

## Eco Mark Product Category No.127

# “Fire Extinguisher Version 2.1” Certification Criteria

### —Applicable Scope—

Of products corresponding to the ministerial ordinance prescribing technical standards of fire extinguishers issued by the Director General of Management and Coordination Agency (established in 1964), those that fall into powder (ABC) fire extinguishing devices are applicable. (Imported fire extinguishers, aerosol type simple extinguishing devices and fire extinguishers used on ships and aircraft are excluded.)

Established: April 1, 2010

Revised: March 1, 2011

Term of validity: February 28, 2017

Japan Environment Association

Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

## Eco Mark Product Category No.127

### “Fire Extinguisher Version 2.0”

#### Certification Criteria

Japan Environment Association  
Eco Mark Office

#### 1. Purpose of Establishing Certification Criteria

The Fire Services Act stipulates that given commercial establishments, schools or libraries, public facilities, etc. must be equipped with fire extinguishers. In addition to this, a number of households voluntarily install fire extinguishers. Thus, fire extinguishers are a very universal product. The annual production of fire extinguishers is approximately 4.0 million units as of Heisei 20 (2008).

The service life of a fire extinguisher is said to be about 8 years if it has not been used. Although inspection, etc. of fire extinguishers installed according to the law is obligatory, those voluntarily installed at households are not required to be inspected regularly. According to the survey conducted by the Fire and Disaster Management Agency in 2002, it was revealed in the sampling survey on the number of years that elapsed after powder fire extinguishers retained by general households were manufactured/purchased that while more than 50% of households retain fire extinguishers that were manufactured/purchased within 5 years, more than 20% of them retain fire extinguishers that were manufactured/purchased more than 10 years ago or fire extinguishers on which the number of elapsed years was not clear. Similarly, of households retaining the powder fire extinguishers, more than 20% retain fire extinguishers which they want to dispose of, and further, about 70% of them said the reason for this is that they do not know “how to dispose of”. Since some fire extinguishers encapsulate liquid or powder through application of great pressure, and disassembly involves risk, they cannot be disposed of as normal wastes. From the standpoint of promptly constructing the recycling society and preventing a fire extinguisher accident, establishment of the collection system of fire extinguishers has been requested.

In response to this, the industry promoted establishment of the collection system, and the collection rate, which was 27% in Heisei 12 (2000), increased to about 55% in Heisei 20 (2008). In addition, disposed fire extinguishers (unwanted fire extinguishers) were added to the target items of the Cross-jurisdictional Waste Treatment Manufacturer Scheme based on the Wastes Disposal and Public Cleansing Law, and at present, all of the fire extinguisher manufacturers are certified by the Cross-jurisdictional Waste Treatment Manufacture Scheme. The collection rate is expected to rise further in the future.

Of components of the fire extinguishers, iron and aluminum used in containers have been recycled conventionally. Since technological development of the millennium project, a joint research and development among industry, academia and

government, which was determined by the government in December 1999 and is aimed to address bold technological innovation that will create new industries in a new millennium enabled reuse of collected extinguishing agent as reworked extinguishing agent or fertilizer, the recycling rate per fire extinguisher has dramatically improved.

This product category is designed to widely disseminate information on collection/recycling of unwanted fire extinguishers that use reworked extinguishing agent by granting the eco-mark to fire extinguishers that use reworked fire extinguishing agent and recommending the eco-mark certified fire extinguishers to consumers, thereby promote 3R in the fire extinguishers, and contribute to further improvement of the collection rate of unwanted fire extinguishers.

## 2. Applicable Scope

Of products corresponding to the ministerial ordinance prescribing technical standards of fire extinguishers issued by the Director General of Management and Coordination Agency (established in 1964), those that fall into powder (ABC) fire extinguishing devices are applicable. (Imported fire extinguishers, aerosol type simple extinguishing devices and fire extinguishers used on ships and aircraft are excluded.)

## 3. Terminology

Omitted

## 4. Certification Criteria and Certification Procedure

### 4-1. Environmental Criteria and Certification Procedure

- (1) The combination ratio of reworked fire extinguishing agent in the fire extinguishing agent shall be 40% or higher.

[Certification Procedure]

A “reworked fire extinguishing agent combination certificate” issued by a fire extinguishing agent manufacturer trader and indicating the combination rate (minimum guaranteed value) of reworked fire extinguishing agent in the fire extinguishing agent, a method of management, etc. shall be attached.

- (2) In manufacturing the applied product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the “Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous substances in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the past five years from the date of application (whether there is any violation) must be reported. If there is any violation, proper remedies and preventive measures shall have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately.

## [Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a “certificate of compliance with the Environmental Laws” (entry or attachment of a list of names of the Environmental Laws, etc.) must be submitted. issued by the representative of the business of manufacturing the applied product or the relevant plant manager(or corresponding person in charge)

In addition, the applicants shall report whether there is any violation in the past five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (clearly indicating a series of communication);
- b. Following materials (copies of recording documents, etc.) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
  - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
  - 2) Implementation system (organizational chart with roles, etc.);
  - 3) Bylaws stipulating retention of recording documents;
  - 4) Recurrence prevention measures (future preventive measures);
  - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

- (3) Plastic materials used in the product shall have no halogen element attached to the polymer skeleton as a prescription constituent. However, this item does not apply if the collection rate of unwanted fire extinguishers is 70% or higher and 70% or higher of the collected parts are subjected to material recycling (for hoses, chemical recycling is also acceptable).

## [Certification Procedure]

A list of used materials of the product issued by the product manufacturer shall be attached. If the halogen element is used in the polymer skeleton, a document explaining the collection rate of unwanted fire extinguishers, the content of recycling of the relevant part and the recycling rate shall be submitted. In addition, Eco Mark Office may request the applicant to report (or conduct on-site audit on) actual record of the collection rate and the recycling rate after the use agreement is concluded, and the applicant must cooperate with it.

- (4) Packaging shall give consideration to resource saving, ease of recycling, and load reduction in incineration. Plastic materials used in packaging shall have no halogen element attached to the polymer skeleton as a prescription constituent.

## [Certification Procedure]

Packaging materials shall be indicated in attached certificates.

- (5) Fire extinguishing agents shall not contain heavy metals such as lead, cadmium, copper, nickel, mercury, and zinc.

## [Certification Procedure]

Certificates issued by the fire extinguishing agent supplier and MSDS shall be attached.

- (6) Products shall have recovery systems. Related information shall also be provided.

## [Certification Procedure]

As a justification that the system for collection, recycling, or energy collection in harmony with the environment, which are described in the Exhibit, shall have been established (collection system, treatment capacity, description of treatment, product design that makes recycling easy), a copy of the certificate of the Cross-jurisdictional Waste Treatment Manufacture Scheme, etc. shall be submitted.

In addition, the instruction manual (user's manual) indicating that the user can use this system easily (e.g.: recovery method at dealers, etc.) shall be submitted.

- (7) Powder (ABC) fire extinguishers recovered shall be disassembled by the appropriate method, and 90% or more of metal parts and fire extinguishing agents shall be recycled appropriately. Parts that cannot be recycled shall be disposed of appropriately.

## [Certification Procedure]

Documents describing disassembly methods, recycling systems of each material (recycling method and rate, etc.), and disposal methods for non-recyclable parts shall be submitted.

#### 4-2. Quality Criteria and Certification Procedure

- (8) Quality shall conform to the ministerial ordinance prescribing technical standards of fire extinguishers issued by the Director General of Management and Coordination Agency, and this shall be labeled.

## [Certification Procedure]

A copy of certificate issued by the Director General of the Management and Coordination Agency shall be attached.

#### 5. Product Classification, Labeling, Etc.

omitted

Established: April 1, 2010 (Version2.0)

Revised: March 1, 2011 (Version2.1)

Validity Period: February 28, 2017

The Certification Criteria for the Product Category will be revised when necessary.

## Attachment

## Certificates on collection and recycling

For cases designated under “Extensive authorization system”, requirements (3) - (6) are considered to be met.

To commission the transportation and disposal of industrial waste, Waste Disposal and Public Cleansing Law shall be followed and certificates (3) - (6) below are required.

**(1) Name of collection and recycling system****(2) Collection and recycling categories**

Material recycling/Chemical recycling

**(3) Outline of collection and recycling systems (Based on actual operation of collection and recycling systems)**

1) Finance

2) Collection assurance

Example: Collection agreement with user, sewing of cloth label to product, etc.

3) Present operation of collection and recycling systems

Example: Products/materials applicable for collection and recycling (Natural fiber 100%, synthetic fiber mixture rate, etc.),

Applicable regions of collection and recycling systems,

Recovery rate (No. products recovered/No. products sold),

Recycling rate (No. products recycled/No. products recovered),

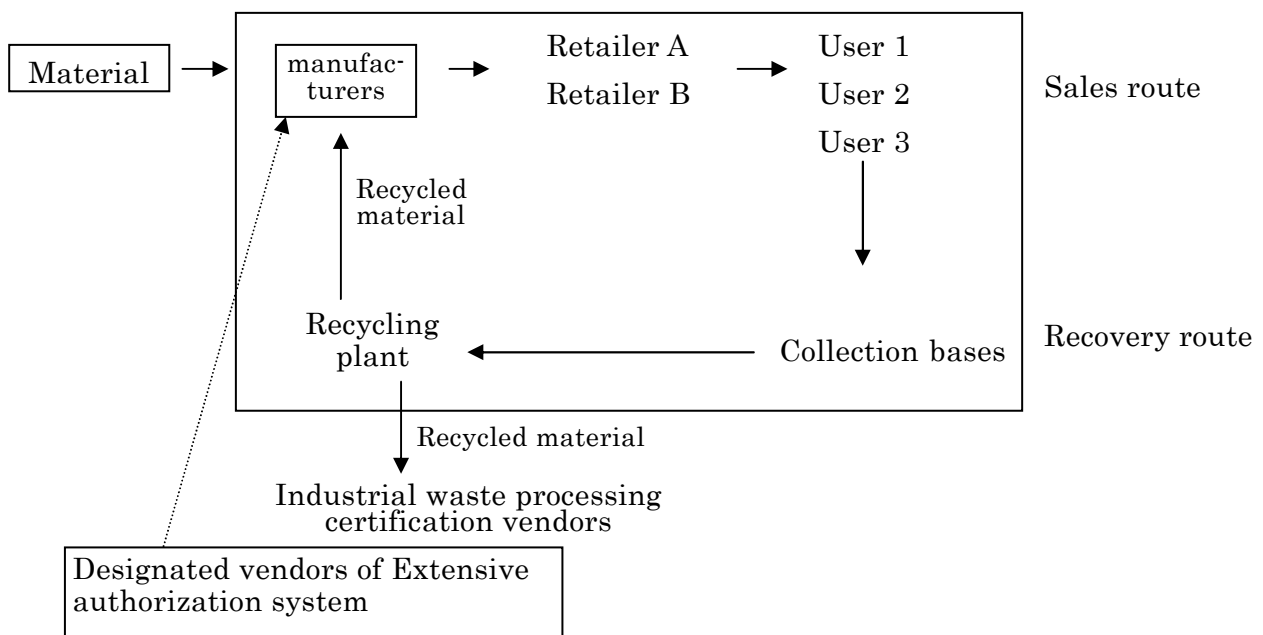
Recycling rate per product (Weight of parts recycled /product weight),

Collection ability, recyclability (No. tons/year),

Re-production purposes, etc.

4) Overview of collection and recycling systems and relation with concerned entities

Example: Models of fire extinguisher manufacturers subject to extensive recycling and reuse designation system (Subcontracted material)



**(4) Name of recycling vendors and waste disposal certification**

Certificates indicating vendor name and waste disposal is allowed to concerned entities such as:

- 1) Waste disposal within own plant (Applicant)
- 2) Intermediate disposal vendor
- 3) Final disposal vendor

**(5) Handing Over of Wastes to Recycling Vendors**

Description should be given as to how products under application are discharged (industrial wastes, general wastes, valuable resources, etc.) and methods of handing over such products from waste disposer to recycling vendor should be explained.

**(6) Submission of agreements**

- 1) A copy of industrial waste disposal and collection and transportation contract
- 2) A copy of vendor contract (Contract between applicants and collection and recycling system providers)