
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.

1 AN ACT Relating to creating new appliance efficiency standards;
2 amending RCW 19.260.030, 19.260.040, and 19.260.050; reenacting and
3 amending RCW 19.260.020; and adding a new section to chapter 19.260
4 RCW.

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

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

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

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

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

17 (3) "Commercial hot food holding cabinet" means a heated, fully
18 enclosed compartment, with one or more solid or partial glass doors,
19 that is designed to maintain the temperature of hot food that has
20 been cooked in a separate appliance. "Commercial hot food holding

1 cabinet" does not include heated glass merchandising cabinets, drawer
2 warmers, or cook and hold appliances.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7 (25) "Battery analyzer" means a device:

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

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

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

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

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

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

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

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

37 (d) Devices whose primary function is to charge batteries, along
38 with the batteries they are designed to charge. These units include
39 chargers for power tool batteries and chargers for automotive, AA,
40 AAA, C, D, or 9 V rechargeable batteries, as well as chargers for

1 batteries used in larger industrial motive equipment and à la carte
2 chargers.

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

8 (29) "Illuminated exit sign" means:

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

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

16 (30) "Large battery charger system" means a battery charger
17 system with a rated input power of more than two kilowatts.

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

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

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

24 (a) Automatic commercial ice cube machines;

25 (b) Commercial refrigerators and freezers;

26 (c) State-regulated incandescent reflector lamps;

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

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

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

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

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

34 (i) Commercial hot food holding cabinets; and

35 (j) Battery charger systems, except those:

36 (i) Used to charge golf carts;

37 (ii) That are classified as class II or class III devices for
38 human use under the federal food, drug, and cosmetic act as of the

1 effective date of this section and require United States food and
2 drug administration listing and approval as a medical device;

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

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

8 (v) That are battery analyzers;

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

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

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

18 (3) This chapter does not apply to:

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

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

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

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

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

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

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

			Maximum	Maximum condenser
	Type of	Harvest rate	energy use	water use
	cooling	(lbs. ice/24 hrs.)	(kWh/100 lbs.)	(gallons/100 lbs. ice)
35				
36				
37	Equipment type			

1	Ice-making head	water	<500	7.80 - .0055H	200 - .022H
2			>=500<1436	5.58 - .0011H	200 - .022H
3			>=1436	4.0	200 - .022H
4	Ice-making head	air	450	10.26 - .0086H	Not applicable
5			>=450	6.89 - .0011H	Not applicable
6	Remote condensing but not remote compressor	air	<1000	8.85 - .0038	Not applicable
8			>=1000	5.10	Not applicable
9	Remote condensing and remote compressor	air	<934	8.85 - .0038H	Not applicable
11			>=934	5.3	Not applicable
12	Self-contained models	water	<200	11.40 - .0190H	191 - .0315H
13			>=200	7.60	191 - .0315H
14	Self-contained models	air	<175	18.0 - .0469H	Not applicable
15			>=175	9.80	Not applicable

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

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

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

26	Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
27	Reach-in cabinets, pass-through cabinets, and roll- 28 in or roll-through cabinets that are refrigerators	Solid	0.10V+ 2.04
29		Transparent	0.12V+ 3.34
30	Reach-in cabinets, pass-through cabinets, and roll- 31 in or roll-through cabinets that are "pulldown" 32 refrigerators	Transparent	.126V+ 3.51

1	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are freezers	Solid	0.40V+ 1.38
2		Transparent	0.75V+ 4.10
3	Reach-in cabinets that are refrigerator-freezers with an AV of 5.19 or higher	Solid	0.27AV - 0.71

6 kWh= kilowatt-hours

7 V= total volume (ft³)

8 AV= adjusted volume= [1.63 x freezer volume (ft³)]+ refrigerator volume (ft³)

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

20	Product or compartment type	Integrated average product temperature in degrees Fahrenheit
21	Refrigerator	38± 2
22	Freezer	0± 2

23 (3)(a) The lamp electrical power input of state-regulated
24 incandescent reflector lamps shall meet the minimum average lamp
25 efficacy requirements for federally regulated incandescent reflector
26 lamps specified in 42 U.S.C. Sec. 6295(i)(1)(A)-(B).

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

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

31 (ii) Lamps rated at sixty-five watts of the following types: BR
32 30, BR 40, and ER 40; and

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

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

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

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

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

12 (6)(a) The standby energy consumption of hot water dispensers and
13 mini-tank electric water heaters manufactured on or after January 1,
14 2010, shall be not greater than 35 watts.

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

16 (i) That is within the scope of 42 U.S.C. Sec. 6292(a)(4) or
17 6311(1);

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

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

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

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

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

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

31 (b) Residential pool pump motors manufactured on or after January
32 1, 2010, must meet requirements specified in the California Code of
33 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

34 (c) Portable electric spas manufactured on or after January 1,
35 2010, must meet requirements specified in the California Code of
36 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

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

1 (8)(a) The leakage rate of tub spout diverters shall be no
2 greater than the applicable requirements shown in the following
3 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

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

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

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

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

26 (a) Large battery charger systems and small battery charger
27 systems manufactured on or after January 1, 2017, must meet
28 requirements specified in the California Code of Regulations, Title
29 20, section 1605 in effect as of the effective date of this section.

30 (b) Battery backup and uninterruptible power supplies that are
31 not consumer products manufactured on or after January 1, 2017, must
32 meet requirements specified in the California Code of Regulations,
33 Title 20, section 1605 in effect as of the effective date of this
34 section.

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

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

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

11 (2) On or after January 1, 2008, no new commercial refrigerator
12 or freezer or state-regulated incandescent reflector lamp
13 manufactured on or after January 1, 2007, may be installed for
14 compensation in the state unless the efficiency of the new product
15 meets or exceeds the efficiency standards set forth in RCW
16 19.260.040. On or after January 1, 2009, no new automatic commercial
17 ice cube machine manufactured on or after January 1, 2008, may be
18 installed for compensation in the state unless the efficiency of the
19 new product meets or exceeds the efficiency standards set forth in
20 RCW 19.260.040.

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

24 (4) The following products, if manufactured on or after January
25 1, 2010, may not be sold or offered in the state unless the
26 efficiency of the new product meets or exceeds the efficiency
27 standards set forth in RCW 19.260.040:

- 28 (a) Wine chillers designed and sold for use by an individual;
- 29 (b) Hot water dispensers and mini-tank electric water heaters;
- 30 (c) Bottle-type water dispensers and point-of-use water
31 dispensers;
- 32 (d) Pool heaters, residential pool pumps, and portable electric
33 spas;
- 34 (e) Tub spout diverters; and
- 35 (f) Commercial hot food holding cabinets.

36 (5) The following products, if manufactured on or after January
37 1, 2010, may not be installed for compensation in the state on or
38 after January 1, 2011, unless the efficiency of the new product meets
39 or exceeds the efficiency standards set forth in RCW 19.260.040:

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

- 1 (b) Hot water dispensers and mini-tank electric water heaters;
2 (c) Bottle-type water dispensers and point-of-use water
3 dispensers;
4 (d) Pool heaters, residential pool pumps, and portable electric
5 spas;
6 (e) Tub spout diverters; and
7 (f) Commercial hot food holding cabinets.

8 (6)(a) Large and small battery charger systems, if manufactured
9 on or after January 1, 2017, may not be sold or offered for sale in
10 the state unless the efficiency of the new product meets or exceeds
11 the efficiency standards set forth in RCW 19.260.040.

12 (b) Battery backup and uninterruptible power supplies that are
13 not consumer products, if manufactured on or after January 1, 2017,
14 may not be sold or offered for sale in the state unless the
15 efficiency of the new product meets or exceeds the efficiency
16 standards set forth in RCW 19.260.040.

17 (7) Large and small battery charger systems, if manufactured on
18 or after January 1, 2017, may not be installed for compensation in
19 the state on or after January 1, 2018, unless the efficiency of the
20 new product meets or exceeds the efficiency standards set forth in
21 RCW 19.260.040.

22 NEW SECTION. Sec. 5. A new section is added to chapter 19.260
23 RCW to read as follows:

24 (1) Beginning December 31, 2015, and each year thereafter, the
25 department must prepare an annual report on Washington's national
26 rating as an energy efficient state. The report must include
27 recommendations for retaining a top ten presence on a national energy
28 efficiency rating list.

29 (2) The report required by this section must, in accordance with
30 RCW 43.01.036, be submitted to the appropriate committees of the
31 legislature.

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