SECOND ENGROSSED SUBSTITUTE HOUSE BILL 1100

State of Washington 64th Legislature 2015 Regular Session

By House Technology & Economic Development (originally sponsored by Representatives Morris, S. Hunt, Hudgins, Ormsby, and Fey)

READ FIRST TIME 02/03/15.

AN ACT Relating to creating new appliance efficiency standards; amending RCW 19.260.030, 19.260.040, and 19.260.050; and reenacting and amending RCW 19.260.020.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Sec. 1. RCW 19.260.020 and 2009 c 565 s 18 and 2009 c 501 s 1 are each reenacted and amended to read as follows:

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Automatic commercial ice cube machine" means a factory-made assembly, not necessarily shipped in one package, consisting of a condensing unit and ice-making section operating as an integrated unit with means for making and harvesting ice cubes. It may also include integrated components for storing or dispensing ice, or both.

(2) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.

(3) "Commercial hot food holding cabinet" means a heated, fully enclosed compartment, with one or more solid or partial glass doors, that is designed to maintain the temperature of hot food that has been cooked in a separate appliance. "Commercial hot food holding cabinet" does not include heated glass merchandising cabinets, drawer warmers, or cook and hold appliances.

(4)(a) "Commercial refrigerators and freezers" means refrigerators, freezers, or refrigerator-freezers designed for use by commercial or institutional facilities for the purpose of storing or merchandising food products, beverages, or ice at specified temperatures that: (i) Incorporate most components involved in the vapor-compression cycle and the refrigerated compartment in a single cabinet; and (ii) may be configured with either solid or transparent doors as a reach-in cabinet, pass-through cabinet, roll-in cabinet, or roll-through cabinet.

(b) "Commercial refrigerators and freezers" does not include: (i) Products with 85 cubic feet or more of internal volume; (ii) walk-in refrigerators or freezers; (iii) consumer products that are federally regulated pursuant to 42 U.S.C. Sec. 6291 et seq.; (iv) products without doors; or (v) freezers specifically designed for ice cream.

(5) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.

(6) "Cook and hold appliance" means a multiple mode appliance intended for cooking food that may be used to hold the temperature of the food that has been cooked in the same appliance.

(7) "Department" means the department of commerce.

(8) "Drawer warmer" means an appliance that consists of one or more heated drawers and that is designed to hold hot food that has been cooked in a separate appliance at a specified temperature.

(9) "Heated glass merchandising cabinet" means an appliance with a heated cabinet constructed of glass or clear plastic doors which, with seventy percent or more clear area, is designed to display and maintain the temperature of hot food that has been cooked in a separate appliance.

(10) "Hot water dispenser" means a small electric water heater that has a measured storage volume of no greater than one gallon.

(11) "Mini-tank electric water heater" means a small electric water heater that has a measured storage volume of more than one gallon and a rated storage volume of less than twenty gallons.

(12) "Pass-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on both the front and rear of the unit.

(13) "Point-of-use water dispenser" means a water dispenser that uses a pressurized water utility connection as the source of potable water.

(14) "Pool heater" means an appliance designed for heating nonpotable water contained at atmospheric pressure for swimming pools, spas, hot tubs, and similar applications.

(15) "Portable electric spa" means a factory-built electric spa or hot tub, supplied with equipment for heating and circulating water.

(16) "Reach-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors or lids, but does not include roll-in or roll-through cabinets or pass-through cabinets.

(17) "Residential pool pump" means a pump used to circulate and filter pool water in order to maintain clarity and sanitation.

(18)(a) "Roll-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors that allow wheeled racks of product to be rolled into the unit.

(b) "Roll-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on two sides of the cabinet that allow wheeled racks of product to be rolled through the unit.

(19) "Showerhead" means a device through which water is discharged for a shower bath.

(20) "Showerhead tub spout diverter combination" means a group of plumbing fittings sold as a matched set and consisting of a control valve, a tub spout diverter, and a showerhead.

(21) "State-regulated incandescent reflector lamp" means a lamp that is not colored or designed for rough or vibration service applications, has an inner reflective coating on the outer bulb to direct the light, an E26 medium screw base, a rated voltage or voltage range that lies at least partially within 115 to 130 volts, and falls into one of the following categories:

(a) A bulged reflector or elliptical reflector bulb shape and which has a diameter which equals or exceeds 2.25 inches; or

(b) A reflector, parabolic aluminized reflector, or similar bulb shape and which has a diameter of 2.25 to 2.75 inches.

(22) "Tub spout diverter" means a device designed to stop the flow of water into a bathtub and to divert it so that the water discharges through a showerhead.

(23) "Wine chillers designed and sold for use by an individual" means refrigerators designed and sold for the cooling and storage of wine by an individual.

(24) "À la carte charger" means a battery charger that is individually packaged without batteries. "À la carte charger" includes those with multivoltage or multiport capabilities.

(25) "Battery analyzer" means a device:

(a) Used to analyze and report a battery's performance and overall condition;

(b) Capable of being programmed and performing service functions to restore capability in deficient batteries; and

(c) Not intended or marketed to be used on a daily basis for the purpose of charging batteries.

(26) "Battery backup" or "uninterruptible power supply charger" means a small battery charger system that is voltage and frequency dependent and designed to provide power to an end-use product in the event of a power outage, and includes an uninterruptible power supply charger as defined in IEC 62040-3 ed.2.0 (March 2011). The output of the voltage and frequency dependent uninterruptible power supply charger is dependent on changes in AC input voltage and frequency and is not intended to provide additional corrective functions, such as those relating to the use of tapped transformers.

(27) "Battery charger systems" means a battery charger coupled with its batteries or battery chargers coupled with their batteries, which together are referred to as battery charger systems, including all rechargeable batteries or devices incorporating a rechargeable battery and the chargers used with them. Battery charger systems include, but are not limited to:

(a) Electronic devices with a battery that are normally charged with AC line voltage or DC input voltage through an internal or external power supply and a dedicated battery charger;

(b) The battery and battery charger components of devices that are designed to run on battery power during part or all of their operations;

(c) Dedicated battery systems primarily designed for electrical or emergency backup; and

(d) Devices whose primary function is to charge batteries, along with the batteries they are designed to charge. These units include chargers for power tool batteries and chargers for automotive, AA, AAA, C, D, or 9 V rechargeable batteries, as well as chargers for batteries used in larger industrial motive equipment and à la carte chargers.

(28) "Consumer product" means any article that when operated consumes energy including articles that to any significant extent are distributed in commerce for personal use or consumption by individuals. "Consumer product" does not include an automobile as defined in 49 U.S.C. Sec. 32901(a)(3).

(29) "Illuminated exit sign" means:

(a) A sign that is designed to be permanently fixed in place to identify an exit, including those products that are a combination illuminated exit sign and emergency egress lighting; and

(b) A sign that: (i) Consists of an electrically powered integral light source that illuminates the legend "EXIT" and any directional indicators; and (ii) provides contrast between the legend, any directional indicators, and the background.

(30) "Large battery charger system" means a battery charger system, other than a battery charger system for golf carts, with a rated input power of more than two kilowatts.

(31) "Small battery charger system" means a battery charger system with a rated input power of two kilowatts or less.

Sec. 2. RCW 19.260.030 and 2009 c 501 s 2 are each amended to read as follows:

(1) This chapter applies to the following types of new products sold, offered for sale, or installed in the state:

(a) Automatic commercial ice cube machines;

(b) Commercial refrigerators and freezers;

(c) State-regulated incandescent reflector lamps;

(d) Wine chillers designed and sold for use by an individual;

(e) Hot water dispensers and mini-tank electric water heaters;

(f) Bottle-type water dispensers and point-of-use water dispensers;

(g) Pool heaters, residential pool pumps, and portable electric spas;

(h) Tub spout diverters; ((~~and~~))

(i) Commercial hot food holding cabinets; and

(j) Battery charger systems, except those:

(i) Used to charge a motor vehicle that is powered by an electric motor drawing current from rechargeable storage batteries, fuel cells, or other portable sources of electrical current, and which may include a nonelectrical source of power designed to charge batteries and components thereof, including autoettes or electric personal

assistive mobility devices, golf carts, and low-speed vehicles, as those vehicles are defined in division 1 of the California vehicle code in effect as of the effective date of this section;

(ii) That are classified as class II or class III devices for human use under the federal food, drug, and cosmetic act as of the effective date of this section and require United States food and drug administration listing and approval as a medical device;

(iii) Used to charge a battery or batteries in an illuminated exit sign;

(iv) With input that is three phase of line-to-line three hundred volts root mean square or more and is designed for a stationary power application;

(v) That are battery analyzers;

(vi) That are voltage independent or voltage and frequency independent uninterruptible power supplies as defined by the international electrotechnical commission 62040-3 ed.2.0 as of the effective date of this section; or

(vii) Used to charge larger industrial motive equipment such as fork lifts, burden carriers, or person carriers.

(2) This chapter applies equally to products whether they are sold, offered for sale, or installed as stand-alone products or as components of other products.

(3) This chapter does not apply to:

(a) New products manufactured in the state and sold outside the state;

(b) New products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state;

(c) Products installed in mobile manufactured homes at the time of construction; or

(d) Products designed expressly for installation and use in recreational vehicles.

Sec. 3. RCW 19.260.040 and 2009 c 501 s 3 are each amended to read as follows:

The minimum efficiency standards specified in this section apply to the types of new products set forth in RCW 19.260.030.

(1)(a) Automatic commercial ice cube machines must have daily energy use and daily water use no greater than the applicable values in the following table:

Equipment type	Type of cooling	Harvest rate (lbs. ice/24 hrs.)	Maximum energy use (kWh/100 lbs.)	Maximum condenser water use (gallons/100 lbs. ice)
Ice-making head	water	<500	7.80 - .0055H	200 - .022H
		>=500<1436	5.58 - .0011H	200 - .022H
		>=1436	4.0	200 - .022H
Ice-making head	air	450	10.26 - .0086H	Not applicable
		>=450	6.89 - .0011H	Not applicable
Remote condensing but not remote compressor	air	<1000	8.85 - .0038	Not applicable
		>=1000	5.10	Not applicable
Remote condensing and remote compressor	air	<934	8.85 - .0038H	Not applicable
		>=934	5.3	Not applicable
Self-contained models	water	<200	11.40 - .0190H	191 - .0315H
		>=200	7.60	191 - .0315H
Self-contained models	air	<175	18.0 - .0469H	Not applicable
		>=175	9.80	Not applicable

Where H= harvest rate in pounds per twenty-four hours which must be reported within 5% of the tested value. "Maximum water use" applies only to water used for the condenser.

(b) For purposes of this section, automatic commercial ice cube machines shall be tested in accordance with the ARI 810-2003 test method as published by the air-conditioning and refrigeration institute. Ice-making heads include all automatic commercial ice cube machines that are not split system ice makers or self-contained models as defined in ARI 810-2003.

(2)(a) Commercial refrigerators and freezers must meet the applicable requirements listed in the following table:

Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are refrigerators	Solid	0.10V+ 2.04
	Transparent	0.12V+ 3.34

Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are "pulldown" refrigerators	Transparent	.126V+ 3.51
Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are freezers	Solid	0.40V+ 1.38
	Transparent	0.75V+ 4.10
Reach-in cabinets that are refrigerator-freezers with an AV of 5.19 or higher	Solid	0.27AV - 0.71

kWh= kilowatt-hours

V= total volume (ft^3)

AV= adjusted volume= [1.63 x freezer volume (ft^3)]+ refrigerator volume (ft^3)

(b) For purposes of this section, "pulldown" designates products designed to take a fully stocked refrigerator with beverages at 90 degrees Fahrenheit and cool those beverages to a stable temperature of 38 degrees Fahrenheit within 12 hours or less. Daily energy consumption shall be measured in accordance with the American national standards institute/American society of heating, refrigerating and air-conditioning engineers test method 117-2002, except that the back-loading doors of pass-through and roll-through refrigerators and freezers must remain closed throughout the test, and except that the controls of all appliances must be adjusted to obtain the following product temperatures.

Product or compartment type	Integrated average product temperature in degrees Fahrenheit
Refrigerator	38$\pm$ 2
Freezer	0$\pm$ 2

(3)(a) The lamp electrical power input of state-regulated incandescent reflector lamps shall meet the minimum average lamp efficacy requirements for federally regulated incandescent reflector lamps specified in 42 U.S.C. Sec. 6295(i)(l)(A)-(B).

(b) The following types of incandescent lamps are exempt from these requirements:

(i) Lamps rated at fifty watts or less of the following types: BR 30, ER 30, BR 40, and ER 40;

(ii) Lamps rated at sixty-five watts of the following types: BR 30, BR 40, and ER 40; and

(iii) R 20 lamps of forty-five watts or less.

(4)(a) Wine chillers designed and sold for use by an individual must meet requirements specified in the California Code of Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

(b) Wine chillers designed and sold for use by an individual shall be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.

(5)(a) The standby energy consumption of bottle-type water dispensers, and point-of-use water dispensers, dispensing both hot and cold water, manufactured on or after January 1, 2010, shall not exceed 1.2 kWh/day.

(b) The test method for water dispensers shall be the environmental protection agency energy star program requirements for bottled water coolers version 1.1.

(6)(a) The standby energy consumption of hot water dispensers and mini-tank electric water heaters manufactured on or after January 1, 2010, shall be not greater than 35 watts.

(b) This subsection does not apply to any water heater:

(i) That is within the scope of 42 U.S.C. Sec. 6292(a)(4) or 6311(1);

(ii) That has a rated storage volume of less than 20 gallons; and

(iii) For which there is no federal test method applicable to that type of water heater.

(c) Hot water dispensers shall be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.

(d) Mini-tank electric water heaters shall be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.

(7) The following standards are established for pool heaters, residential pool pumps, and portable electric spas:

(a) Natural gas pool heaters shall not be equipped with constant burning pilots.

(b) Residential pool pump motors manufactured on or after January 1, 2010, must meet requirements specified in the California Code of Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

(c) Portable electric spas manufactured on or after January 1, 2010, must meet requirements specified in the California Code of Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

(d) Portable electric spas must be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.

(8)(a) The leakage rate of tub spout diverters shall be no greater than the applicable requirements shown in the following table:

Appliance	Testing Conditions	Maximum Leakage Rate Effective January 1, 2009
Tub spout diverters	When new	0.01 gpm
	After 15,000 cycles of diverting	0.05 gpm

(b) Showerhead tub spout diverter combinations shall meet both the federal standard for showerheads established pursuant to 42 U.S.C. Sec. 6291 et seq. and the standard for tub spout diverters specified in this section.

(9)(a) The idle energy rate of commercial hot food holding cabinets manufactured on or after January 1, 2010, shall be no greater than 40 watts per cubic foot of measured interior volume.

(b) The idle energy rate of commercial hot food holding cabinets shall be determined using ANSI/ASTM F2140-01 standard test method for the performance of hot food holding cabinets (test for idle energy rate dry test). Commercial hot food holding cabinet interior volume shall be calculated using straight line segments following the gross interior dimensions of the appliance and using the following equation: Interior height x interior width x interior depth. Interior volume shall not account for racks, air plenums, or other interior parts.

(10) The following standards are established for battery charger systems:

(a) Large battery charger systems and small battery charger systems manufactured on or after January 1, 2018, must meet requirements specified in the California Code of Regulations, Title 20, section 1605 in effect as of the effective date of this section.

(b) Battery backup and uninterruptible power supplies that are not consumer products manufactured on or after January 1, 2018, must meet requirements specified in the California Code of Regulations, Title 20, section 1605 in effect as of the effective date of this section.

(c) Large battery charger systems and small battery charger systems must be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of the effective date of this section.

Sec. 4. RCW 19.260.050 and 2009 c 501 s 4 are each amended to read as follows:

(1) No new commercial refrigerator or freezer or state-regulated incandescent reflector lamp manufactured on or after January 1, 2007, may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040. No new automatic commercial ice cube machine manufactured on or after January 1, 2008, may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.

(2) On or after January 1, 2008, no new commercial refrigerator or freezer or state-regulated incandescent reflector lamp manufactured on or after January 1, 2007, may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040. On or after January 1, 2009, no new automatic commercial ice cube machine manufactured on or after January 1, 2008, may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.

(3) Standards for state-regulated incandescent reflector lamps are effective on the dates specified in subsections (1) and (2) of this section.

(4) The following products, if manufactured on or after January 1, 2010, may not be sold or offered in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040:

(a) Wine chillers designed and sold for use by an individual;

(b) Hot water dispensers and mini-tank electric water heaters;

(c) Bottle-type water dispensers and point-of-use water dispensers;

(d) Pool heaters, residential pool pumps, and portable electric spas;

(e) Tub spout diverters; and

(f) Commercial hot food holding cabinets.

(5) The following products, if manufactured on or after January 1, 2010, may not be installed for compensation in the state on or after January 1, 2011, unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040:

(a) Wine chillers designed and sold for use by an individual;

(b) Hot water dispensers and mini-tank electric water heaters;

(c) Bottle-type water dispensers and point-of-use water dispensers;

(d) Pool heaters, residential pool pumps, and portable electric spas;

(e) Tub spout diverters; and

(f) Commercial hot food holding cabinets.

(6)(a) Large and small battery charger systems, if manufactured on or after January 1, 2018, may not be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.

(b) Battery backup and uninterruptible power supplies that are not consumer products, if manufactured on or after January 1, 2018, may not be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.

(7) Large and small battery charger systems, if manufactured on or after January 1, 2018, may not be installed for compensation in the state on or after January 1, 2019, unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.

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