



**Criteria of ZVEI and VDMA concerning the  
certification of recycling companies for electrical  
and electronic products**

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# **Criteria of ZVEI and VDMA concerning the certification of recycling companies for electrical and electronic products**

## **Preamble**

The manufacturers and importers of electrical and electronic products grouped within ZVEI and VDMA consider environmental protection and the associated conservation of natural resources an important task. The environmentally compatible recycling/recovery of post-use products is of particular importance. Recyclers must therefore be specially qualified.

The requirements laid down in this paper help the certifier to certify suitable companies for the recycling/recovery of electrical and electronic products\* and thus make them identifiable. 'Suitable' in this connection means that these companies comply with both environmental legislation and these requirements. This is confirmed by a certificate, if the suitability was proven by a test. Certification can only be carried out by accredited certification bodies.

- \* For the purpose of this paper, products are appliances, appliance parts, components and equipment.

## **1. Organization**

### **1.1 Name, legal form and seat of company**

- Ownership and holdings
- Management
- Business establishments.

### **1.2 Description of the range of services to be certified**

- Product groups covered
- Other fields of activity of the company not subject to certification
- Disassembly in situ and/or collection
- Transport
- Storage
- Recovery/recycling
- Disposal.

### **1.3 Organizational structure**

The tasks of relevance to the range of services is to be described in organization charts. The necessary transfer of duties shall be documented.

### **1.4 Control mechanisms**

The management has to prove that checks on all company activities are carried out in an appropriate manner.

### **1.5 Works representative**

The works representatives required by law shall be appointed in writing and proof shall be furnished of his being registered with the competent authorities.

## **1.6 Statutory provisions and safety profile**

The company must be able to prove compliance with the environmentally relevant statutory provisions. The same applies in respect of the observance of requirements from other areas of law which are to ensure safety of operation (e.g. labour, fire and explosion protection).

## **1.7 Liability**

On the basis of a risk analysis, coverage of liability risks by an appropriate insurance protection has to be documented.

## **1.8 Permits**

Establishment and evidencing of the necessary permits and of compliance with obligations imposed is required.

## **1.9 Documentation**

Because of the particular importance of a proper documentation, a description of how it is organized in the relevant company shall be given.

It is to be explained in what form service conditions and operational failures are documented (among others, service log-book). Item 3. describes the documentation of mass flows.

Compliance with the legal documentation requirements shall be proved.<sup>1</sup>

Concerning the main functional parts, a photographic documentation has to retain the operating conditions at the time of the test.

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<sup>1</sup> The obligation to retain the documents which concern hazardous components for 30 years has been deleted. Since publication of the criteria in 1994 legal regulations entered into force, which designate a sufficiently long period of retention. For instance, documents of waste disposing companies, pertaining to waste which has to be particularly monitored, have to be retained for 10 years (§ 29 NachwV).

### **1.10 Qualification of the personnel**

Of decisive importance for the satisfactory operation and the fulfillment of tasks of relevance to the environment is the qualification of all personnel of the company to be certified.

All personnel of the company to be certified shall provedly meet the requirements set and be kept at the required level of knowledge through regular instruction and training.

Expertise and professional competence in respect of the main processes of the company shall be evidenced at the relevant management levels.

### **1.11 Measures against unauthorized re-placing on the market or unauthorized removal of products**

Proof of suitable precautions to prevent the removal or other forms of disappearance or unauthorized selling of products shall be furnished.

### **1.12 Data carriers**

It has to be ensured that the contents of electronic data carriers is destroyed in a suitable manner. There must be no previous read-out or other forms of abuse.

## **2. Technology**

### **2.1 Collection and transport**

- Sufficient precautions shall be taken to ensure that the collection and transport do not cause risks to living beings and to the environment. Especially, care shall be taken to ensure that in the process of loading or during transport, products are not damaged in a way that dangers result to living beings and to the environment. Disassembly for the purpose of removing harmful substances and subsequent recycling, recovery or disposal must not be impaired by previous damage.
- Suitable containers or vehicles with the necessary safety devices shall be used for collection and transport.

## **2.2 Storage**

It has to be ensured that the products are stored in a way as to comply with the legal requirements and not impair subsequent recycling or disposal.

## **2.3 Technology and recovery**

- During all operational and procedural stages, compliance with the legal requirements has to be ensured. Especially, adequate precautions shall be taken to prevent risks arising to living beings and to the environment.
- Proof shall be furnished of the proper removal (acc. to the valid legal regulations) of harmful substances<sup>2</sup>.
- The processes and methods applied shall allow to achieve maximum recovery efficiency.
- Compliance with all requirements deriving from statutory provisions and technical rules applicable to the materials handled shall be ensured. The results of corresponding analyses shall be presented.
- The existence of appropriate information systems (document control) to fulfill these requirements has to be evidenced.

## **3. Balancing of mass flows**

- 3.1 All mass flows (e.g. appliances, appliance parts, components, equipment, data carriers and materials) shall be documented.
- 3.2 Incoming masses shall be documented by product groups and weight.
- 3.3 Specific attention shall be given to the identification, handling and documentation of the whereabouts of harmful substances and components containing harmful substances (see especially 1.9).

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<sup>2</sup> Harmful substances in this sense are i.e. picture tube glass, PCB containing capacitors, mercury, fluorescent lamps

- 3.4 Passing on of waste to recycling subcontractors is admissible only if it is proven that they are certified in the same manner. The passing on of waste to uncertified recyclers is admissible only for the sole purpose of reclaiming substances or raw materials. In the case of border-crossing transports for the purpose of recycling or recovery, the company passing on waste shall make sure that recovery/recycling is carried out according to the requirements defined in this paper.
- 3.5 The recycler shall prove that the recovery/disposal company commissioned by him is in possession of the necessary permits.

#### **4. Certification**

- 4.1 The certifiers shall be accredited for certification according to the criteria laid down in this paper. Certification can be implemented according to these criteria alone or under a certification according to DIN ISO 9000 et seq., using these criteria. This shall be mentioned in the certificate.
- 4.2 Certification shall be applied for by the recovery/recycling company.
- 4.3 The certification is valid for three years and is checked annually.
- 4.4 In case of changes in the certified company, especially in regard to
- ownership/possession
  - legal form
  - management
  - legal obligations
  - permits granted and obligations imposed
  - fields of activity, products or materials
  - plant and processes
  - contractual relationships with subcontractors,
- a report shall be given to the certifier. In case of substantial changes, a supplementary certification may be necessary.
- In case of major infringements of the certification requirements, the certificate can be withdrawn.
- 4.5 The certification confirms compliance with the conditions for the proper conduct of a recovery/recycling business laid down in this paper. It applies only to the controlled location/s, the range of services declared and the procedural framework.

4.6 In case a certification according to the Recycling Company Regulation (EfbV) has been obtained substantial requirements of these criteria have been fulfilled. Therefore, the fulfillment of the aforementioned requirements<sup>3</sup> going beyond the EfbV and, if necessary, product specific appendices, have to be proven during the certification procedure.

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<sup>3</sup> **Criteria going beyond the Recycling Company Regulation (EfbV):**

- # 1.2: - different areas of activities of the company, not to be certified
- # 1.9.5: - Photographic documentation
- # 1.11: - Measures against unauthorized re-placing on the market or unauthorized removal of products
- # 1.12: - Data carriers
- # 2.1: - Collection and transport
- # 2.3: - harmful substances removal