NB: Unofficial translation; legally binding texts are those in Finnish and Swedish

#### Ministry of the Environment, Finland

# Government Decree on Waste Electrical and Electronic Equipment (852/2004)

Section 1 - Objectives

In addition to the provisions of the Waste Act (1072/1993) concerning the waste management of waste electrical and electronic equipment based on the principle of producer responsibility, the provisions of this Decree shall be complied with for the purpose of reducing the quantity and harmfulness of waste from electrical and electronic equipment, promoting the reuse, recycling and other forms of recovery of discarded electrical and electronic equipment and components thereof, and improving the standard of environmental protection in treatment and disposal of waste electrical and electronic equipment.

#### Section 2 - Scope

- (1) This Decree applies to electrical and electronic equipment that falls within the categories set out in Appendix 1.
- (2) This Decree does not apply to electrical and electronic equipment forming part of another type of equipment that is not covered within the scope of this Decree, nor to filament bulbs.

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#### Section 3 - Definitions

#### (1) In this Decree,

- 1) electrical and electronic equipment means equipment falling within the categories set out in Appendix 1 that is dependent on an electric current or electromagnetic field in order to function properly or is meant for the generation, transfer or measurement of such currents and fields and is designed for use with a voltage rating not exceeding 1,000 volts for alternating current or 1,500 volts for direct current;
- 2) waste electrical and electronic equipment means electrical or electronic equipment that has to be considered waste within the meaning of section 3(1) of the Waste Act, including all components, subassemblies and consumables that are part of the product at the time of discarding;
- 3) prevention means measures aimed at reducing the quantity and the harmfulness to the environment of waste electrical and electronic equipment and materials and substances contained therein;
- 4) reuse means any operation by which waste electrical and electronic equipment or components thereof are used for the same purpose for which they were conceived; reuse includes the continued use of equipment or components thereof which are returned to collection points, distributors, recyclers or manufacturers;
- 5) recycling means the use of waste electrical and electronic equipment or components thereof as a raw material for the original purpose or for other purposes, but excluding energy recovery;

- 6) recovery means any of the applicable operations referred to in Appendix 5 of the Waste Decree (1390/1993) with the purpose of recovering and using a material or substance or energy contained within the waste electrical and electronic equipment or components thereof;
- 7) disposal means any of the applicable operations referred to in Appendix 6 of the Waste Decree with the purpose of rendering harmless or permanently depositing the waste electrical and electronic equipment or components thereof;
- 8) treatment means any activity after the waste electrical and electronic equipment has been handed over to a facility for depollution, disassembly, shredding, recovery or preparation for disposal, and any other operation carried out for the purpose of more efficient recovery or easier disposal of waste electrical and electronic equipment;
- 9) producer means any party which, irrespective of the selling technique used, including distance selling in accordance with Chapter 6(4) of the Consumer Protection Act (38/1978):
- a) manufactures and sells electrical and electronic equipment under its own brand;
- b) sells under its own brand equipment made by other producers; the seller is not, however, regarded as a producer if the brand of the producer referred to in subparagraph a appears on the equipment;
- c) imports electrical and electronic equipment or exports such equipment on a professional basis to a Member State of the European Community;

any party that exclusively provides financing under or pursuant to a finance agreement shall not be deemed a producer under this Decree unless the same party also acts as a producer in the manner referred to in subparagraphs a, b or c;

- 10) distributor means any party that provides electrical and electronic equipment on a commercial basis to those who are going to use it;
- 11) waste electrical and electronic equipment from private households means waste electrical and electronic equipment which comes from private households as well as that from commercial, industrial, institutional and other sources which, because of its nature and quantity, is similar to that from private households;
- 12) dangerous substance means any dangerous chemical referred to in section 11 of the Chemicals Act (744/1989);
- 13) finance agreement means any loan, lease, hiring or deferred sale agreement or arrangement relating to any equipment, whether or not the terms of that agreement or arrangement or any supplementary agreement or arrangement provide that a transfer of ownership of that equipment will or may take place.
- (2) The provisions on producers laid down in this Decree also apply correspondingly to producer corporations referred to in section 18g of the Waste Act.

#### Section 4 - Product design and manufacture

(1) Electrical and electronic equipment shall be designed and manufactured in such a way that:

- 1) the use of dangerous substances is minimized;
- 2) the disassembly, reuse and recycling or other recovery of waste electrical and electronic equipment is as easy as possible;
- 3) recycled materials are used as much as possible;
- 4) when the product becomes waste, it presents no danger or harm to health or the environment nor any hindrance or difficulty for the organization of waste management.
- (2) No method may be used in the design or manufacture of a product that deliberately prevents the reuse of waste electrical and electronic equipment, unless this presents overriding advantages with regard to environmental protection and safety.

#### Section 5 - Minimum targets

- (1) Producers must ensure that by 31 December 2006:
  - 1) a collection rate averaging at least four kilograms of waste electrical and electronic equipment from private households per inhabitant per year is achieved;
  - 2) for collected waste electrical and electronic equipment that falls within category 1 (large household appliances) and category 10 (automatic dispensers) of Appendix 1, at least 80% of the average weight per appliance is recovered and at least 75% is reused or recycled;
  - 3) for collected waste electrical and electronic equipment that falls within categories 3 (IT and telecommunications equipment) and 4 (consumer

equipment) of Appendix 1, at least 75% of the average weight per appliance is recovered and at least 65% is reused or recycled;

- 4) for collected waste electrical and electronic equipment that falls within categories 2 (small household appliances), 5 (lighting equipment), 6 (electrical and electronic tools), 7 (toys, leisure and sports equipment) and 9 (monitoring and control instruments) of Appendix 1, at least 70% of the average weight per appliance is recovered and at least 50% is reused or recycled;
- 5) at least 80% of the weight of collected waste gas discharge lamps is reused or recycled.
- (2) Waste electrical and electronic equipment exported out of the European Community shall only count towards the fulfilment of recovery targets if the exporter can prove that recovery, reuse or recycling has taken place in a manner that corresponds with the requirements of this Decree.

#### Section 6 - Separate collection

- (1) Waste electrical and electronic equipment may not be mixed with other waste.
- (2) Producers shall organize separate collection of all waste electrical and electronic equipment that can be collected, irrespective of whether the collection target set in section 5(1)(1) has been achieved.
- (3) Producers shall organize the delivery of separately collected waste electrical and electronic equipment to an authorized treatment facility unless the appliances are reused as a whole. Waste electrical and electronic equipment shall be collected and

stored in such a way that whole appliances and components thereof that are suitable for reuse and recycling can primarily be reused or, as a secondary alternative, recycled as well as possible.

#### Section 7 - Treatment

- (1) Producers shall organize treatment of separately collected waste electrical and electronic equipment at a facility that has an environmental permit referred to in section 28(2)(4) of the Environmental Protection Act (86/2000). In making agreements with treatment facilities, producers shall give first priority to facilities that have introduced environmental management systems certified within the European Community.
- (2) The best available treatment, recovery and recycling techniques shall be applied in treatment. All fluids shall be removed from waste electrical and electronic equipment during treatment. The waste shall be treated in accordance with Appendix 2.
- (3) The treatment facility must meet the technical requirements set out in Appendix 3.
- (4) Provisions to take account of the obligations under subsections 2 and 3 shall be included in environmental permits for treatment of waste electrical and electronic equipment.

Section 8 - Showing waste management costs in the price of a product

(1) Costs incurred in waste management of waste electrical and electronic equipment from private households produced from electrical and electronic equipment put on the market after 13 August 2005 may not be shown separately to purchasers at the time of sale of new products.

(2) Producers are allowed to show purchasers, at the time of sale of new products, the actual costs incurred in waste management of waste from private households produced from equipment put on the market before the date referred to in subsection 1 until 13 February 2011 and, for equipment that falls within category 1 of Appendix 1, until 13 February 2013.

Section 9 - Obligations of producers engaged in distance selling

Electrical and electronic equipment producers engaged in distance selling shall participate in organizing financing for waste management of waste electrical and electronic equipment from private households in the European Community Member State to which the equipment is supplied, complying with sections 18c(1-2) and 18m(2) of the Waste Act and section 8 of this Decree.

Section 10 - Labelling of electrical and electronic equipment

- (1) Producers shall ensure that any electrical and electronic equipment that they put on the market after 13 August 2005 is labelled with the mark for separate collection shown in Appendix 4. In special cases, where necessary because of the product's size or function, the symbol can be marked on the packaging, instructions for use and warranty of the electrical and electronic equipment.
- (2) Producers shall ensure that any electrical and electronic equipment that they put on the market after 13 August 2005 is labelled with a mark that

indicates the name of the equipment producer that brought the equipment to market in the European Community. The equipment marking must also indicate that it was put on the market after the entry into force of this Decree.

#### Section 11 - Information for users

Producers shall see to the provision of information and advice about the collection and recovery of waste electrical and electronic equipment. In the information given, particular attention shall be paid to ensuring that users of electrical and electronic equipment in private households receive details about:

- 1) the obligation regarding separate collection, and instructions for it;
- 2) the collection systems and facilities available;
- 3) their role in contributing to collection, reuse, recycling and other forms of recovery of waste electrical and electronic equipment;
- 4) the potential effects on the environment and health due to the presence of dangerous substances in electrical and electronic equipment;
- 5) the meaning of the symbol shown in Appendix 4.

#### Section 12 - Information for treatment facilities

Upon the request of treatment facilities, producers shall provide reuse and treatment information for each type of appliance within one year of it being put on the market. This must indicate the information needed by establishments engaged in the

reuse, treatment and recycling of waste electrical and electronic equipment for the purpose of identifying the components and substances contained in the electrical and electronic equipment and concerning the location of dangerous substances in the equipment. The information shall be provided to reuse centres and treatment and recycling establishments in the form of a manual or by means of electronic media.

### Section 13 - Monitoring information

- (1) Producers or treatment facilities acting on a producer's behalf or another third party shall, by the end of April each year, notify the Pirkanmaa Regional Environment Centre of the following information and estimates for the previous year, wherever possible by category in accordance with Appendix 1:
  - 1) the quantity in tonnes and, if possible, the number of items of new electrical and electronic equipment supplied to the domestic market;
  - 2) an estimate of the accumulated tonnage of waste electrical and electronic equipment;
  - 3) the quantity of collected waste electrical and electronic equipment and the quantity in tonnes and, if possible, the number of items of reused, separately recycled and otherwise recovered waste equipment;
  - 4) exports of collected waste electrical and electronic equipment in tonnes and, if possible, the number of items;

- 5) changes that have occurred in the guarantee arrangements and amount of the guarantee.
- (2) Producers engaged in distance selling shall submit information on the quantity in tonnes and, if possible, the number of items of new electrical and electronic equipment supplied to a European Community Member State market and information on how the producer is to meet the obligation under section 9.

#### Section 14 - Reporting

- (1) The Pirkanmaa Regional Environment Centre shall submit the information referred to in section 13 to the Commission of the European Communities every two years using a form that accords with the Commission's decision, and shall do this within 18 months of the end of the period covered by the report.
- (2) The Pirkanmaa Regional Environment Centre shall play its part in organizing the appropriate exchange of information among European Community Member States, particularly for the purpose of complying with sections 5(2) and 13(2).
- (3) The Pirkanmaa Regional Environment Centre shall submit a report to the Commission of the European Communities every three years on the implementation of this Decree in Finland, in accordance with Article 5 of Council Directive 91/692/EEC standardizing and rationalizing reports on the implementation of certain Directives relating to the environment, and shall do this within nine months of the end of the period covered by the report.

Section 15 - Content of the notification to be made for the producer data register

- (1) The notification to be made by producers for the purpose of entry in the producer data register as referred to in section 50b(1-2) of the Waste Act must contain the following:
  - 1) producer's name or company name;
  - 2) contact and address details;
  - 3) name and position of contact person;
  - 4) business identity code;
  - 5) information on the products marketed by the producer and their market areas, the producer's turnover and an estimate of the producer's market share in terms of euros and weight and by equipment or equipment group in accordance with Appendix 1;
  - 6) information on the waste management organized by the producer, such as the network of collection facilities, collection and transportation, the reuse of discarded whole appliances, the treatment, recycling, other recovery and disposal and other waste management of waste electrical and electronic equipment, and the type, quality, quantity and origin of the waste that falls within the waste management sphere, and the area of operation;
  - 7) information on the agreements concerning the organization of waste management;
  - 8) information on the guarantee set by the producer under section 18m(2) of the Waste Act.

- (2) The notification to be made by producer corporations for the purpose of approval in the producer data register as referred to in section 50b(1-2) of the Waste Act must contain the following:
  - 1) producer corporation's name or company name;
  - 2) contact and address details;
  - 3) name and position of contact person;
  - 4) business identity code;
  - 5) information on the producers represented by the producer corporation: name of company, business identity code and date of entry to the producer corporation;
  - 6) information on the products marketed by the producers represented by the producer corporation, their market areas and an estimate of the joint market share in terms of euros and weight and by equipment or equipment group in accordance with Appendix 1;
  - 7) the rules of the producer corporation and, if necessary, other information indicating how the obligations are divided between the producers and how a new producer can reach agreement with the producer corporation on attending to producer responsibility;
  - 8) information on the waste management organized by the producer corporation, such as the network of collection facilities, collection and transportation, reuse of discarded whole appliances, treatment, recycling, other recovery and disposal and other waste management of waste electrical and

electronic equipment, and the type, quality, quantity and origin of the waste that falls within the waste management sphere, and the area of operation;

- 9) information on the agreements concerning the organization of waste management and the contractual parties' environmental permits and any environmental management and quality management systems;
- 10) information for assessing the financial standing, or information on the producer corporation's guarantee under section 50c(2)(3) of the Waste Act.
- Producers and producer corporations shall notify the Pirkanmaa Regional Environment Centre without delay if their name, company name or contact details change or if significant changes occur in the waste management system and contractual arrangements referred to in subsections 1(7-8) and 2(8-9). Producer corporations shall also notify the Pirkanmaa Regional Environment Centre without delay of any changes in the rules referred to in subsection 2(7) and of the information referred to in subsection 2(5) on new producers entering the producer corporation and producers exiting from it.

Section 16 - Entry into force of certain provisions of the Waste Act

- (1) Electrical and electronic equipment shall be subject to the producer responsibility provisions of the Waste Act after 13 August 2005.
- (2) Electrical and electronic equipment producers and producer corporations shall nevertheless submit the notification required under section 50b of the Waste

Act to the Pirkanmaa Regional Environment Centre by 15 May 2005.

## Section 17 - Entry into force

- (1) This Decree enters into force on 13 August 2005.
- (2) Measures necessary for the implementation of this Decree may be undertaken before the Decree's entry into force.

Appendix 1. Categories of electrical and electronic equipment that fall within the scope of the Decree and examples of the equipment within these categories

### 1. Large household appliances

Large cooling appliances Refrigerators

Freezers

Other large appliances used for refrigeration, preservation and storage of food

Washing machines

Clothes dryers

Dish washing machines

Food preparation equipment

Electric stoves

Electric hot plates

Microwave ovens

Other large appliances used for cooking and other processing of food

Electric heating appliances

Electric radiators

Other large appliances for heating rooms, beds and seating furniture

Electric fans

Air conditioner appliances

Other fanning, exhaust ventilation and air-exchange equipment

#### 2. Small household appliances

Vacuum cleaners

Carpet sweepers

Other appliances for cleaning

Appliances used for sewing, knitting, weaving and other processing of textiles

Irons and other appliances for ironing, mangling and other care of and textiles

Toasters

Grills

Coffee grinders, coffee machines and equipment for opening or sealing containers or packages
Electric knives

Appliances for hair-cutting, hair drying, tooth brushing, shaving and massage, and other body care appliances Clocks, watches and equipment for the purpose of measuring, indicating or recording time Scales

#### 3. IT and telecommunications equipment

Centralized data processing:

Mainframes

Minicomputers

Printer units

Personal computing:

Personal computers (CPU, mouse, screen and keyboard included)

Laptop computers (CPU, mouse, screen and keyboard included)

Notebook computers

Notepad computers

Printers

Copying equipment

Electrical and electronic typewriters

Pocket and desk calculators

and other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means

User terminals and systems

Facsimile machines

Telex machines

Telephones

Pay telephones

Cordless telephones

Mobile telephones

Telephone answering systems and other products or equipment for transmitting sound, images or other information by telecommunications

#### 4. Consumer equipment

Radio sets
Television sets
Video cameras
Video recorders
Hi-fi recorders
Audio amplifiers
Musical instruments

Other products or equipment for the purpose of recording or reproducing sound or images, including signals and technologies for the distribution of sound and images other than by telecommunications

#### 5. Lighting equipment

Luminaires for fluorescent lamps
Straight fluorescent lamps
Compact fluorescent lamps
High intensity discharge lamps, including pressure sodium
lamps and metal halide lamps
Low pressure sodium lamps
Other lighting or equipment for the purpose of spreading
or controlling light, with the exception of filament
bulbs

**6. Electrical and electronic tools** (with the exception of large-scale stationary industrial tools)

Drills
Saws
Sewing machines

Equipment for turning, milling, sanding, sawing, cutting, drilling, making holes, punching, folding, bending or other processing of wood, metal and other materials

Tools for riveting, nailing or screwing, or for removing rivets, nails or screws, or similar uses

Tools for welding, soldering or similar use

Equipment for spraying, spreading, dispersing or other treatment of liquid or gaseous substances

Tools for mowing or other gardening activities

#### 7. Toys, leisure and sports equipment

Electric trains or car racing sets

Hand-held video game consoles

Video games

Computer devices for cycling, diving, running, rowing, etc.

Sports equipment with electric or electronic components

8. Medical equipment and supplies (with the exception of all implanted and infected equipment and supplies)

Radiotherapy equipment
Cardiology equipment
Dialysis equipment
Pulmonary ventilators
Nuclear medicine
Laboratory equipment for in-vitro diagnosis
Analysers
Freezers
Fertilization tests
Other appliances for detecting, preventing, monitoring, treating and alleviating illness, injury or disability

#### 9. Monitoring and control instruments

Smoke detectors

Coin slot machines

Heating regulators
Thermostats
Measuring, weighing or adjusting appliances for households or laboratories
Other monitoring and control instruments used in industrial installations (e.g. in control panels)

### 10. Automatic dispensers

Automatic dispensers for hot drinks
Automatic bottle and can dispensers for hot and cold
drinks
Automatic dispensers for solid products
Automatic dispensers for money
Various appliances which deliver products automatically

#### Appendix 2. Requirements for treatment and sorting

- 1. The suitability for reuse of equipment and components delivered to a collection facility must be checked. Equipment and components that are fit for reuse must be directed for reuse wherever possible.
- 2. As a minimum, the following substances, preparations and components must be removed from all separately collected waste electrical and electronic equipment:

capacitors containing polychlorinated biphenyls (PCBs), in the manner laid down in the Government Decision on discarding PCBs and PCB equipment and the disposal of PCB waste (711/1998);

mercury-containing components, such as switches and backlighting lamps;

#### batteries;

printed circuit boards of mobile phones generally, and of other devices if the surface area of the printed circuit board is greater than  $10~{\rm cm}^2$ ;

toner cartridges, liquid and pasty, as well as colour toner;

plastic containing brominated flame retardants;

asbestos waste and components which contain asbestos;

cathode ray tubes;

fully halogenated chlorofluorocarbons (CFCs), partially halogenated chlorofluorocarbons (HCFCs) or hydrofluorocarbons (HFC), hydrocarbons (HC);

gas discharge lamps;

liquid crystal displays (together with their casing where appropriate) of a surface area greater than  $100~{\rm cm}^2$  and all those backlighted with gas discharge lamps;

external electric cables;

components containing refractory ceramic fibres as referred to in Appendix 1 of the Ministry of Social Affairs and Health Decree on the catalogue of dangerous substances (624/2001);

components containing radioactive substances, with the exception of components that are below the exemption thresholds set in Article 3 of and Annex 1 to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation; the Directive has been implemented in Finland under Radiation and Nuclear Safety Authority guide ST 1.5 on the exemption of radiation use from the need for a safety licence and from the reporting obligation, issued on 1 July 1999 under section 17 of the Radiation Act (529/1991);

electrolyte capacitors containing dangerous substances (height > 25 mm, diameter > 25 mm or proportionately similar volume).

These substances, preparations and components shall be disposed of or recovered in accordance with section 6 of the Waste Act (1072/1993).

3. The components of separately collected waste electrical and electronic equipment must be treated as follows:

cathode ray tubes: the fluorescent coating must be removed;

equipment containing gases that are ozone depleting or have a global warming potential (GWP) above 15 and are used in, for example, insulation foam and refrigeration circuits: these gases must be properly extracted and treated. Ozone-depleting gases must be treated in accordance with Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer;

gas discharge lamps: the mercury must be removed.

4. Taking into account environmental considerations and the desirability of reuse and recycling, paragraphs 2 and 3 shall be applied in such a way that environmentally sound reuse and recycling of components or whole appliances is not hindered.

#### Appendix 3. Requirements concerning treatment facilities

# 1. Facilities for storage of waste electrical and electronic equipment must have:

an appropriate area with a surface impermeable to fluids that is equipped with a fluid spillage collection system and, where appropriate, oil and grease separators;

waterproof covering for appropriate areas.

# 2. Facilities for treatment of waste electrical and electronic equipment must have:

balances to measure the weight of the waste;

an appropriate area with a surface impermeable to fluids that is equipped with a fluid spillage collection system and, where appropriate, oil and grease separators;

waterproof covering for appropriate areas;

appropriate storage for disassembled spare parts;

appropriate containers for storage of batteries, capacitors containing polychlorinated biphenyls and polychlorinated terphenyls (PCBs/PCTs) and other hazardous waste, such as radioactive substances;

equipment for the treatment of water in compliance with health and environmental regulations.

# Appendix 4. Symbol to be used in the labelling of electrical and electronic equipment

The picture below shows the symbol to be marked on electrical and electronic equipment which must be collected separately. The symbol must be displayed visibly, legibly and indelibly.