DISTRICT OF COLUMBIA OFFICIAL CODE

TITLE 8. ENVIRONMENTAL AND ANIMAL CONTROL AND PROTECTION.

CHAPTER 17M.
ENERGY EFFICIENCY STANDARDS.

2001 Edition

DISTRICT OF COLUMBIA OFFICIAL CODE CHAPTER 17M. ENERGY EFFICIENCY STANDARDS.

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CHAPTER 17M. ENERGY EFFICIENCY STANDARDS.

§ 8-1771.01. DEFINITIONS.

For the purposes of this chapter, the term:

- (1) "Ballast" means a device used with an electric discharge lamp to obtain necessary circuit conditions (voltage, current, and waveform) for starting and operating the lamp.
- (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 glass doors that is designed to maintain the temperature of hot food that has been cooked in a separate appliance. The term "commercial hot food holding cabinet" shall not include heated glass merchandizing cabinets, drawer warmers, or cook-and-hold appliances.
- (4) "Construction Codes" means the standards and requirements adopted pursuant to Chapter 14 of Title 6.
- (5) "High-intensity discharge lamp" means a lamp in which light is produced by the passage of an electric current through a vapor or gas and in which the light-producing are is stabilized by bulb wall temperature and the are tube has a bulb wall loading in excess of 3 watts per square centimeter.
- (6) "Metal halide lamp" means a high-intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in combination with metallic vapors.
- (7) "Metal halide lamp fixture" means a light fixture designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.
- (8) "Probe-start metal halide ballast" means a ballast which is used to operate metal halide lamps, which does not contain an igniter, and which starts lamps by using a 3rd starting electrode probe in the are tube.
- (9) "Single-voltage external AC to DC power supply" means a device that:
 - (A) Is designed to convert line voltage AC input into lower voltage DC output;
 - (B) Is able to convert to only one DC output voltage at a time;
 - (C) Is sold with, or intended to be used with, a separate end-use product that constitutes the primary power load;
 - (D) Is contained within a separate physical enclosure from the end-use product;
 - (E) Is connected to the end-use product through a removable or hard-wired male/female electrical connection, cable, cord, or other wiring;
 - (F) Does not have batteries or battery packs, including those that are removable, that physically attach directly to the power supply unit;
 - (G) Does not have a battery chemistry or type selector switch and:
 - (i) Indicator light; or
 - (ii) A battery chemistry or type selector switch and a state of charge meter; and
 - (H) Has a nameplate output power not exceeding 250 watts.
- (10) "State-regulated incandescent reflector lamp" means a lamp, not colored or designed for rough or vibration service applications, with 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 that falls into either of the following categories:
 - (A) A blown PAR, bulged reflector, elliptical reflector, or similar bulb shape with a diameter equal to

or greater than 2.25 inches; or

- (B) A reflector, parabolic aluminized reflector, or similar bulb shape with a diameter of 2.25 to 2.75 inches.
- (11) "Walk-in refrigerator or freezer" means a refrigerated space that can be walked into and has a total chilled and frozen storage area of less than 3,000 square feet, operates at chilled (above 32 degrees Fahrenheit) or frozen (at or below 32 degrees Fahrenheit) temperature, and is connected to a self-contained or remote condensing unit. The term "walk-in refrigerator or freezer" shall not include products designed and marketed exclusively for medical, scientific, or research purposes, or refrigerated warehouses.
- (12) "Water dispenser" means a factory-made assembly that mechanically cools and heats potable water and that dispenses the cooled or heated water by integral or remote means.

(Dec. 11, 2007, D.C. Law 17-64, § 2, 54 DCR 10964.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

Law 17-64, the "Energy Efficiency Standards Act of 2007", was introduced in Council and assigned Bill No. 17-211 which was referred to the Committee on Public Services and Consumer Affairs. The Bill was adopted on first and second readings on July 10, 2007, and October 2, 2007, respectively. Signed by the Mayor on October 19, 2007, it was assigned Act No. 17-165 and transmitted to both Houses of Congress for its review. D.C. Law 17-64 became effective on December 11, 2007.

§ 8-1771.02. SCOPE.

- (a) This chapter shall apply to the following types of new products sold, offered for sale, or installed in the District of Columbia:
 - (1) Bottle-type water dispensers;
 - (2) Commercial hot food holding cabinets;
 - (3) Metal halide lamp fixtures;
 - (4) Single-voltage external AC to DC power supplies;
 - (5) State-regulated incandescent reflector lamps;
 - (6) Walk-in refrigerators or freezers; and
 - (7) Any other products designated by the Mayor in accordance with § 8-1771.04.
- (b) This chapter shall not apply to:
 - (1) New products manufactured in the District of Columbia and sold outside the District of Columbia;
 - (2) New products manufactured outside the District of Columbia and sold at wholesale inside the District for final retail sale and installation outside the District of Columbia;
 - (3) Products installed in mobile manufactured homes at the time of construction; or
 - (4) Products designed expressly for installation and use in recreational vehicles.

(Dec. 11, 2007, D.C. Law 17-64, § 3, 54 DCR 10964.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

For Law 17-64, see notes following § 8-1771.01.

§ 8-1771.03. STANDARDS AND IMPLEMENTATION.

- (a) On or after January 1, 2009, a new bottle-type water dispenser, commercial hot food holding cabinet, metal halide lamp fixture, state-regulated incandescent reflector lamp, or walk-in refrigerator or freezer shall not be sold or offered for sale in the District of Columbia unless the efficiency of the new product meets or exceeds the efficiency standards set forth in subsection (b) of this section.
- (b) On or after January 1, 2010, a product listed in subsection (a) of this section shall not be installed in the District of Columbia unless the efficiency of the new product meets or exceeds the following efficiency standards:
 - (1) Bottle-type water dispensers designed for dispensing both hot and cold water shall not have standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance with the test criteria contained in version 1.1 of the Environmental Protection Agency's "Energy Star

Program Requirements for Bottled Water Coolers," except units with an integral, automatic timer shall not be tested using Section D, "Timer Usage," of the test criteria.

- (2) Commercial hot food holding cabinets shall have a maximum idle energy rate not exceeding 40 watts per cubic foot of interior volume, as determined by the "idle energy rate-dry test" in ASTM F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by ASTM International. Interior volume shall be measured in accordance with the method shown in the Environmental Protection Agency's "Energy Star Program Requirements for Commercial Hot Food Holding Cabinets" as in effect on August 15, 2003.
- (3) Metal halide lamp fixtures designed to be operated with lamps rated greater than or equal to 150 watts but less than or equal to 500 watts shall not contain a probe-start metal halide ballast.
- (4)(A) State-regulated incandescent reflector lamps shall meet the minimum average lamp efficacy requirements for federally-regulated incandescent reflector lamps contained in section 325(i)(1)(A) of the Energy Policy and Conservation Act, approved December 22, 1975 (89 Stat. 923; 42 U. S.C. § 6295(i)(1)(A)).
 - (B) The following types of incandescent reflector lamps shall be exempt from these requirements:
 - (i) Lamps rated at 50 watts or less of the following types: BR30, ER30, BR40, and ER40;
 - (ii) Lamps rated at 65 watts of the following types: BR30, BR40, and ER40; and
 - (iii) R20 lamps of 45 watts or less.
- (5)(A) Walk-in refrigerators or freezers shall:
 - (i) Have automatic door closers that firmly close all reach-in doors and that firmly close all walk-in doors that have been closed to within one inch of full closure; provided, that this requirement shall not apply to walk-in doors wider than 3 feet, 9 inches or higher than 6 feet, 11 inches;
 - (ii) Contain wall, ceiling, and door insulation of at least R-28 for refrigerators and at least R-32 for freezers; provided, that door insulation requirements shall not apply to glazed portions of doors or to structural members:
 - (iii) Contain floor insulation of at least R-28 for freezers;
 - (iv) For single-phase evaporator fan motors of under one horsepower and less than 460 volts, use electronically commutated motors; provided, that the Mayor may delay implementation of this sub-subparagraph upon a determination that the motors are only available from one manufacturer or in insufficient quantities to serve the needs of the walk-in industry for evaporator-fan applications;
 - (v) For condenser fan motors of under one horsepower, use either:
 - (I) Electronically commutated motors;
 - (II) Permanent split capacitor-type motors; or
 - (III) Polyphase motors of 1/2 horsepower or more; and
 - (vi) For all interior lights, use light sources with an efficacy of 40 lumens per watt or more, including ballast losses; provided, that light sources with an efficacy of 40 lumens per watt or less, including ballast losses (if any), may be used in conjunction with a timer or device that turns off the lights within 15 minutes after the enclosure ceases to be occupied.
 - (B) Walk-in refrigerators or freezers with transparent reach-in doors and walk-in door windows shall also meet the following specifications:
 - (i) Transparent reach-in doors and windows in walk-in doors for walk-in freezers shall be of triple-pane glass with either heat-reflective treated glass or gas fill.
 - (ii) Transparent reach-in doors and windows in walk-in doors for walk-in refrigerators shall be:
 - (I) Double-pane glass with heat-reflective treated glass and gas fill; or
 - (II) Triple-pane glass with either heat-reflective treated glass or gas fill.
 - (iii) For appliances with an anti-sweat heater:
 - (I) The appliances shall have a total door rail, glass, and frame heater power draw of no more than:
 - (aa) Seven and 1/10 watts per square foot of door opening for freezers; and
 - (bb) Three watts per square foot of door opening for refrigerators.
 - (II) If an appliance with an anti-sweat heater has anti-sweat heat controls, the controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.
- (c) On or after January 1, 2012, a new single-voltage external AC to DC power supply shall not be sold or

offered for sale in the District of Columbia unless the efficiency of the new product meets or exceeds the following efficiency standards:

(1) Single-voltage external AC to DC power supplies shall meet the energy efficiency requirements in the following table:

Nameplate Output Power

Minimum Efficiency in Active Mode

From 0 to less than 1 watt

From 1 watt to not more than 49

watts

logarithm of the nameplate output

power (expressed in watts) and

0.49

Greater than 49 watts

Maximum Energy Consumption in No-Load

Mode

From 0 to less than 10 watts

From 10 watts to not more than 250

watts

0.5 watts
0.75 watts

- (2) This standard shall apply to single-voltage AC to DC power supplies that are sold individually and to those that are sold as a component of or in conjunction with another product.
- (3) Single-voltage external AC to DC power supplies that require Food and Drug Administration listing and approval as a medical device shall be exempt from the requirements of this section.
- (4) Single-voltage external AC to DC power supplies made available by a manufacturer directly to a consumer or to a service or repair facility after and separate from the original sale of the product requiring the power supply as a service part or spare part shall not be required to meet the standards of this section until January 1, 2013.
- (5) For the purposes of this section, the efficiency of single-voltage external AC to DC power supplies shall be measured in accordance with the test methodology specified by the Environmental Protection Agency's Energy Star Program, "Test Method for Calculating the Energy Efficiency of Single-Voltage External AC-DC and AC-AC Power Supplies (August 11, 2004)," except that tests shall be conducted at 115 volts only.
- (6) One year after the sale or offering for sale of a new product becomes subject to the requirements of subsection (c) of this section, the product shall not be installed in the District of Columbia unless the efficiency of the new product meets or exceeds the efficiency standards set forth herein.

(Dec. 11, 2007, D.C. Law 17-64, § 4, 54 DCR 10964.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

For Law 17-64, see notes following § 8-1771.01.

§ 8-1771.04. NEW AND REVISED STANDARDS.

The Mayor may adopt rules to establish increased efficiency standards for the products listed in § 8-1771.02 or efficiency standards for products not specifically listed in § 8-1771.02 if he or she determines that increased efficiency standards would serve to promote energy conservation in the District of Columbia; provided, that no new or increased efficiency standards shall become effective in less than one year following the adoption of the rule establishing the efficiency standard; provided further, that a substantially identical standard shall have been adopted by statute or regulation in Maryland or Virginia. The Mayor may apply for a waiver of federal preemption in accordance with federal procedures under section 325 of the Energy Policy and Conservation Act, approved December 22, 1975 (89 Stat. 923; 42 U.S.C. § 6295), for state efficiency standards for any product regulated by the federal government.

(Dec. 11, 2007, D.C. Law 17-64, § 5, 54 DCR 10964.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

For Law 17-64, see notes following § 8-1771.01.

§ 8-1771.05. TESTING, CERTIFICATION, LABELING, AND ENFORCEMENT.

- (a) The manufacturers of products covered by this chapter shall test samples of their products. The tests shall be conducted in accordance with test procedures contained in § 8-1771.03 or with test procedures adopted by California or Maryland if the test procedures were adopted to enforce energy efficiency standards substantially identical to those adopted by the District of Columbia. If test procedures are not provided for in § 8-1771.03, the Mayor may adopt test procedures adopted by any other state, United States Department of Energy-approved test methods or, in the absence of such test methods, other appropriate nationally recognized test methods.
- (b) Manufacturers of new products covered by § 8-1771.03, except for single-voltage external AC to DC power supplies and walk-in refrigerators or freezers, shall certify that the products are in compliance with the provisions of this chapter. The certifications shall be based on test results. The Mayor may promulgate rules governing the certification of such products and may coordinate with the certification programs of other states and federal agencies with substantially identical standards.
- (c) Manufacturers of new products covered by § 8-1771.03 shall identify each product offered through retailers for sale or installation in the District of Columbia as in compliance with the provisions of this chapter, or with the energy efficiency standards enacted by another state or the federal government if the standards on which the compliance is based are substantially identical to the appropriate standards in the District of Columbia, by means of a mark, label, or tag on the product or packaging at the time of sale or installation. The Mayor shall allow the use of existing marks, labels, or tags that connote compliance with the efficiency requirements of this chapter. All display models of products covered by § 8-1771.03 shall be displayed with a mark, label, or tag on the product indicating compliance with the efficiency requirements of this chapter. If a national efficiency standard is established by federal law or regulation for a product covered by § 8-1771.03, the labeling requirements of this subsection shall not apply to the product.
- (d) The Mayor may test products covered by § 8-1771.03 following the implementation dates of the standards provided in § 8-1771.03 for the specific product. If products so tested are found not to be in compliance with the minimum efficiency standards established under § 8-1771.03, after notice and a hearing, the Mayor shall:
 - (1) Impose a penalty on the manufacturer of the product in an amount at least equal to the cost of product purchase and testing; and
 - (2) Make information available to the public on products found not to be in compliance with the standards.
- (e) The Mayor may randomly and periodically inspect distributors or retailers of new products covered by this chapter to determine compliance. The Mayor may also undertake inspections prior to occupancy of newly constructed buildings containing new products that are also covered by the Construction Codes.
- (f)(1) The Mayor may investigate potential violations of this chapter. If the Mayor finds, after notice and a hearing, that a manufacturer, distributor, or retailer of a product covered by this chapter, or a person who installs a product covered by this chapter, violates any provision of this chapter, the Mayor:
 - (A) For a first violation, shall issue a warning; and
 - (B) For a second or subsequent violation, may take one or more of the following actions:
 - (i) Impose a penalty not to exceed:
 - (I) Two thousand five hundred dollars if the violator is, or is an agent of, a manufacturer, distributor, or retailer of the product; or
 - (II) Five hundred dollars for any other violator;
 - (ii) Issue a cease and desist order; or
 - (iii) Request that the Attorney General for the District of Columbia commence civil or criminal action to secure injunctive or other appropriate relief.
 - (2) Each violation shall constitute a separate offense. Each day that a violation continues shall constitute a separate offense.
 - (3) Penalties assessed under this subsection shall be in addition to the costs assessed under subsection (d) of this section.
- (g) The Mayor may adopt such other rules as may be necessary or appropriate for the implementation and enforcement of this chapter.

(Dec. 11, 2007, D.C. Law 17-64, § 6, 54 DCR 10964.)

§ 8-1771.06. ELECTRIC COMPANY PURCHASES OF DISTRIBUTION TRANSFORMERS--PUBLIC SERVICE COMMISSION RULE.

- (a) For the purposes of this section, the term:
 - (1) "Electric company" shall have the same meaning as in § 34-207.
 - (2) "Liquid-immersed distribution transformer" means a transformer that:
 - (A) Has an input voltage of 34,500 volts or less;
 - (B) Has an output voltage of 600 volts or less;
 - (C) Uses oil or other liquid as a coolant; and
 - (D) Is rated for operation at a frequency of 60 Hertz.
 - (3) "Transformer" means a device consisting of 2 or more coils of insulated wire and that is designed to transfer alternating current by electromagnetic induction from one coil to another to change the original voltage or current value.
- (b) Within 365 days of the date that the United States Department of Energy issues a final rule on liquid-immersed distribution transformers, the Public Service Commission shall adopt a rule governing the purchase of liquid-immersed distribution transformers by the electric company. The rule shall ensure that, subject to availability, all such purchases occurring on or after January 1, 2009 are based on the life-cycle cost methodology contained in section 2 of Standard TP 1-2002 published by the National Electrical Manufacturers Association. The Public Service Commission may also consider additional inventory management costs as costs for inclusion within the life-cycle cost methodology to be used by an electric company for purposes of this section. Except as provided herein, the rule shall be consistent with regulations pertaining to liquid-immersed distribution transformers adopted by the United States Department of Energy.

(Dec. 11, 2007, D.C. Law 17-64, § 7, 54 DCR 10964.)

HISTORICAL AND STATUTORY NOTES

Legislative History of Laws

For Law 17-64, see notes following § 8-1771.01.