
The development of electronic instruments and consumer electronics has spurred an ongoing rise in demand for dry cell batteries. Many types of dry cell batteries embody different production methods and technologies to meet different functional needs, and some of these batteries currently on the market still contain mercury, an environmentally-harmful element. The failure to adequately recycle and dispose of such batteries will cause mercury to disperse in the environment, accumulate within living organisms and threaten human health.

In conforming with international trends towards the gradual restriction of and ultimately, a ban on the use of mercury, the governments of the world's countries are restricting its use in certain products and strictly controlling the final disposal of products containing mercury. For instance, the European Union has drafted relevant guiding principles and recommended that member states prohibit the sale of dry cell batteries with a mercury content exceeding five parts per million (ppm) from 2000. The US has also imposed restrictions on dry cell batteries that contain mercury.

In view of the hazard mercury poses to the environment and human health, the EPA has drafted this Official Announcement concerning restrictions on the manufacture, import, and sale of dry cell batteries that contain mercury in excess of the standard value in accordance with Article 21 of the Waste Disposal Act and in compliance with European Union battery directives and regulations.

In light of the fact that alkaline manganese batteries and manganese-zinc batteries are currently used in large quantities and are made using mature mercury-free production technology, the government shall first restrict the manufacture, import, and sale of manganese-zinc batteries and non-button type alkaline manganese batteries that contain in excess of five ppm mercury. The manufacturers and importers designated in this announcement shall submit documents to verify a mercury content of less than five ppm when applying to the central competent authority for confirmation prior to the import or manufacture of such batteries. Furthermore, vendors may not sell designated batteries without EPA confirmation. The government has taken these steps to effectively control the smuggling and surreptitious import of inferior quality batteries.

The implementation of this announcement shall steer the manufacture of dry cell batteries towards low-mercury, low pollution designs, effectively reduce mercury use and waste volume, and lessen the mercury content of trash incinerator ash and facilitate subsequent reuse.

The Official Announcement consists of 17 items, which are outlined below:

1. "Designated battery" refers to a one-time-use battery that is either a
manganese-zinc battery or a non-button type alkaline manganese battery. (Announcement Item 1)

2. The manufacture or import of designated batteries may begin only after the manufacturer or importer has submitted an application to the central competent authority that includes a testing report that indicates said batteries have a mercury concentration lower than 5 ppm, and the said authority has issued confirmation documents. (Announcement Item 2)

3. The manufacturer or importer shall also mark the confirmation document number on a clearly-visible spot on the packaging. (Announcement Item 4)

4. A vendor may not sell or give away designated batteries that have not been confirmed by the central competent authority as having a mercury content less than 5 ppm or do not bear the confirmation document number. (Announcement Item 5)

5. The announcement specifies that the competent authority may send personnel in possession of personal identification documents to enter the premises of manufacture or import and sales in order to inspect the circumstances of the manufacture or import and sale of designated batteries, and test samples. (Announcement Item 12)

6. Designated batteries placed on the market before this Official Announcement takes effect must comply with regulations on clearly displaying the confirmation document number by September 1, 2007. (Announcement Item 16)

7. In order to allow the related businesses ample time to respond to these regulations, the Announcement takes effect on September 1, 2006, with the exception of the regulations that stipulate packaging must clearly display the confirmation document number, which takes effect on December 1, 2006. (Announcement Item 17)
**Official Announcement of Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries**

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<tr>
<th>Announced items</th>
<th>Explanation</th>
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<tr>
<td><strong>Basis: Article 21, Waste Disposal Act</strong></td>
<td>1. This specifies the types of battery products subject to controls, and the scope of manufacturers, importers, and vendors subject to controls or excluded, so as to avoid determination disputes due to broad definitions.</td>
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<tr>
<td>1. Terms used in this Official Announcement are defined as follows.</td>
<td>2. In light of the fact that that alkaline manganese batteries and manganese-zinc batteries are currently used in large quantities and are made using mature mercury-free production technology, manganese batteries and non-button type alkaline manganese battery are listed as designated batteries.</td>
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<td>a. &quot;Dry cell battery&quot; means a battery in which the electrolyte is not able to flow freely.</td>
<td>3. All battery definitions refer to national standards set by the Bureau of Standards, Metrology and Inspection, MOEA.</td>
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<td>b. &quot;One-time-use battery&quot; means a battery constructed to employ chemical energy derived from chemical reactions in accordance with electrochemical methods so as to directly discharge electricity, and so that the electric potential produced by the chemical reaction is irreversible.</td>
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<td>c. &quot;Designated battery&quot; means a one-time-use battery that is either a manganese-zinc battery or a non-button type alkaline manganese battery.</td>
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<td>d. &quot;Manganese-zinc battery&quot; means a battery that uses manganese dioxide as the effective anodic material and zinc as the effective cathodic material, and that uses an aqueous solution of a neutral salt such as ammonium chloride or zinc chloride as the electrolyte; this battery is commonly known as a carbon zinc battery.</td>
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<td>e. &quot;Alkaline manganese battery&quot; means a battery that uses manganese dioxide as the effective anodic material and zinc as the effective cathodic material and uses an aqueous solution of an alkali metal hydroxide as the electrolyte.</td>
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<td>f. &quot;Manufacturer&quot; means a business engaged in the manufacture of designated</td>
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batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.).

| g. "Importer" means a business engaged in the importation of designated batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.). |
| h. "Vendor" means a business engaged in the sale of designated batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.). |

| 2. The manufacture or import of designated batteries may begin only after the manufacturer or importer has submitted an application to the central competent authority that includes a testing report that indicates said batteries have a mercury concentration lower than 5 ppm, and the said authority has issued confirmation documents. |
| 1. This states that the manufacturer or importer of designated batteries must obtain a confirmation document from the central competent authority before manufacturing or importing said batteries. |
| 2. All designated batteries, whether or not they were produced using mercury production technology, must all submit testing reports when applying for confirmation documents. |
| 3. The formula for calculating mercury content is: parts per million (ppm) by weight = weight of the mercury contained in the battery (µg) ÷ battery weight (g). |

<p>| 3. If the manufacturer or importer of a designated battery attached to another product uses a designated battery for which the central competent authority has issued a confirmation document, and obtains the consent of the original designated battery confirmation document. To avoid the need for application for confirmation documents, this states that if the manufacturer or importer of a designated battery attached to another product uses a designated battery for which a confirmation document has been issued, the |</p>
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<td>applicant, the manufacturer or importer does not need to re-apply for a confirmation document.</td>
<td>manufacturer or importer does not need to re-apply for confirmation after obtaining the consent of the original applicant.</td>
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<td>4. Manufacturers and importers shall attach labeling to designated battery packaging that clearly states the phrase &quot;This battery complies with Environmental Protection Administration regulations on mercury content&quot; and the confirmation document number issued by the central competent authority. The width or height of the characters may not be less than 0.3 centimeters.</td>
<td>According to the Waste Disposal Act, manufacturers and importers of designated batteries must place labels on packaging so that the public can easily recognize the label when making a purchasing choice.</td>
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<td>5. A vendor may not sell or give away designated batteries that have not been confirmed by the central competent authority confirmation and do not bear the markings specified in Item 4 of this announcement.</td>
<td>This states that vendors may not sell designated batteries that have not been confirmed by the central competent authority as having a mercury content of less than five parts per million or fail to comply with Item 4 of the Official Announcement. A vendor shall check the website of the manufacturer or importer, vendor, or EPA to determine whether any party has applied for a confirmation document for the designated battery.</td>
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<td>6. The manufacturer or importer shall attach the following materials when applying to the central competent authority for a confirmation document for a designated battery in accordance with Item 2 of this Official Announcement: a. Application form b. Photocopy of the company registration or profit seeking enterprise certificate c. Photocopy of the personal identification document of the statutory responsible person d. Photo showing the appearance of the designated battery e. Testing report for mercury concentration issued within three months before the date the documents are submitted. f. Other documents or information designated by the central competent authority.</td>
<td>This states materials that the manufacturer or importer shall prepare when applying for a confirmation document.</td>
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7. The testing report mentioned in Item 6 of this Official Announcement shall comply with the following regulations:
   a. The manufacturer shall provide all testing reports submitted by the analysis laboratory that have received permits to test mercury concentration from the central competent authority.
   b. The importer shall provide all testing reports submitted by analysis laboratories mentioned in the previous item or laboratories that are authorized to test for mercury concentration in dry batteries by the International Laboratory Accreditation Cooperation (ILAC).
   c. The manufacturer or importer shall submit separate testing reports when the manufactured or imported designated batteries are of different brands, models, specifications, or outward appearances, or when designated batteries made by the same manufacturer have been manufactured in different countries.
   d. The manufacturer and importer shall submit sample batteries that are representative of the type and model to be sold on the domestic market.

This explains the mercury content testing report that shall be submitted as part of application for a confirmation document shall comply with the following provision method and principles:

1. A domestic manufacturer shall engage an environmental analysis and testing organization licensed by the central competent authority to perform testing in accordance with announced testing methods and provide a report to serve as verification.

2. When a designated battery is imported, the importer shall obtain a testing report in accordance with regulations applicable to domestic manufacturers, or may submit an International Laboratory Accreditation Cooperation testing report.

3. In order to ease the burden on businesses, domestic manufacturers will be required to send only one set of tests for the same battery, model, specifications, and outer appearance.

4. Foreign importers that are also the manufacturer and of the producing country of the battery will be required to send only one set of tests for the same battery, model, specifications, and outer appearance.

8. A confirmation document shall state the following items:
   a. Confirmation number
   b. Name, address, and statutory responsible

This specifies the content items of the confirmation document.
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<td><strong>c. Country of manufacture</strong></td>
<td><strong>d. Battery model, specifications, photograph of outward style, and mercury content</strong></td>
</tr>
<tr>
<td><strong>e. Issuance date and period of validity</strong></td>
<td><strong>f. Other items designated by the central competent authority</strong></td>
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9. The central competent authority may, depending on the mercury content of the designated battery and random testing circumstances, approve the validity period of the confirmation documents. The validity period is limited to five years. Those manufacturers and importers that wish to continue to use their confirmation documents after expiration shall re-apply six months prior to expiration. Those that are applying for the first time are limited to a validity period of two years.

This specifies the period of validity of the confirmation document and time for submission of a new application.

10. When making changes to recorded items in confirmation documents, the changes shall be made pursuant to the following regulations.
   a. When basic information such as the name, address, or statutory responsible person of company or profit seeking enterprise changes, the manufacturer or importer shall perform change procedures with the central competent authority within 15 days after the company license or profit seeking enterprise certificate changes.
   b. When other confirmation document content changes, the manufacturer or importer shall submit a new application in accordance with Item 6 of this announcement prior to the change.

This states that a manufacturer or importer shall comply with regulations for making changes when items stated on a confirmation document change.

11. The competent authority may still conduct random testing of any designated battery on the domestic market that has obtained a confirmation document.

This indicates that the competent authority may still conduct random testing of designated batteries that have passed confirmation.
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<td>12.</td>
<td>The competent authority may send personnel in possession of personal identification documents to enter the premises of manufacture or import and sales in order to inspect the circumstances of the manufacture or import and sale of designated batteries, and request the provision of relevant information. The manufacturer or importer shall provide designated batteries for testing without compensation, up to a quantity sufficient to meet testing needs, and may not refuse to do so.</td>
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| 13. | The central competent authority possesses the authority to revoke a confirmation document when a manufacturer or importer is found to be in any of the following circumstances:  
  a. In those circumstances in which designated batteries in the domestic market have a mercury content of 5 ppm or higher, as determined through random testing by the central competent authority.  
  b. The application documents are false and untruthful.  
  c. Other matters designated by the central competent authority. |
| 14. | If the central competent authority has revoked a confirmation document, the manufacturer or importer may submit a new application for a confirmation document for the same type or model of designated battery six months after completion of improvement. |
| 15. | In those circumstances in which random testing by the central competent authority reveals that a designated battery has a mercury content greater than 5 ppm, the said authority may order the manufacturer or importer to recall the product from stores and return or dispose. |

1. This states that the competent authority may investigate the circumstances of the manufacture or import and sale of designated batteries.  
2. This specifies that a manufacturer or importer shall provide designated products for testing without compensation, but only up to a quantity sufficient to meet testing needs, which shall, in principle, be three products.  
3. This states regulations governing revocation of confirmation documents.  
4. This states regulations governing implementation of improvement within a limited time period when random testing finds that designated batteries exceed control standards.
of product pursuant to the Waste Disposal Act.

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<th>16. Those designated batteries that are placed on the market before the implementation of this Official Announcement shall comply with Item 4 of this Announcement by September 1, 2007. The date of sale shall be the date on the vendor sales form, the purchase invoice or receipt.</th>
<th>In view of the fact that designated batteries sold prior to the implementation of this announcement cannot be easily recovered for labeling, a grace period is offered for complying with labeling requirements in Item 4 of this Announcement: designated batteries shall comply with marking regulations within one year.</th>
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<td>17. Item 4 of this Official Announcement shall take effect on December 1, 2006; all other items shall take effect on September 1, 2006.</td>
<td>This specifies the date on which the Announcement shall take effect, and allows businesses sufficient time in which to respond to the new regulations.</td>
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Official Announcement of Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries

Subject: Official Announcement of Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries

Basis: Article 21, Waste Disposal Act

Announced items:

1. Terms used in this Official Announcement are defined as follows.

   a. "Dry cell battery" means a battery in which the electrolyte is not able to flow freely.
   b. "One-time-use battery" means a battery contructed to employ chemical energy derived from chemical reactions in accordance with electrochemical methods so as to directly discharge electricity, and so that the electric potential produced by the chemical reaction is irreversible.
   c. "Designated battery" means a one-time-use battery that is either a manganese-zinc battery or a non-button type alkaline manganese battery.
   d. "Manganese-zinc battery" means a battery that uses manganese dioxide as the effective anodic material and zinc as the effective cathodic material, and that uses an aqueous solution of a neutral salt such as ammonium chloride or zinc chloride as the electrolyte; this battery is commonly known as a carbon zinc battery.
   e. "Alkaline manganese battery" means a battery that uses manganese dioxide as the effective anodic material and zinc as the effective cathodic material and uses an aqueous solution of an alkali metal hydroxide as the electrolyte.
   f. "Manufacturer" means a business engaged in the manufacture of designated batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.).
   g. "Importer" means a business engaged in the importation of designated batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.).
   h. "Vendor" means a business engaged in the sale of designated batteries, including when the designated batteries are attached to other goods (such as toys, clocks, appliances, etc.).

2. The manufacture or import of designated batteries may begin only after the manufacturer or importer has submitted an application to the central competent authority that includes a testing report that indicates said batteries have a mercury concentration lower than 5 ppm, and the said authority has
issued confirmation documents.

3. If the manufacturer or importer of a designated battery attached to another issued a confirmation document, and obtains the consent of the original designated battery confirmation document applicant, the manufacturer or importer does not need to re-apply for a confirmation document.

4. Manufacturers and importers shall attach labeling to designated battery Environmental Protection Administration regulations on mercury content” and the confirmation document number issued by the central competent authority. The width or height of the characters may not be less than 0.3 centimeters.

5. A vendor may not sell or give away designated batteries that have not been confirmed by the central competent authority confirmation and do not bear the markings specified in Item 4 of this announcement.

6. The manufacturer or importer shall attach the following materials when applying to the central competent authority for a confirmation document for a designated battery in accordance with Item 2 of this Official Announcement:

   a. Application form
   b. Photocopy of the company registration or profit seeking enterprise certificate
   c. Photocopy of the personal identification document of the statutory responsible person Photo showing the appearance of the designated battery
   d. Testing report for mercury concentration issued within three months before the date the documents are submitted
   e. Other documents or information designated by the central competent authority

7. The testing report mentioned in Item 6 of this Official Announcement shall comply with the following regulations:

   a. The manufacturer shall provide all testing reports submitted by the analysis laboratory that have received permits to test mercury concentration from the central competent authority.
   b. The importer shall provide all testing reports submitted by analysis laboratories mentioned in the previous item or laboratories that are
authorized to test for mercury concentration in dry batteries by the International Laboratory Accreditation Cooperation (ILAC).
c. The manufacturer or importer shall submit separate testing reports or verification documents when the manufactured or imported designated batteries are of different brands, models, specifications, or outward appearances, or when designated batteries made by the same manufacturer have been manufactured in different countries.
d. The manufacturer and importer shall submit sample batteries that are representative of the type and model to be sold on the domestic market.

8. A confirmation document shall state the following items:

a. Confirmation number  
b. Name, address, and statutory responsible person of the company or profit seeking enterprise  
c. Country of manufacture  
d. Battery model, specifications, photograph of outward style, and mercury content  
e. Issuance date and period of validity  
f. Other items designated by the central competent authority

9. The central competent authority may, depending on the mercury content of the designated battery and random testing circumstances, approve the validity period of the confirmation documents. The validity period is limited to five years. Those manufacturers and importers that wish to continue to use their confirmation documents after expiration shall re-apply six months prior to expiration. Those that are applying for the first time are limited to a validity period of two years.

10. When making changes to recorded items in confirmation documents, the changes shall be made pursuant to the following regulations.

a. When basic information such as the name, address, or statutory responsible person of company or profit seeking enterprise changes, the manufacturer or importer shall perform change procedures with the central competent authority within 15 days after the company license or profit seeking enterprise certificate changes.

b. When other confirmation document content changes, the manufacturer or importer shall submit a new application in accordance with Item 6 of
11. The competent authority may still conduct random testing of any designated battery on the domestic market that has obtained a confirmation document.

12. The competent authority may send personnel in possession of personal identification documents to enter the premises of manufacture or import and sales in order to inspect the circumstances of the manufacture or import and sale of designated batteries, and request the provision of relevant information. The manufacturer or importer shall provide designated batteries for testing without compensation, up to a quantity sufficient to meet testing needs, and may not refuse to do so.

13. The central competent authority possesses the authority to revoke a confirmation document when a manufacturer or importer is found to be in any of the following circumstances:

   a. In those circumstances in which designated batteries in the domestic market have a mercury content of 5 ppm or higher, as determined through random testing by the central competent authority.
   b. The application documents are false and untruthful.
   c. Other matters designated by the central competent authority

14. If the central competent authority has revoked a confirmation document, the manufacturer or importer may submit a new application for a confirmation document for the same type or model of designated battery six months after completion of improvement.

15. In those circumstances in which random testing by the central competent authority reveals that a designated battery has a mercury content greater than 5 ppm, the said authority may order the manufacturer or importer to recall the product from stores and return or dispose of product pursuant to the Waste Disposal Act.

16. Those designated batteries that are placed on the market before the implementation of this Official Announcement shall comply with Item 4 of this Announcement by September 1, 2007. The date of sale shall be the date on the vendor sales form, the purchase invoice or receipt. Item 4 of this
Official Announcement shall take effect on December 1, 2006; all other items shall take effect on September 1, 2006.