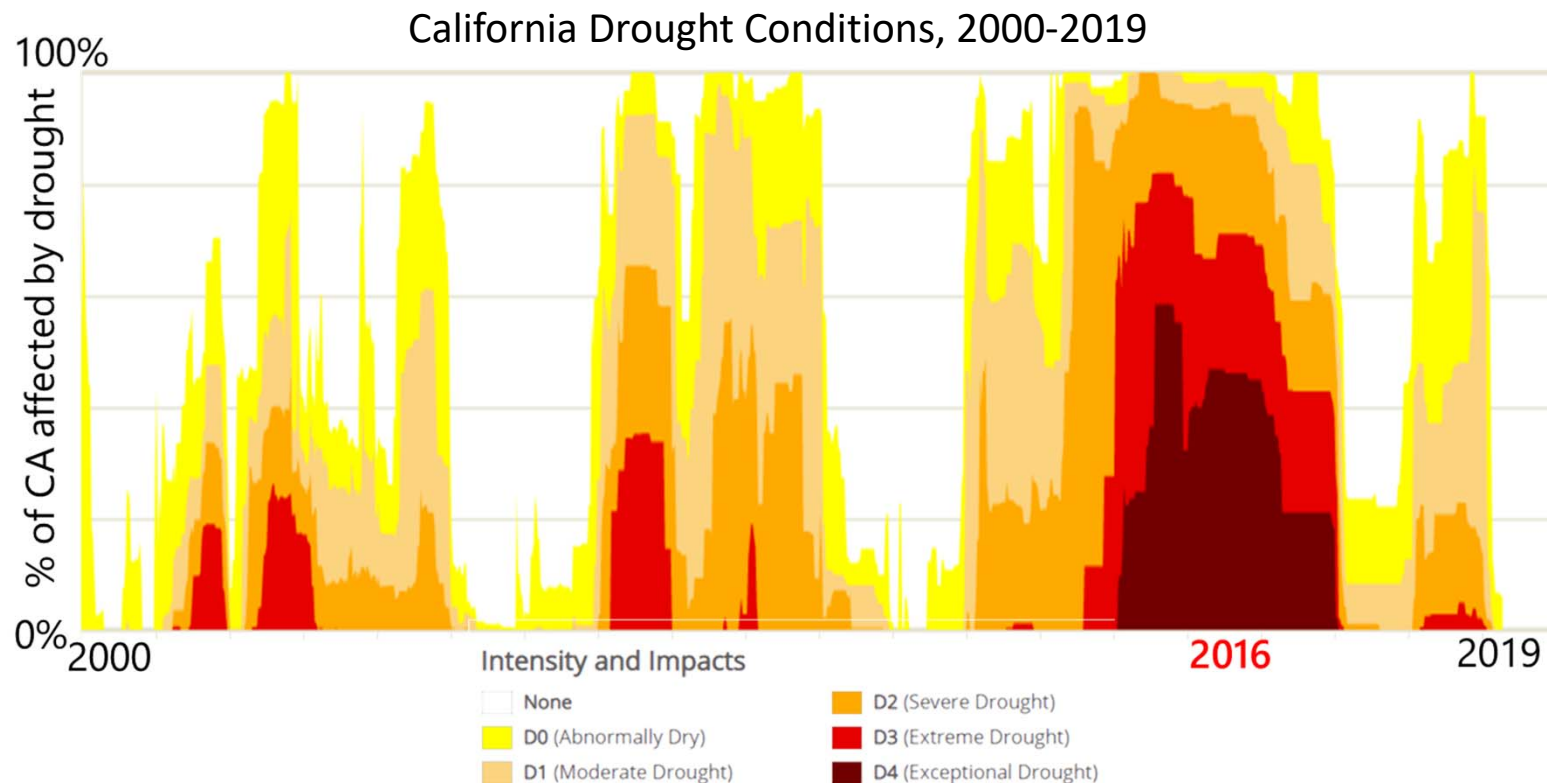
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- Staff finding that the proposed efficiency standards will not have any significant adverse effect on environment
- No significant change to materials or manufacturing
- No comments received
- Request approval of the proposed negative declaration





# Making Water Conservation a California Way of Life

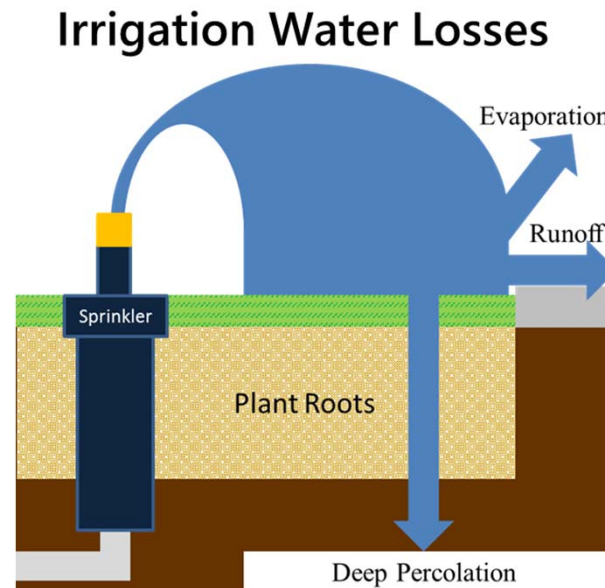


19 years of above average dry conditions



# Landscape Irrigation

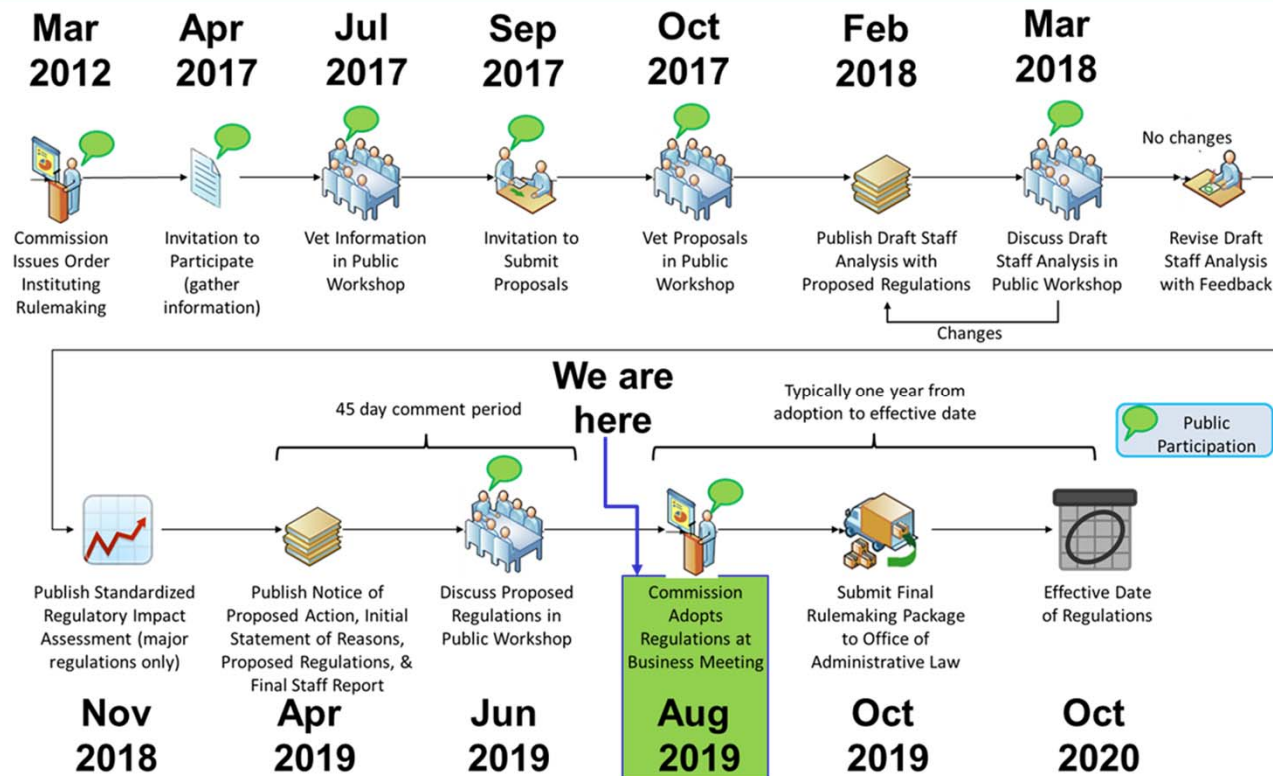
- Significant water waste from over-irrigation and excessive water pressure



Proposal will save over 150 Billion gallons per year



# Public Participation at the Energy Commission



Participation by US EPA WaterSense, Irrigation Industry, CA State Agencies, and Energy Advocates



# Staff Proposal

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- Provide scope and definitions for Spray Sprinkler Bodies (SSB)
- Set SSB test method to the EPA WaterSense Specification for Spray Sprinkler Bodies, V1.0
- Establish SSB certification and marking requirements
- Set a mandatory SSB standard complementary to the voluntary WaterSense specification





# Product Description

- SSB may be sold separately as a sprinkler body or with a nozzle
- Options include pressure regulators and check valves



Key Facts	
Purchase Price	\$2-\$15
Product Lifetime	10 years
CA Shipments	31 million/year
CA Stock	305 million
Water use per SSB	3000 gallons/year

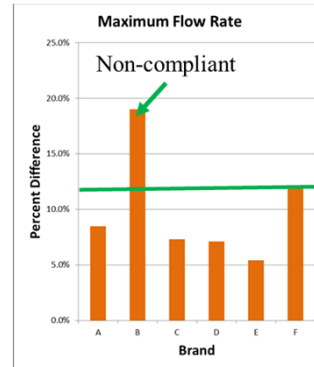
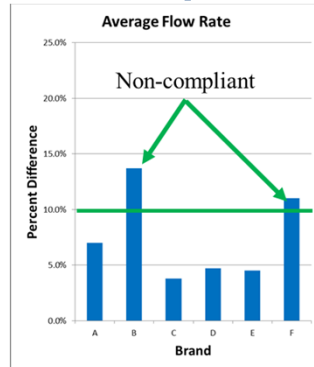
There are many SSBs in California that use a significant amount of water





# Technical Feasibility

- Proposed standards can be met with existing technology
- University of Florida test results show models capable of complying to SSB standard
- Over 100 SSB models certified to US EPA as compliant to WaterSense specification







# Cost-Effectiveness

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PER SPRAY  
SPRINKLER BODY

SAVINGS	\$27
COST	-\$ 5
BENEFIT	\$22

Proposed standard is cost effective



# Statewide Monetary Savings

Product Type	First Year			Stock Savings		
	Water Delivery (M\$/yr)	Embedded Electricity (M\$/yr)	Total (M\$/yr)	Water Delivery (M\$/yr)	Embedded Electricity (M\$/yr)	Total (M\$/yr)
Spray Sprinkler Bodies	\$88	\$8	\$96	\$877	\$78	\$955

Significant savings to Californian consumers



# Comparison to Previous Water Standards

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Showerheads  
38 Bgal/yr



Toilets,  
Faucets,  
and Urinals  
87 Bgal/yr



Spray Sprinkler  
Bodies  
152 Bgal/yr

Appliance Standards yield significant statewide water savings



# Conclusion

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- Staff finds the proposed standard is
  - Technically feasible
  - Cost-effective over the lifetime of the appliance
- Staff requests approval of the proposed regulations



# Thank You

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- Sean Steffensen
- Appliances Office
- Efficiency Division
- [Sean.Steffensen@energy.ca.gov](mailto:Sean.Steffensen@energy.ca.gov)
- 916-651-2908

# Item 7

## INITIAL STUDY AND NEGATIVE DECLARATION FOR SPRAY SPRINKLER BODIES

Title 20. Public Utilities and Energy  
Division 2. State Energy Resources Conservation and Development Commission  
Chapter 4. Energy Conservation  
Article 4. Appliance Efficiency Regulations  
Sections 1601-1609

California Energy Commission  
Spray Sprinkler Bodies  
Docket No. 19-AAER-01  
Notice Published on May 17, 2019

### INTRODUCTION

The California Energy Commission was established in 1974 by the Warren-Alquist Act to develop and implement energy policy for the State of California. One of the Energy Commission's mandates is to promote water and energy efficiency through a variety of means, including efficiency standards for appliances. (Public Resources Code § 25402[c][1]). The Energy Commission adopted its first appliance efficiency standards in 1976 and has periodically revised those standards, as well as adopted new regulations. The current regulations include provisions on testing of appliances to determine efficiency, reporting of data by manufacturers to the Energy Commission, mandatory minimum efficiency levels, and compliance and enforcement procedures, as well as general provisions on the scope of the regulations and definitions.

The California Environmental Quality Act (CEQA) requires public agencies to identify and consider the potential environmental effects of actions that meet the definition of "project" under the statute, and, when feasible, to reduce any related adverse environmental consequences. Adoption of the proposed regulations is a discretionary decision undertaken by a public agency and has the potential to result in direct or indirect physical changes in the environment. Thus, it constitutes a project under CEQA. (See Pub. Resources Code § 21065.) Therefore, the Energy Commission has prepared this initial study to assess the potential significant effects of the proposed regulations on the environment.

The proposed regulations establish water efficiency standards for spray sprinkler bodies. The proposed standard would save about 15 billion gallons and 54 gigawatt-hours (GWh) the first year the standard is in effect. By 2029, the year that stock turns over, the proposed standards would have an annual savings of about 152 billion gallons and 543 GWh. This amount equates to roughly \$955 million in annual savings to California businesses and individuals.

Based on the initial study, staff concludes that the regulations will not have a significant impact on the environment, and, in fact, will benefit the environment by resulting in

reductions in air pollution. Therefore, a negative declaration is the appropriate environmental document.

## **DESCRIPTION OF PROPOSED PROJECT**

### **PROJECT NAME**

This project is a statewide rulemaking proceeding titled Appliance Efficiency Standards Rulemaking for Spray Sprinkler Bodies, Energy Commission Docket # 19-AAER-01.

### **PROJECT DESCRIPTION AND LOCATION**

The project proposes statewide regulations to create water efficiency standards for spray sprinkler bodies. These products are not covered by federal appliance efficiency standards. The required new efficiency standards apply to newly manufactured products sold or offered for sale in California.

The proposed regulations apply to spray sprinkler bodies manufactured on or after October 1, 2020. The proposed regulations do not mandate proprietary technology or equipment. The proposed regulations require the use of non-proprietary pressure regulation to maintain rated spray sprinkler body performance over a range of water supply pressures. Manufacturers will need to control the water flow rate as input water pressure varies to meet the proposed standards.

The proposed regulations relevant to this initial study are contained in:

*Proposed Amendments to Appliance Efficiency Regulations (Express Terms), California Code of Regulations, Title 20, Sections 1601 Through 1607, 2019 Appliance Efficiency Rulemaking, Spray Sprinkler Bodies, Docket Number 19-AAER-01.*

All the documents listed above are available on the Energy Commission's website <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-01>, or by phone at (916) 654-4147, or by electronic mail from the Energy Commission's Appliances Office, by submitting a request to [Angelica.Romo@energy.ca.gov](mailto:Angelica.Romo@energy.ca.gov).

## **ENERGY AND ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT**

### **WATER AND ENERGY IMPACTS**

The water efficiency standards being proposed for spray sprinkler bodies will reduce future demand for water and electricity in the state. Staff identified over-irrigation and excessive water pressure as contributing to the inefficient irrigation of landscapes. The water is lost as it runs off the landscape, evaporates into the air, or drains beneath the reach of the plant roots, as shown in **Figure 1**. The losses may be significant, in the case of over-irrigation, where Californians, on average, provide 50 percent more water than is needed.



**Figure 1: Irrigation Water Losses**

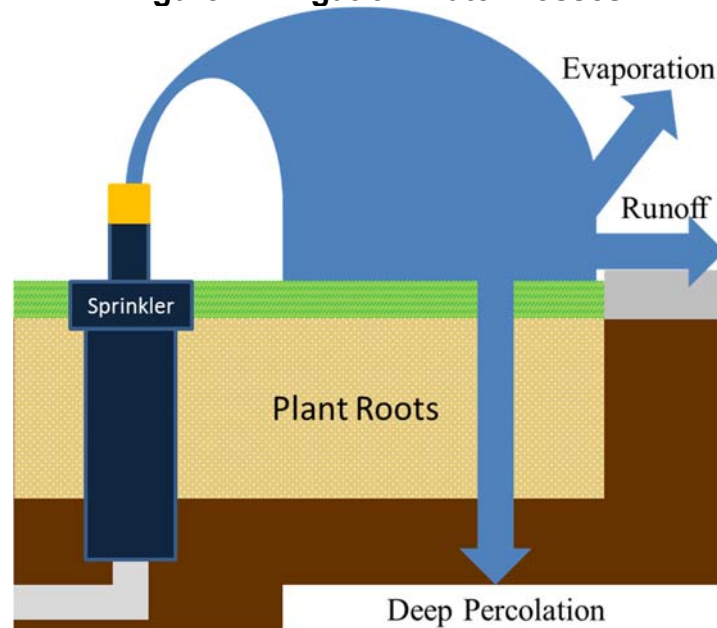


Illustration Credit: California Energy Commission

The staff proposal examines an opportunity to increase the water efficiency of the spray sprinkler body, a component of a spray sprinkler. Spray sprinkler bodies are offered with models that may or may not include pressure regulation depending upon the manufacturers' design. Pressure regulation addresses the issue of excessive water pressure by maintaining the optimum water flow from the sprinkler regardless of the water pressure. By eliminating excessively high water flow, over irrigation will also be addressed. The widespread adoption of this standard will prevent the unnecessary and wasteful use of water.

The proposed standards would take effect October 1, 2020. The estimated water savings after complete stock turnover in 2029 are 152 billion gallons per year, equivalent to \$877 million in annual cost savings. The estimated energy savings after complete stock turnover in 2029 are 543 gigawatt-hours (GWh) per year, equivalent to \$77.7 million in annual cost savings.

Because less water will need to be pumped to irrigate landscapes, this reduction will lead to a reduced need for new power plants, reduced use of fossil fuels for those plants, and fewer new transmission lines.

## **ENVIRONMENTAL IMPACTS**

The proposed water efficiency standards will reduce water and energy consumption with no significant change in the energy or the process of manufacturing this appliance type. The proposed regulations do not mandate proprietary technology or equipment. The proposed regulations require the use of non-proprietary pressure regulation to

maintain rated spray sprinkler body performance over a range of water supply pressures.

Sprinklers with pressure regulation control the output pressure to the spray nozzle to maintain the manufacturer-recommended operating pressure as the input pressure varies. Pressure-regulated sprinklers prevent excessive water flow rates, misting, wind drift, evaporation, and poor uniformity. Sprinklers are sold with and without pressure regulation.

Typically, these devices feature a spring-operated flow tube centered within the sprinkler stem, which can move up and down between seats on either end of the flow tube. The movement of the tube relative to the inlet seat regulates how much water can flow through the stem, thus regulating water pressure at the outlet to the nozzle. The level of outlet-pressure regulation is determined by the strength of the spring. Different manufacturers may implement specific pressure regulation features differently and often have patented technologies.

Since these improvements are already common practice, updating the water efficiency of spray sprinkler bodies is not likely to change industry practice, the spray sprinkler body design, or the material composition of these spray sprinkler bodies. Staff estimates 10 percent of spray sprinkler bodies comply with the proposed standards. An additional 90 percent would need to comply after the standards or about 27 million units per year. Staff estimates the additional material to be a small fraction of the material used to make a sprinkler without pressure regulation. In addition, the non-hazardous materials found in the final product do not pose any harm to the user and would not cause a significant environmental impact.

The marking requirement would require product information to appear on the appliance or its packaging. The marking requirement could be accomplished with existing marking techniques and would not cause a significant environmental impact.

The proposed regulations will lead to improved environmental quality in California. Saved energy from less water pumped translates to fewer power plants built and less pressure on the limited energy resources, land, and water use associated with them. In addition, lower electricity consumption results in reduced greenhouse gas and criteria pollutant emissions, primarily from lower generation in hydrocarbon-burning power plants, such as natural gas power plants.

## ENVIRONMENTAL CHECKLIST

The following is the Energy Commission's analysis of the potential impacts of the proposed project using the initial study environmental checklist.

**Table 1: Lead and Responsible Agencies**

<b>Project Title</b>	Spray Sprinkler Bodies Appliance Efficiency Rulemaking, Docket # 19-AAER-01
<b>Lead Agency Name and Address</b>	California Energy Commission, 1516 Ninth Street–MS 25, Sacramento, California, 95814
<b>Contact Person and Phone Number</b>	Sean Steffensen, Appliances Office, Efficiency Division, <a href="mailto:Sean.Steffensen@energy.ca.gov">Sean.Steffensen@energy.ca.gov</a> , (916) 651-2908
<b>Project Description</b>	The project is a proposal for statewide regulations to update the levels of efficiency required for spray sprinkler bodies, which are not covered by federal appliance efficiency standards. The required new efficiency standards apply to newly manufactured products and are attainable through normal and existing manufacturing processes.
<b>Responsible Agencies</b>	None
<b>Other public agencies whose approval is required</b> (e.g., permits, financing approval, or participation agreement)	None

Source: 2018 CEQA Handbook Appendix G and California Energy Commission

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

For each of the environmental factors checked below, there is likely to be a positive environmental impact due to the decrease in electricity generation associated with reduced electrical demand by the use of more efficient appliances. The Energy Commission's analysis reveals no significant adverse impacts.

**Table 2: Potentially Affected Areas**

Potential Positive Impact Determined	Environmental Factor	Potential Positive Impact Determined	Environmental Factor
	I. Aesthetics		XII. Mineral Resources
	II. Agriculture and Forestry Resources		XIII. Noise
X	III. Air Quality		XIV. Population/Housing
	IV. Biological Resources		XV. Public Services
	V. Cultural Resources		XVI. Recreation
	VI. Energy		XVII. Transportation
	VII. Geology/Soils		XVIII. Tribal Cultural Resources
X	VIII. Greenhouse Gas Emissions	X	XIX. Utilities/Service Systems
X	IX. Hazards & Hazardous Materials		XX. Wildfire
X	X. Hydrology/Water Quality		XXI. Mandatory Findings of Significance
	XI. Land Use/Planning		

Source: 2018 CEQA Handbook Appendix G and California Energy Commission

## Evaluation of Environmental Impacts

**Table 3** lists specific potential issues for each of the factors presented in **Table 2**.

**Table 3: Specific Potential Issues**

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>I. AESTHETICS.</u> Except as provided in Public Resources Code Section 21099 would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X
COMMENT: The proposed regulations will have no impact to aesthetics and no impact on any of the specific concerns listed above.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><b>II. AGRICULTURE AND FORESTRY RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
a) Convert Prime farmland, Unique farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
<p><b>COMMENT:</b> The proposed regulations will have no impact to agricultural and forestry resources and no impact on any of the specific concerns listed above. These regulations do not require land, including forest or agriculture land, to convert to other uses.</p>				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?				X
c) Expose sensitive receptors to substantial pollutant concentrations?				X
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				X
COMMENT: The proposed regulations will have no adverse impact to the air quality concerns listed above. The proposed efficiency standards will result in reduced power plant operation and related facility emissions in California as compared to no standards.				



Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>IV. BIOLOGICAL RESOURCES.</u> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
COMMENT: The proposed regulations will have no impact on biological resources and no impact on the specific concerns listed above. The proposed regulations do not require land, including wetlands or habitat, to convert to other uses.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>V. CULTURAL RESOURCES.</u> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				X
c) Disturb any human remains, including those interred outside formal cemeteries?				X
COMMENT: The proposed regulations will have no impact on any cultural resources and no impact on any of the specific concerns listed above. The proposed regulations do not require land, including burial grounds or archaeological/paleontological sites, to convert to other uses.				

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>VI. Energy.</u> Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X
COMMENT: The proposed regulations are part of state policy to reduce energy consumption through more efficient use of water and energy through appliance efficiency standards The proposed regulations would reduce energy consumption by reducing water and energy consumption associated with spray sprinkler bodies resulting in a corresponding decrease in the electricity produced by power plants.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				X
COMMENT: The proposed regulations will have no impact to geology and soils and no impact on the specific concerns listed above. The proposed regulations do not require changes to land use that might affect its seismic or stability characteristics.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>VIII. GREENHOUSE GAS EMISSIONS.</u> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
COMMENT: The proposed regulations will have no adverse greenhouse gas emissions and will not generate greenhouse gas emissions, either directly or indirectly. The proposed regulations are part of state policy to reduce greenhouse gas emissions and would reduce greenhouse gas emissions by reducing water and energy consumption associated with spray sprinkler bodies resulting in a corresponding decrease in the electricity produced by power plants, and the greenhouse gases associated with those power plants, especially natural gas-fired power plants.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>IX. HAZARDS AND HAZARDOUS MATERIALS.</u> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X
COMMENT: The proposed regulations will have no impact on hazards and hazardous material. While the proposed regulations may require the use of additional materials to improve the water efficiency of spray sprinkler bodies, the regulations do not prescribe their use or require these materials to be used. The additional material for pressure regulation is estimated to be a small fraction of the material used to make a sprinkler without pressure regulation. The materials may include various types of metal or plastic. These materials are not new to the manufacturing process of spray sprinkler bodies. The proposed regulations also do not alter the way in which these materials are disposed.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>X. HYDROLOGY AND WATER QUALITY.</u> Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				X
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				X
(i) result in substantial erosion or siltation on- or off-site;				X
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				X
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
(iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
COMMENT: The proposed regulations do not require land, including flood zones and drainage, to be altered.				



Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>XI. LAND USE AND PLANNING.</u> Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X
COMMENT: The proposed regulations will have no impact to land use and planning and no impact on any of the specific concerns listed above. The proposed regulations do not require land, including habitat and community development sites, to convert to other uses				
<u>XII. MINERAL RESOURCES.</u> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
COMMENT: The proposed regulations will have no adverse impact to mineral resources and no impact on any of the concerns listed above. The proposed regulations do not require land, including mineral-rich land, to convert to other uses.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. NOISE.</b> Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Generation of excessive groundborne vibration or groundborne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
COMMENT: The proposed regulations will have no noise impact and no impact on the specific concerns listed above. The pressure regulator will not change the level of noise produced by the sprinkler spray body or the pitch of the noise.				
<b>XIV. POPULATION AND HOUSING.</b> Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
COMMENT: The proposed regulations will have no impact on population and housing and no impact on any of the concerns listed above.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>XV. PUBLIC SERVICES.</u>				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				X
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X
COMMENT: The proposed regulations will not require the construction or alteration of governmental buildings in a way that will cause significant negative environmental impact. The reduction in energy consumption resulting from these regulations will lead to environmental benefits by reducing greenhouse gas emissions, criteria pollutants, and the need to site and construct new power plants.				
<u>XVI. RECREATION.</u>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X
COMMENT: The proposed regulations will have no impact on recreation and no impact on any of the specific concerns listed above. The proposed regulations do not require park or recreational land to convert to other uses.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>XVII. TRANSPORTATION.</u> Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X
COMMENT: The proposed regulations will have no impact on transportation and no impact on any of the specific concerns listed above.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>XVIII. TRIBAL CULTURAL RESOURCES.</u>				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				X
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X
COMMENT: The proposed regulations will have no impact on landscape, sacred places, or objects with cultural value to a California Native American tribe.				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>XIX. UTILITIES AND SERVICE SYSTEMS.</u> Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers' existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X
COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above. The proposed regulations will have beneficial effects on water and energy utilities by reducing the need to procure additional electricity generation and water storage.				

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<u>XX. WILDFIRE.</u> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above.				



Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				X
COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed in the above checklist. No potential exists for any adverse impacts on any animal or human populations, and none of the impacts are cumulatively considerable. Improvements in the water efficiency of spray sprinkler bodies resulting from the proposed standards are likely to result in beneficial impacts including reduced water and electricity consumption, reduced power plant operation, and reduced need to build power plants and power lines in the future.				

Source: 2018 CEQA Handbook Appendix G and California Energy Commission

## DETERMINATION

On the basis of this evaluation:

<input checked="checked" type="checkbox"/>	I find that the proposed project WILL NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signing Officer:

Drew Bohan  
Executive Director  
California Energy Commission

Signature  Date 5-10-19

## SUMMARY OF PROPOSED CHANGES TO APPLIANCE EFFICIENCY STANDARDS AND RESULTING ENERGY AND ENVIRONMENTAL EFFECTS

**Table 4** summarizes the proposed changes and the resulting energy and environmental effects for portable air conditioners.

**Table 4: Summary of Proposed Changes**

No.	Existing Standard	Proposed Standard	Water and Energy Effects	Potential Environmental Issues
1	There are no existing standards for spray sprinkler bodies.	The proposed standards set minimum performance standards for spray sprinkler bodies.	The proposed standard for spray sprinkler bodies would result in annual savings of 152 billion gallons and 543 gigawatt-hours (GWh) per year in 2029.	Lower electricity consumption results in reduced greenhouse gas and other particulates.

Source: California Energy Commission

## REFERENCES

- California Energy Commission. (2012, March 14). Order Instituting Rulemaking. Order# 12-0314-16, Docket #12-AAER-02. Retrieved from [https://energyarchive.ca.gov/appliances/2012rulemaking/notices/prerulemaking/2012-03-14\\_Appliance\\_Efficiency\\_OIR.pdf](https://energyarchive.ca.gov/appliances/2012rulemaking/notices/prerulemaking/2012-03-14_Appliance_Efficiency_OIR.pdf)
- California Energy Commission. (April 26, 2019). Initial Statement of Reasons (ISOR) for Spray Sprinkler Bodies. *Docket # 19-AAER-01, TN# 227861*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=227861>
- California Energy Commission. (April 26, 2019). Notice of Proposed Action (NOPA) for Spray Sprinkler Bodies. *Docket # 19-AAER-01, TN# 227862*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=227862>
- California Energy Commission. (April 26, 2019). Proposed Regulatory Language for Appliance Efficiency Regulations for Spray Sprinkler Bodies. *Docket # 19-AAER-01, TN# 227855*. <https://efiling.energy.ca.gov/getdocument.aspx?tn=227855>
- Steffensen, S. (2019). Final Staff Analysis of Water Efficiency Standards for Spray Sprinkler Bodies. *Docket # 19-AAER-01, TN # 227860*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=227860>

## ACRONYMS AND GLOSSARY

<u>Term</u>	<u>Description</u>	<u>Definition</u>
CEQA	California Environmental Quality Act	A statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.
GWh	Gigawatt-hour	One thousand megawatt-hours, or one million kilowatt-hours, or one billion watt-hours of electrical energy.
PRC	Public Resources Code	

## **[Proposed] Negative Declaration**

### **Spray Sprinkler Body Appliance Efficiency Rulemaking**

Public Resources Code § 25402, Subdivision (c)(1) and §25401.9, mandates that the California Energy Commission reduce wasteful, uneconomic, inefficient, or unnecessary energy use by prescribing, through regulation standards, minimum efficiency levels for appliances. The Energy Commission adopted appliance efficiency regulations in 1976 and periodically adopts new or revised standards. The Energy Commission proposes to adopt new Appliance Efficiency Regulations (Section 1601–1609 of Title 20 of the California Code of Regulations) to establish water efficiency standards for spray sprinkler bodies.

The California Environmental Quality Act (CEQA), found in Public Resources Code (PRC) Sections 21000 et seq., requires public agencies to identify and consider the potential environmental effects of their "projects," as that term is defined, and when feasible to mitigate any related adverse significant environmental consequences. The proposed adoption of these regulations is a discretionary action undertaken by a public agency and has the potential to result in a direct or indirect physical change in the environment. Thus, the proposed adoption constitutes a "project" under CEQA. (See PRC Section 21065.) The Energy Commission has prepared this initial study to assess the potential significant effects of the proposed regulations on the environment.

The proposed regulations are contained in the following document:

*Proposed Amendments to Appliance Efficiency Regulations (Proposed Regulatory Language), California Code of Regulations, Title 20, Sections 1601 Through 1609, 2019 Appliance Efficiency Rulemaking, Spray Sprinkler Bodies, Docket Number 19-AAER-01.*

The proposed regulations are summarized in the notice of proposed action and are available with the proposed regulatory language at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-01>.

The potential environmental impacts of the proposed regulations are analyzed in this document.

All the documents listed above are available on the Energy Commission's website <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-01>, or by phone at (916) 654-4147, or by electronic mail from the Energy Commission's Appliances Office, by submitting a request to [Angelica.Romo@energy.ca.gov](mailto:Angelica.Romo@energy.ca.gov).

### **Finding of No Significant Impact**

The initial study demonstrates, and the Energy Commission concludes, that the proposed energy efficiency regulations for spray sprinkler bodies will not have any significant adverse effect on the environment. The attached initial study and environmental checklist support this finding.

<b>DOCKETED</b>	
<b>Docket Number:</b>	19-AAER-01
<b>Project Title:</b>	Spray Sprinkler Bodies
<b>TN #:</b>	227855
<b>Document Title:</b>	Proposed Regulatory Language
<b>Description:</b>	Proposed Regulatory Language
<b>Filer:</b>	Sean Steffensen
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	4/25/2019 9:50:01 AM
<b>Docketed Date:</b>	4/25/2019

# Proposed Regulatory Language

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**California Code of Regulations**  
**Title 20. Public Utilities and Energy**  
**Division 2. State Energy Resources Conservation and Development Commission**  
**Chapter 4. Energy Conservation**  
**Article 4. Appliance Efficiency Regulations**  
**Sections 1601 – 1609**  
**As related to spray sprinkler bodies**

The proposed changes to the Title 20 standards are provided below. Changes to the 2018 standards are marked with underlining (new language) and ~~striketroughs~~ (deletions). Three dots or “...” represents the substance of the existing regulations that will remain unchanged between the sections containing proposed language changes.

## **Section 1601. Scope.**

...[skipping first paragraph through (w)]

(x) Reserved.

(y) Landscape irrigation equipment.

(l) Spray sprinkler bodies.

...[skipping the rest of section 1601]

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and sections 16, 26, and 30, Governor’s Exec. Order No. B-29-15 (April 1, 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), 25402.5.4, and 25960, Public Resources Code; and section 16, Governor’s Exec. Order No. B-29-15 (April 1, 2015).

## **Section 1602. Definitions.**

...[skipping (a) through (w)]

(x) Reserved.

(y) Landscape Irrigation Equipment.

(l) Spray Sprinkler Bodies.



1 “Integral pressure regulator” means a device located within a spray sprinkler body that  
2 maintains constant operating pressure immediately downstream from the device, given a higher  
3 upstream pressure.

4 “Landscape” means any areas that are planted or installed and designed to receive irrigation,  
5 including turf grass, ground covers, shrubs, trees, flowers, and similar plant materials.  
6 Landscape does not include agricultural crops grown and harvested for monetary return.

7 “Maximum operating pressure” of a spray sprinkler body means the highest manufacturer-  
8 recommended inlet pressure to ensure proper operation.

9 “Nozzle” of a spray sprinkler means the discharge opening or orifice of a spray sprinkler used  
10 to control the volume of discharge, distribution pattern, and droplet size.

11 “Orifice” of a spray sprinkler means the emission point from a nozzle into the atmosphere.

12 “Regulation pressure” of a spray sprinkler body means its rated outlet pressure, regardless of  
13 higher inlet pressure, as stated by the manufacturer.

14 “Spray sprinkler” means a device used to irrigate landscape that:

15 (1) consists of a spray sprinkler body and a nozzle or orifice, and

16 (2) discharges water through the air at a minimum flow rate of 0.5 gallons per minute

17 when operated at an inlet pressure of 30 pounds per square inch or more, with the largest  
18 area of coverage available for the nozzle series using a full circle pattern.

19 “Spray sprinkler body” means a sprinkler body that does not contain components to drive the  
20 rotation of the nozzle or orifice during operation and lacks an integral control valve. This term  
21 includes a spray sprinkler body that is a component of a spray sprinkler.

22 “Sprinkler body” means the exterior case or shell of a sprinkler incorporating a means of  
23 connection to the piping system, designed to convey water to a nozzle or orifice.

24 ...[skipping the rest of section 1602]

25 Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960,  
26 Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1,  
27 2015).

28 Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), 25402.5.4, and 25960, Public  
29 Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## 31 **Section 1602.1 Rule of Construction.**

32 **(No Change)**

33 ...[skipping the rest of section 1602.1]

## Section 1603. Testing: All Appliances.

(No Change)

...[skipping the rest of section 1603]

## Section 1604. Test Methods for Specific Appliances.

...[skipping (a) through (w)]

(x) Reserved.

(y) Landscape Irrigation Equipment.

(1) Spray Sprinkler Bodies.

(A) The test method for a spray sprinkler body is Appendix B of the WaterSense® Specification for Spray Sprinkler Bodies Version 1.0, September 21, 2017. For certification, compliance, and enforcement purposes, the sampling provisions in Appendix B of the WaterSense® Specification for Spray Sprinkler Bodies Version 1.0, September 21, 2017 shall be used.

The following documents are incorporated by reference in section 1604.

...[skipping CALIFORNIA ENERGY COMMISSION TEST METHODS through ENERGY STAR Recommended]

	<u>Appendix B of the WaterSense® Specification for Spray Sprinkler Bodies</u>
	<u>Version 1.0 (Dated September 21, 2017)</u>
<u>Copies available from:</u>	<u>WaterSense®</u>
	<u>U.S. Environmental Protection Agency</u>
	<u>Office of Wastewater Management</u>
	<u>(4204M)</u>
	<u>1200 Pennsylvania Avenue, N.W.</u>
	<u>Washington, D.C. 20460</u>
	<u><a href="https://www.epa.gov/watersense">https://www.epa.gov/watersense</a></u>

...[skipping AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE (AHRI) through the end of the section]

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c) and 25960, Public Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## **Section 1605. Energy Performance, Energy Design, Water Performance, and Water Design Standards: In General.**

**(No Change)**

### **Section 1605.1. Federal and State Standards for Federally-Regulated Appliances.**

...[skipping (a) through (w)]

(x) Reserved.

(y) Landscape Irrigation Equipment.

See section 1605.3(y) for water efficiency standards for landscape irrigation equipment.

...[skipping the rest of section 1605.1]

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

### **Section 1605.2. State Standards for Federally-Regulated Appliances.**

...[skipping (a) through (w)]

(x) Reserved.

(y) Landscape Irrigation Equipment.

See section 1605.3(y) for water efficiency standards for landscape irrigation equipment.

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## Section 1605.3. State Standards for Non-Federally-Regulated Appliances.

...[skipping (a) through (w)]

(x) Reserved.

(y) Landscape Irrigation Equipment.

(1) Spray Sprinkler Bodies.

(A) A spray sprinkler body manufactured on or after October 1, 2020, shall meet all of the following requirements:

1. Maximum flow rate at any tested pressure level. The percent difference between the initial calibration flow rate, as determined by the test method in section 1604(y)(1)(A), and the maximum flow rate at any tested pressure level, averaged for the selected samples at the test pressure levels where the maximum flow rate occurred, shall not exceed  $\pm 12.0$  percent.

The average of the selected samples shall be calculated per the following equation:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

where  $\bar{x}$  is the average of the selected samples; n is the number of samples; and  $x_i$  is the percent difference between the initial calibration flow rate, and the maximum flow rate at any tested pressure level of the  $i^{\text{th}}$  sample.

Percent difference of a sample =  $100 \times (Q_{\text{max}} - Q_{\text{initial}}) / Q_{\text{initial}}$

Where  $Q_{\text{max}}$  is the measured maximum flow rate at any tested pressure level and  $Q_{\text{initial}}$  is the measured calibration flow rate.

2. Average flow rate across all tested pressures. The percent difference between the initial calibration flow rate, as determined by the test method in section 1604(y)(1)(A), and the flow rate at each tested pressure level, averaged across all pressure levels and all selected samples, shall not exceed  $\pm 10.0$  percent.

The average of the selected samples shall be calculated per the following equation:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

where  $\bar{x}$  is the average of the selected samples; n is the number of samples; and  $x_i$  is the percent difference between the initial calibration flow rate and the flow rate at each tested pressure level, averaged across all pressure levels of the  $i^{\text{th}}$  sample.

Percent difference of a sample =  $100 \times (Q_{\text{average}} - Q_{\text{initial}}) / Q_{\text{initial}}$

Where  $Q_{\text{average}}$  is the measured flow rate at each tested pressure level, averaged across all pressure levels and  $Q_{\text{initial}}$  is the measured flow rate at the initial calibration point of a sample.

3. Minimum outlet pressure. The average outlet pressure at the initial calibration point, as determined by the test method in section 1604(y)(1)(A), of the selected samples shall not be less than two-thirds of the regulation pressure.

The average of the selected samples shall be calculated per the following equation:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

where  $\bar{x}$  is the average of the samples; n is the number of samples; and  $x_i$  is the measured minimum outlet pressure at the initial calibration point for the  $i^{\text{th}}$  sample.

...[skipping the rest of section 1605.3]

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c) and 25960, Public Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## **Section 1606. Filing by Manufacturers; Listing of Appliances in MAEDbS.**

...[skipping (a)through (d)]

1  
2

**Table X**  
**Data Submittal Requirements**

	<b>Appliance</b>	<b>Required Information</b>	<b>Permissible Answers</b>
	All Appliances	* Manufacturer's Name	
		* Brand Name	
		* Model Number	
		Date model to be displayed	
		Regulatory Status	Federally-regulated consumer product, federally-regulated commercial and industrial equipment, non-federally-regulated

3

...[skipping sections (A)-(W) of Table X]

	<b>Appliance</b>	<b>Required Information</b>	<b>Permissible Answers</b>
<u>X</u>	<u>Reserved</u>		
<u>Y</u>	<u>Spray Sprinkler Body</u>	<u>Regulation pressure (psi)</u>	
		<u>Maximum operating pressure (psi)</u>	
		<u>Percent difference between the initial calibration flow rate and the maximum flow rate at any tested pressure level, averaged for the selected samples at the test pressure levels where the maximum flow rate occurred (percent)</u>	
		<u>Percent difference between the initial calibration flow rate and the flow rate at each tested pressure level, averaged across all pressure levels and all selected samples (percent)</u>	
		<u>Average outlet pressure at the initial calibration point of the selected samples (psi)</u>	

4

...[skipping the rest of section 1606]

5

6 Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c), and 25960,  
7 Public Resources Code; and sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1,  
8 2015).

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), 25402.5.4, and 25960, Public Resources Code; and section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## **Section 1607 Marking of Appliances.**

...[skipping (a) through (b)]

(c) Exceptions to Section 1607(b).

...[skipping (first sentence through (1)]

(2) For lamps and spray sprinkler bodies, the information required by section 1607(b) of this Article shall be permanently, legibly, and conspicuously displayed on an accessible place on each unit, on the unit's packaging, or, where the unit is contained in a group of several units in a single package, on the packaging of the group.

...[skipping (c)(3)]

(d) Energy Performance Information.

...[skipping (d)(1)-(14)]

### **(15) Landscape Irrigation Equipment.**

(A) Spray Sprinkler Bodies. Each spray sprinkler body manufactured on or after October 1, 2020, shall be marked, permanently and legibly, to indicate the presence of an internal pressure regulator. The marking shall be on an accessible and conspicuous place on the spray sprinkler body and designed to be visible after installation.

...[skipping the rest of section 1607]

Note: Authority cited: Sections 25213, 25218(e), 25401.9(b), 25402(a)-25402(c) and 25960, Public Resources Code.

Reference: Sections 25216.5(d), 25401.9(b), 25402(a)-25402(c), and 25960, Public Resources Code.

## **Section 1608. Compliance, Enforcement, and General Administrative Matters.**

**(No Change)**

...[skipping the rest of section 1608]

## **Section 1609. Administrative Civil Penalties.**

**(No Change)**

...[skipping the rest of section 1609]

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

*IN THE MATTER OF:*

**SPRAY SPRINKLER BODIES  
APPLIANCE EFFICIENCY  
RULEMAKING**

**Docket No. 19-AAER-01**

**[PROPOSED] RESOLUTION  
ADOPTING REGULATIONS**

**WHEREAS**, on April 25, 2019, the Commission published a Notice of Proposed Action (NOPA) formally notifying the public of the Energy Commission's intent to adopt proposed regulations for spray sprinkler bodies, the Express Terms of the proposed regulations, an Initial Statement of Reasons (ISOR) describing the rationale for the proposal, Appendix B of the U.S. EPA WaterSense Specification for Spray Sprinkler Bodies, incorporated by reference, Standardized Regulatory Impact Assessment (SRIA), Final Staff Report; and

**WHEREAS**, on April 26, 2019, the NOPA was published in the California Regulatory Notice Register; and

**WHEREAS**, on May 9, 2019, the Commission published a Notice of Extension of Comment Period, extending the comment period to June 17, 2019; and

**WHEREAS**, on May 16, 2019, the Commission published an Initial Study and Proposed Negative Declaration for Spray Sprinkler Bodies and a Notice of Availability, concluding that the proposed regulations would result in water and energy savings and reductions in air pollution, and there would be no significant adverse impacts to the environment as a result; and

**WHEREAS**, on June 18, 2019, the Commission held a Public Hearing to hear comments on the proposed regulations; and

**WHEREAS**, each of these documents and notices was provided to every person on the Energy Commission's Appliances list server and to every person who had requested notice of such matters, and was posted to the Commission's website; and



WHEREAS, on August 2, 2019, the Commission provided notice designating August 14, 2019, as the date for the hearing to consider adoption of the proposed regulations and on this date the Commission held a public hearing to receive comments on the proposed regulations and to consider their adoption and did so adopt the regulations; and

**THEREFORE, THE CALIFORNIA ENERGY COMMISSION FINDS:**

With regard to the California Environmental Quality Act:

- The California Energy Commission has considered the application of the California Environmental Quality Act (CEQA) to the proposed regulations and concluded that the proposed energy efficiency regulations for spray sprinkler bodies will not have any direct, indirect, or cumulatively considerable significant adverse effect on the environment; and

With regard to the Warren-Alquist Act:

- The proposed regulations will reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water and energy for appliances that require a significant amount of water on a statewide basis; and
- The proposed regulations are technologically feasible and attainable; and
- The proposed regulations do not result in any added total costs to the consumer over the designed life of the appliances concerned; and
- In adopting these regulations, the Commission considered the Irrigation Association's Smart Water Application Technology Program testing protocols, and ultimately determined that Appendix B of the U.S. EPA WaterSense Specification for Spray Sprinkler Bodies was a preferable test procedure for purposes of these regulations; and

With regard to the Administrative Procedure Act:

- The proposed regulations will not create new businesses, eliminate existing businesses, or have an effect on the expansion of businesses in California and will not result in a significant statewide adverse impact directly affecting business, including the ability of California businesses to compete with businesses in other states; and
- The proposed regulations will not create or eliminate a significant number of jobs within California; and
- The proposed regulations will impose no direct costs, or direct or indirect requirements or mandates, on state agencies, local agencies, or school districts, including but not limited to costs that are required to be reimbursed under Part 7

(commencing with Section 17500) of Division 4 of the Government Code, when savings accruing over the lifetime of the appliance is considered; and

- The proposed regulations will result in no costs or savings in federal funding to the State of California; and
- The proposed regulations will not result in cost or savings to any state agency in reasonable compliance with these regulations; and
- The proposed regulations will result in no nondiscretionary costs or savings to local agencies or school districts when savings accruing over the lifetime of the appliance is considered; and
- The proposed regulations will have no impact on housing costs; and
- The proposed regulations will have no significant, statewide adverse effect on businesses in general or small businesses in particular; and
- The proposed regulations will impose no net costs on private persons when savings from reduced water use are taken into account; and
- The proposed regulations will result in some costs that a representative business would necessarily incur in reasonable compliance with the regulations, but any costs will be passed on to consumers and outweighed by savings resulting from reduced water use; and
- The proposed regulations will result in non-economic benefits, on a statewide level, such as reduction in air pollution, greenhouse gas emissions, water use and demand, and energy generation demand; and
- The proposed regulations have no alternatives that would be more effective in carrying out the purposes of the Warren-Alquist Act, that would be as effective and less burdensome to affected private persons in carrying out those purposes, or that would be more cost effective to affected private persons and equally effective in implementing those purposes; and
- The proposed regulations require completion of certain reports regarding the efficiency and performance of the regulated appliances; this information is necessary for consumers and the Energy Commission to confirm that the standards are met and that the appliances consume no more water or energy than allowed, so that the anticipated water savings, and energy, environmental, and cost benefits will actually be achieved. Accordingly, it is necessary that these reporting requirements apply to businesses in order to protect the health, safety and welfare of the people of California, as required by Government Code section 11346.3, subdivision (d); and
- None of the comments received during the comment period or at the adoption hearing, and nothing else in the record, justified any changes to the proposed regulations as published on April 25, 2019.

**THEREFORE BE IT RESOLVED**, after considering the Initial Study, and all related materials in the record, the Energy Commission finds that (1) there is no substantial evidence that the adoption of the proposed amendments to the Appliance Efficiency Regulations will have a significant effect on the environment, and (2) the Negative Declaration reflects the Commission's independent judgment and analysis. The Commission hereby adopts the Negative Declaration and Initial Study published May 16, 2019. Documents and other materials that constitute the record of proceedings upon which the decision to adopt the negative declaration is based can be found at the California Energy Commission, 1516 9<sup>th</sup> Street, Sacramento, California, 95814 in the custody of the Docket Unit.

**RESOLVED**, additionally, after considering all comments received and the staff's responses, and based on the entire record of this proceeding, the California Energy Commission hereby adopts the amendments to its appliance efficiency regulations, as set forth in the express terms that were published on April 25, 2019 (Cal. Code of Regs., tit. 20, §§ 1601-1607). We take this action under the authority of, and to implement, interpret, and make specific, sections 25213, 25218(e), 25401.9 and 25402 of the Public Resources Code.

**FURTHER BE IT RESOLVED**, the Energy Commission delegates the authority and directs Commission staff to take, on behalf of the Commission, all actions reasonably necessary to have the adopted regulations go into effect, including but not limited to making any appropriate non-substantive changes to the regulations; preparing all appropriate documents, such as the Final Statement of Reasons; compiling and submitting the rulemaking file to the Office of Administrative Law (OAL); making any changes to the rulemaking file required by OAL; and preparing and filing the Notice of Determination with the State Clearinghouse.

### **CERTIFICATION**

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on August 14, 2019.

AYE:

NAY:

ABSENT:

ABSTAIN:

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Cody Goldthrite  
Secretariat