

# 129th MAINE LEGISLATURE

## FIRST REGULAR SESSION-2019

**Legislative Document** 

No. 1750

H.P. 1245

House of Representatives, May 16, 2019

An Act To Establish Appliance Energy and Water Standards

Reference to the Committee on Environment and Natural Resources suggested and ordered printed.

ROBERT B. HUNT Clerk

R(+ B. Hunt

Presented by Representative PLUECKER of Warren.

Cosponsored by Senator CARSON of Cumberland and

Representatives: BERRY of Bowdoinham, BLUME of York, DOUDERA of Camden, GRAMLICH of Old Orchard Beach, MAXMIN of Nobleboro, SKOLFIELD of Weld,

ZEIGLER of Montville, Senator: CHENETTE of York.

Be it enacted by the People of the State of Maine as follows:
Sec. 1. 38 MRSA c. 15-B is enacted to read:
CHAPTER 15-B
APPLIANCE ENERGY AND WATER STANDARDS
§1581. Short title
This chapter may be known and cited as "the Appliance Energy and Water Standards Act."
<u>§1582. Purpose</u>
The Appliance Energy and Water Standards Act is established for the purpose of ensuring that certain appliances and products sold or installed in the State meet or exceed energy and water efficiency standards adopted by the department by rule.
§1583. Definitions
As used in this chapter, unless the context otherwise indicates, the following terms have the following meanings.
1. Air compressor. "Air compressor" means a compressor designed to compress air that has an inlet open to the atmosphere or other air source and is composed of a compression element, a driver or drivers, mechanical equipment to drive the compressor element and any ancillary equipment.
2. Commercial dishwasher. "Commercial dishwasher" means a machine designed to clean and sanitize plates, pots, pans, glasses, cups, bowls, utensils, trays and other dishware by applying sprays of detergent solution and a sanitizing rinse.
3. Commercial fryer. "Commercial fryer" means an appliance, including, but not limited to, a cooking vessel, in which a cooking fluid is placed in a cooking area at a depth such that food items placed in the fluid are supported by displacement of the fluid and not by the bottom of the cooking area and in which heat is delivered to the fluid by means of an immersed electric element of band-wrapped vessel or by heat transfer from gas burners through either the walls of the cooking area or tubes passing through the cooking area.
4. Commercial hot food holding cabinet. "Commercial hot food holding cabinet"
means a heated, fully-enclosed compartment with one or more solid or transparent doors designed to maintain the temperature of hot food placed within the compartment that has
previously been cooked or otherwise heated using a separate appliance or appliances.
"Commercial hot food holding cabinet" does not include a heated glass merchandising
cabinet, a drawer warmer or a cook-and-hold appliance.
5. Commercial steam cooker. "Commercial steam cooker" means a countertop,
wall-mounted freestanding or floor-mounted device with one or more food-steaming

compartments in which the energy in the steam produced by the device is transferred by direct contact to food placed within the compartments.

- <u>6. Compensation.</u> "Compensation" means money or other item of value, regardless of form, received or to be received by a person for services rendered.
- 7. Compressor. "Compressor" means a machine or apparatus that converts different types of energy into the potential energy of gas pressure for displacement and compression of gaseous media to any higher-pressure values above atmospheric pressure and that has a pressure ratio greater than 1.3 at full-load operating pressure. "Compressor" includes, but is not limited to, an air compressor.
- 8. Dual-duct portable air conditioner. "Dual-duct portable air conditioner" means a portable air conditioner that draws some or all of the condenser inlet air from outside the conditioned space through a duct attached to an adjustable window bracket; that may draw additional condenser inlet air from the conditioned space; and that discharges the condenser outlet air outside the conditioned space by means of a separate duct attached to an adjustable window bracket.
- 9. Dual-flush toilet. "Dual-flush toilet" means a toilet that is designed to allow a user to flush the toilet with either a full volume of water or a reduced volume of water.
- 10. Faucet. "Faucet" means a lavatory faucet, a kitchen faucet or a public lavatory faucet. "Faucet" includes a replacement aerator for a lavatory faucet, a kitchen faucet or a public lavatory faucet but does not include a metering faucet.
- 11. General service lamp. "General service lamp" means a lamp that has a base approved by the American National Standards Institute or its successor organization, that operates at any voltage, that has an initial lumen output of greater than or equal to 310 lumens and less than or equal to 4,000 lumens or, for modified spectrum general service incandescent lamps, an initial lumen output of greater than or equal to 232 lumens and less than or equal to 4,000 lumens and that is used in general lighting applications.
  - A. "General service lamp" includes a general service incandescent lamp, a compact fluorescent lamp, a general service light-emitting diode lamp and a general service organic light-emitting diode lamp.
  - B. "General service lamp" does not include a light fixture, a light-emitting diode downlight retrofit kit, a general service fluorescent lamp, a linear fluorescent lamp of one to 8 feet in length, a circline fluorescent lamp, a fluorescent lamp designed for cold temperature applications, an impact-resistant fluorescent lamp, a reflectorized or aperture fluorescent lamp, a fluorescent lamp designed for use in reprographic equipment, a fluorescent lamp primarily designed to produce radiation in the ultraviolent region of the spectrum, a fluorescent lamp with a color rendering index of 87 or greater, an appliance lamp, a black light lamp, a colored lamp, an infrared lamp, a left-hand thread lamp, a marine lamp, a marine signal service lamp, a mine service lamp, a plant light lamp, a sign service lamp, a silver bowl lamp, a showcase lamp or a traffic signal lamp.

1 <u>12. Hand-held shower head.</u> "Hand-held shower head" means a shower head that is connected to a flexible hose and that is designed so that a user may spray water on the user by either holding the shower head or by fixing the shower head in place.

- 13. Metering faucet. "Metering faucet" means a fitting that when turned on will gradually shut off over a period of several seconds.
- 14. On-demand water cooler. "On-demand water cooler" means a water cooler designed to heat water on demand and then, following a period of heating, dispense the heated water, whether or not the water cooler is also designed to dispense cold or room-temperature water by other means.
- 15. Plumbing fixture. "Plumbing fixture" means an exchangeable device that connects to a plumbing system and that is designed to deliver and drain away water and waste. "Plumbing fixture" includes, but is not limited to, a urinal and a toilet.
- 16. Portable air conditioner. "Portable air conditioner" means a portable, encased assembly that delivers cooled, conditioned air to an enclosed space; that is powered by single-phase electric current; that includes a source of refrigeration; and that may include additional means for air circulation and heating. "Portable air conditioner" includes, but is not limited to, a single-duct portable air conditioner and a dual-duct portable air conditioner, but does not include a packaged terminal air conditioner, a room air conditioner or a dehumidifier.
- 20 <u>17. Portable electric spa.</u> "Portable electric spa" means a factory-built electric spa
  21 or hot tub that may include any combination of integral controls, water heating equipment
  22 or water circulating equipment.
  - 18. Public lavatory faucet. "Public lavatory faucet" means a fitting designed to be installed in a nonresidential bathroom that is intended for walk-in use by the general public.
  - 19. Replacement aerator. "Replacement aerator" means an aerator designed to be installed in a faucet that is sold separately from the faucet as a replacement part.
  - 20. Residential ventilating fan. "Residential ventilating fan" means a ceiling-mounted, wall-mounted or remotely mounted in-line fan that is designed for use in a residential bathroom or utility room to move air from inside the residence to outside the residence.
  - 21. Shower head. "Shower head" means a device through which water is discharged for a shower bath. "Shower head" includes a hand-held shower head but does not include a safety shower shower head.
  - 22. Single-duct portable air conditioner. "Single-duct portable air conditioner" means a portable air conditioner that draws all of the condenser inlet air from the conditioned space without the means of a duct and that discharges the condenser outlet air outside the conditioned space through a single duct attached to an adjustable window bracket.

- 23. Spray sprinkler body. "Spray sprinkler body" means the exterior case or shell of a sprinkler that incorporates a means of connection to a plumbing system that is designed to convey water to a nozzle or orifice.
  - 24. Storage-type water cooler. "Storage-type water cooler" means a water cooler that is designed to store thermally conditioned water in a storage tank so that the thermally conditioned water can be dispensed on demand.
  - 25. Toilet. "Toilet" means a plumbing fixture that includes a water-containing receptor that is designed to receive liquid and solid human waste through an exposed integral trap into a drainage system. "Toilet" includes, but is not limited to, a dual-flush toilet.
- **26.** Trough-type urinal. "Trough-type urinal" means a urinal that is designed for simultaneous use by 2 or more persons.
  - 27. Uninterruptible power supply. "Uninterruptible power supply" means a battery charger consisting of a combination of converters, switches and energy storage devices that as a whole, constitutes a power system designed to maintain continuity of load power in the case of input power failure.
  - 28. Urinal. "Urinal" means a plumbing fixture that is designed to receive only liquid human waste and to convey the waste through a trap into a drainage system. "Urinal" includes, but is not limited to, a trough-type urinal.
  - 29. Water cooler. "Water cooler" means a freestanding device that consumes energy in order to dispense cold water, room-temperature water or hot water, or any combination thereof. "Water cooler" includes, but is not limited to, a storage-type water cooler and an on-demand water cooler.

### §1584. Adoption of standards; scope; prohibitions

1 2

- 1. Adoption of standards. In accordance with the provisions of this section, the department shall adopt rules establishing minimum energy and water efficiency standards that are applicable to the products listed in subsection 2. The department, when necessary and practicable, shall ensure that the rules adopted pursuant to this section are consistent with similar energy and water efficiency standards adopted federally and in other states.
- 2. Scope. Except as provided in subsection 6, the provisions of this chapter and the rules adopted pursuant to this chapter apply to the following products: air compressors, commercial dishwashers, commercial fryers, commercial hot food holding cabinets, commercial steam cookers, faucets, general service lamps, portable air conditioners, portable electric spas, residential ventilating fans, shower heads, spray sprinkler bodies, toilets, uninterruptible power supplies, urinals, water coolers and any other products designated by the department by rule in accordance with subsection 7.
- 3. Sales prohibition. Except as provided in subsection 5 or 6, beginning January 1, 2021, a person may not sell or offer for sale in the State a product listed in subsection 2 unless the product meets or exceeds the applicable standards adopted by rule by the department pursuant to this section.

- 4. Installation prohibition. Except as provided in subsection 5 or 6, beginning January 1, 2022, a person may not install for compensation in the State a product listed in subsection 2 unless the product meets or exceeds the applicable standards adopted by rule by the department pursuant to this section.
- 5. Sales and installation prohibitions for air compressors and portable air conditioners. Notwithstanding subsections 3 and 4 and except as provided in subsection 6, beginning February 1, 2022, a person may not sell or offer for sale in the State an air compressor or a portable air conditioner unless the air compressor or a portable air conditioner meets or exceeds the applicable standards adopted by rule by the department pursuant to this section. Beginning February 1, 2023, a person may not install for compensation in the State an air compressor or a portable air conditioner unless the air compressor or a portable air conditioner meets or exceeds the applicable standards adopted by rule by the department pursuant to this section.
- **6. Exceptions.** The prohibitions in subsections 3, 4 and 5 do not apply to any of the products listed in subsection 2 that are:
  - A. Sold or offered for sale at retail or wholesale in the State in used condition;
  - B. Manufactured in the State and sold or offered for sale at retail or wholesale outside the State in new condition;
  - C. Manufactured outside the State and sold or offered for sale at wholesale in the State in new condition for final retail sale outside the State in new condition;
  - D. Installed in a mobile manufactured home during the construction of the home; or
  - E. Designed solely for installation and use in a recreational vehicle.
- 7. Designation of additional products. The department may by rule designate an additional product to which the prohibitions in subsections 3 and 4 apply upon a determination that the designation of the additional product will promote energy or water conservation in the State and will be cost-effective for consumers who purchase and use the product. An additional product designated by rule under this subsection may be subject to the prohibitions in subsections 3 and 4 no earlier than one year following the date on which the rule designating the product is finally adopted by the department.
- 8. Increased efficiency standards. The department may by rule amend the standards adopted by rule pursuant to subsection 1 to increase the minimum energy and water efficiency standards upon a determination that the increase of the standards will promote energy or water conservation in the State and will be cost-effective for consumers who purchase and use the product subject to the increased standards. Increased efficiency standards adopted by rule pursuant to this subsection may take effect no earlier than one year following the date on which the rule increasing the standards is finally adopted by the department.

### §1585. Manufacturer testing, certification and labeling

- 1. Testing. Except as provided in section 1584, subsection 6, a manufacturer of a product listed in section 1584, subsection 2 shall test the product to ensure the product meets the standards adopted by the department pursuant to section 1584.
- 2. Certification. A manufacturer of a product listed in section 1584, subsection 2 that is required to test the product under subsection 1 shall, prior to selling or offering for sale the product in the State, certify to the department that the product has been tested in accordance with subsection 1 and the applicable rules adopted pursuant to subsection 4 and that the product meets the standards adopted by the department pursuant to section 1584.
- 3. Labeling. A manufacturer of a product listed in section 1584, subsection 2 that is required to test the product under subsection 1 shall, prior to selling or offering for sale the product in the State and following certification to the department under subsection 2, affix a mark, label or tag to the product and the packaging of the product that, in accordance with applicable rules adopted pursuant to subsection 4, indicates that the product has been tested and certified as meeting the standards adopted by the department pursuant to section 1584.
- 4. Rules. The department shall by rule adopt procedures and requirements for the testing, certification and labeling of the products listed in section 1584, subsection 2 by the manufacturers of those products. The department, where necessary and practicable, shall ensure that the rules adopted pursuant to this subsection are consistent with similar testing, certification and labeling procedures and requirements relating to energy and water efficiency standards adopted federally and in other states.

#### §1586. State testing and inspections

- 1. Testing. The department may test or facilitate the testing of products required to be tested under section 1585, subsection 1 and sold or offered for sale in the State to ensure compliance with the requirements of section 1585 and the rules adopted pursuant to section 1585, subsection 4. In addition to the initiation of an enforcement action pursuant to section 1587, subsection 1 and the imposition of a civil penalty pursuant to section 1587, subsection 2, if the department determines that a product tested pursuant to this subsection and sold or offered for sale in the State does not meet the standards adopted by the department pursuant to section 1584, the department:
  - A. May require the manufacturer of the product to pay to the department all costs of the testing conducted pursuant to this subsection; and
  - B. Shall post on its publicly accessible website a notice to consumers that the product does not meet the standards adopted pursuant to section 1584.
- 2. Inspections. The department, with prior notice and during regular business hours, may inspect the facilities of manufacturers, distributors and retailers in the State that sell or offer for sale at wholesale or retail in the State a product required to be tested under section 1585, subsection 1 to ensure compliance with the requirements of this chapter and the rules adopted pursuant to this chapter.

#### §1587. Administration and enforcement; violations; rules

- 1. Administration and enforcement. The department shall administer and enforce the provisions of this chapter and the rules adopted pursuant to this chapter. The department shall refer to the Attorney General for further action any activity the department determines to constitute a violation of this chapter or the rules adopted pursuant to this chapter.
- 2. Violations. A person who violates a provision of this chapter or the rules adopted pursuant to this chapter must be issued a written warning by the commissioner regarding that violation, except that a person who violates a provision of this chapter or the rules adopted pursuant to this chapter after having previously committed a violation under this subsection is subject to a civil penalty, payable to the State, of not more than \$100 for each day of that violation.
- 3. Rules. In accordance with the provisions of this chapter, the department shall adopt rules as necessary for the implementation, administration and enforcement of this chapter. Rules adopted pursuant to this chapter are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.
- **Sec. 2.** Department of Environmental Protection; establishment of minimum energy and water efficiency standards. The Department of Environmental Protection shall adopt rules pursuant to the Maine Revised Statutes, Title 38, section 1584, subsection 1 establishing minimum energy and water efficiency standards that are applicable to the products listed in Title 38, section 1584, subsection 2. The standards adopted by the department by rule pursuant to this section must include the following standards. As used in this section, "Energy Star" means the energy efficiency rating program managed by the United States Environmental Protection Agency and Department of Energy.
- 1. The rules must require that air compressors subject to the requirements of Title 38, chapter 15-B meet the same requirements as set forth in the final rule "Energy Conservation Program: Energy Conservation Standards for Compressors" issued by the United States Department of Energy on December 5, 2016 as measured using the testing methods contained in 10 Code of Federal Regulations, Part 431, Appendix A to Subpart T that are in effect on July 3, 2017.
- 2. The rules must require that commercial dishwashers subject to the requirements of Title 38, chapter 15-B that are included in the scope of the Energy Star program requirements, product specification for commercial dishwashers, Version 2.0, meet the qualification criteria of that specification.
- 3. The rules must require that commercial fryers subject to the requirements of Title 38, chapter 15-B that are included in the scope of the Energy Star program requirements, product specification for commercial fryers, version 2.0, meet the qualification criteria of that specification.
- 4. The rules must require that commercial hot food holding cabinets subject to the requirements of Title 38, chapter 15-B have a maximum idle energy rate of 40 watts per

cubic foot of interior volume, as measured using the idle energy rate-dry test set forth in ATSM Standard F2140-11, "Standard Test Method for Performance of Hot Food Holding Cabinets," ASTM International, 2011 with the interior volume measured in accordance with Energy Star program requirements, product specification for commercial hot food holding cabinets, version 2.0.

- 5. The rules must require that commercial steam cookers subject to the requirements of Title 38, chapter 15-B meet the requirements as set forth in the Energy Star program requirements, product specification for commercial steam cookers, version 1.2.
- 6. The rules must require that faucets subject to the requirements of Title 38, chapter 15-B, excluding metering faucets, meet the applicable standards in paragraphs A to C, as measured using the testing methods set forth in 10 Code of Federal Regulations, Part 430, Appendix S to Subpart B that are in effect on January 3, 2017.
  - A. Lavatory faucets may not exceed a maximum flow rate of 1.5 gallons per minute at 60 pounds per square inch.
  - B. Residential kitchen faucets may not exceed a maximum flow rate of 1.8 gallons per minute at 60 pounds per square inch, except that residential kitchen faucets may have an optional temporary flow of 2.2 gallons per minute at 60 pounds per square inch so long as the faucet defaults to a maximum flow rate of 1.8 gallons per minute at 60 pounds per square inch after each use.
  - C. Public lavatory faucets may not exceed a maximum flow rate of 0.5 gallons per minute at 60 pounds per square inch.
- 7. The rules must require that general service lamps subject to the requirements of Title 38, chapter 15-B meet or exceed a lamp efficacy of 45 lumens per watt when tested in accordance with the testing methods set forth in 10 Code of Federal Regulations, Part 430, Section 430.23(gg) that are in effect on January 3, 2017.
- 8. The rules must require that portable air conditioners subject to the requirements of Title 38, chapter 15-B meet the requirements contained in 10 Code of Federal Regulations, Part 430, Appendix CC to Subpart B that are in effect on January 3, 2017.
- 9. The rules must require that portable electric spas subject to the requirements of Title 38, chapter 15-B meet the requirements as set forth in the American National Standard for Portable Electric Spa Energy Efficiency, ANSI/APSP/ICC-14, 2011.
- 10. The rules must require that residential ventilating fans subject to the requirements of Title 38, chapter 15-B meet the requirements as set forth in the Energy Star program requirements, product specification for residential ventilating fans, version 3.2.
- 11. The rules must require that shower heads subject to the requirements of Title 38, chapter 15-B may not exceed a maximum flow rate of 2.0 gallons per minute at 80 pounds per square inch when measured using the testing methods contained in 10 Code of Federal Regulations, Part 430, Appendix S to Subpart B that are in effect on January 3, 2017.

12. The rules must require that spray sprinkler bodies subject to the requirements of Title 38, chapter 15-B that are not specifically excluded from the scope of the United States Environmental Protection Agency rule "WaterSense" specification for spray sprinkler bodies, version 1.0, include an internal pressure regulator and meet the water efficiency and performance criteria and other requirements of that specification. As used in this subsection, "pressure regulator" means a device that is designed to maintain constant operating pressure immediately downstream from the device where there is higher operating pressure upstream from the device.

- 13. The rules must require that toilets subject to the requirements of Title 38, chapter 15-B meet the applicable standards in paragraphs A and B, as measured using waste extraction testing methods for toilets set forth in the American Society of Mechanical Engineers, ASME A112.19.2/CSA B45.1-2013.
  - A. Toilets, except for dual-flush tank-type toilets, must have a maximum flush volume of 1.28 gallons per flush.
  - B. Dual-flush tank-type toilets must have a maximum dual flush effective flush volume of 1.28 gallons per flush. As used in this paragraph, "dual-flush effective flush volume" means the average flush volume of 2 reduced flushes and one full flush.
- 14. The rules must require that uninterruptible power supplies subject to the requirements of Title 38, chapter 15-B that utilize a National Electrical Manufacturers Association 1-15P or 5-15P input plug and have an AC output must have an average load adjusted efficiency that meets or exceeds the values contained in the prepublication final rule, "Energy Conservation Program: Energy Conservation Standards for Uninterruptible Power Supplies" issued by the United States Department of Energy on December 28, 2016, as measured using the testing methods contained in 10 Code of Federal Regulations, Part 430, Appendix Y to Subpart B that are in effect on January 11, 2017.
- 15. The rules must require that wall-mounted and floor-mounted urinals, excluding trough-type urinals, that are subject to the requirements of Title 38, chapter 15-B have a maximum flush volume of 0.5 gallons per flush as measured using the testing methods set forth in 10 Code of Federal Regulations, Part 430, Appendix T to Subpart B that are in effect on January 3, 2017.
- 16. The rules must require that water coolers subject to the requirements of Title 38, chapter 15-B that are included in the scope of the Energy Star program requirements, product specification for water coolers, version 2.0 must have an on mode with no water draw energy consumption less than or equal to the applicable values in paragraphs A to C as measured in accordance with that specification.
  - A. For water coolers that provide cold water only or that provide cold water and a cooking function, 0.16 kilowatt-hours per day.
  - B. For storage-type water coolers that provide hot and cold water, 0.87 kilowatthours per day.
- C. For on-demand water coolers that provide hot and cold water, 0.18 kilowatt-hours per day.

Rules adopted pursuant to this section are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

**Sec. 3. Federal preemption review; report.** The Department of Environmental Protection, in consultation with the Attorney General, shall determine whether state energy efficiency standards applicable to general service lamps as set forth in section 2, subsection 7 and as adopted pursuant to the Maine Revised Statutes, Title 38, chapter 15-B are wholly or partially subject to federal preemption. On or before January 15, 2020, the department shall submit a report to the Joint Standing Committee on Environment and Natural Resources containing its findings and recommendations, including any necessary proposed legislation, regarding federal preemption of state energy efficiency standards for general service lamps. After reviewing the report, the committee may report out legislation to the Second Regular Session of the 129th Legislature to implement recommendations contained in the report.

14 SUMMARY

This bill enacts the Appliance Energy and Water Standards Act to be implemented, administered and enforced by the Department of Environmental Protection. The Act generally provides that, beginning January 1, 2021, a person is prohibited from selling or offering for sale in the State certain appliances and products unless they meet or exceed applicable energy and water standards adopted by rule by the department. Beginning January 1, 2022, a person is prohibited from installing for compensation in the State any of those appliances or products.