

#### **455D.19 Packaging heavy metal content.**

1. The general assembly finds and declares all of the following:

*a.* The management of solid waste can pose a wide range of hazards to public health and safety and to the environment.

*b.* Packaging comprises a significant percentage of the overall solid waste stream.

*c.* The presence of heavy metals in packaging is a concern in light of the likely presence of heavy metals in emissions or ash when packaging is incinerated or in leachate when packaging is landfilled.

*d.* Lead, mercury, cadmium, and hexavalent chromium, on the basis of available scientific and medical evidence, are of particular concern.

*e.* It is desirable as a first step in reducing the toxicity of packaging waste to eliminate the addition of heavy metals to packaging.

*f.* The intent of the general assembly is to achieve reduction in toxicity without impeding or discouraging the expanded use of postconsumer materials in the production of packaging and its components.

2. As used in this section unless the context otherwise requires:

*a.* "*Distributor*" means a person who takes title to one or more packages or packaging components purchased for promotional purposes or resale. A person involved solely in delivering or storing packages or packaging components on behalf of third parties is not a distributor.

*b.* "*Incidental presence*" means the presence of a regulated metal as an unintended or undesired ingredient of a package or packaging component.

*c.* "*Intentional introduction*" means an act of deliberately utilizing a regulated metal in the formulation of a package or packaging component where its continued presence is desired in the final package or packaging component to provide a specific characteristic, appearance, or quality. Intentional introduction does not include the use of a regulated metal as a processing agent or intermediate to impart certain chemical or physical changes during manufacturing, if the incidental presence of a residue of the metal in the final package or packaging component is neither desired nor deliberate, and if the final package or packaging component is in compliance with subsection 4, paragraph "*c*". Intentional introduction also does not include the use of recycled materials as feedstock for the manufacture of new packaging materials, if the recycled materials contain amounts of a regulated metal and if the new package or packaging component is in compliance with subsection 4, paragraph "*c*".

"*Regulated metal*" means any metal regulated under this section.

*d.* "*Manufacturer*" means a person who produces one or more packages or packaging components.

*e.* "*Manufacturing*" means physical or chemical modification of one or more materials to produce packaging or packaging components.

*f.* "*Package*" means a container which provides a means of marketing, protecting, or handling a product including a unit package, intermediate package, or a shipping container. "*Package*" also includes but is not limited to unsealed receptacles such as carrying cases, crates, cups, pails, rigid foil and other trays, wrappers and wrapping films, bags, and tubs.

*g. "Packaging component"* means any individual assembled part of a package including but not limited to interior and exterior blocking, bracing, cushioning, weatherproofing, exterior strapping, coatings, closures, inks, labels, tin-plated steel that meets ASTM (American society for testing and materials) international specification A-623, electro-galvanized coated steel, or hot-dipped-coated galvanized steel that meets ASTM (American society for testing and materials) international specification A-525 or A-879.

*h. "Reusable entities"* means packaging or packaging components having a controlled distribution and reuse subject to the exemption provided in subsection 5, paragraph "e".

3. A manufacturer or distributor shall not offer for sale or sell or offer for promotional purposes a package or packaging component, in this state, which includes, in the package itself or in any packaging component, inks, dyes, pigments, adhesives, stabilizers, or any other additives, any lead, cadmium, mercury, or hexavalent chromium which has been intentionally introduced as an element during manufacturing or distribution as opposed to the incidental presence of any of these elements and which exceed the concentration level established by the department. A distributor shall only be subject to the assessment of a civil penalty pursuant to section 455D.25, subsection 2, for the knowing violation of this section. Knowledge by the distributor of the violation shall be presumed beginning sixty days from the receipt of notification from the department by certified mail.

4. The concentration levels of lead, cadmium, mercury, and hexavalent chromium present in a package or packaging component shall not exceed the following:

*a.* Six hundred parts per million by weight by July 1, 1992.

*b.* Two hundred fifty parts per million by weight by July 1, 1993.

*c.* One hundred parts per million by weight by July 1, 1994.

Concentration levels of lead, cadmium, mercury, and hexavalent chromium shall be determined using ASTM (American society for testing and materials) international test methods, as revised, or United States environmental protection agency test methods for evaluating solid waste, S-W 846, as revised.

5. The following packaging and packaging components are exempt from the requirements of this section:

*a.* Packaging or packaging components with a code indicating a date of manufacture prior to July 1, 1990, and packaging or packaging components used by the alcoholic beverage industry or the wine industry prior to July 1, 1992.

*b.* Packages or packaging components to which lead, cadmium, mercury, or hexavalent chromium have been added in the manufacturing, forming, printing, or distribution process in order to comply with health or safety requirements of federal law or for which there is no feasible alternative if the manufacturer of a package or packaging component petitions the department for an exemption from the provisions of this paragraph for a particular package or packaging component. The department may grant a two-year exemption, if warranted by the circumstances, and an exemption may, upon meeting either criterion of this paragraph, be renewed for two years. For purposes of this paragraph, a use for which there is no feasible alternative is one in which the regulated substance is essential to the protection, safe handling, or function of the package's contents.

*c.* Packages and packaging components that would not exceed the maximum contaminant levels established but for the addition of recycled materials.

*d.* Packages or packaging components that are reused, but exceed contaminant levels set forth in subsection 4, paragraph "c", if all of the following criteria are met:

(1) The product being conveyed by the package, including any packaging component, is regulated under federal or state health or safety requirements.

(2) Transportation of the packaged product is regulated under federal or state transportation requirements.

(3) The disposal of the packages or packaging components is performed according to federal or state radioactive or hazardous waste disposal requirements.

The department may grant a two-year exemption if warranted by the circumstances and an exemption may, upon meeting the criteria of this paragraph, be renewed for additional two-year periods.

*e.* Packages or packaging components which qualify as reusable entities that exceed the contaminant levels set forth in subsection 4, paragraph "c", if the manufacturers or distributors of such packages or packaging components petition the department for an exemption and receive approval from the department according to the following standards based upon a satisfactory demonstration that the environmental benefit of the controlled distribution and reuse is significantly greater than if the same package is manufactured in compliance with the contaminant levels set forth in subsection 4, paragraph "c". The department may grant a two-year exemption, if warranted by the circumstances, and an exemption may, upon meeting the four criteria listed in subparagraphs (1) through (4), be renewed for additional two-year periods.

In order to receive an exemption, the application must ensure that reusable entities are used, transported, and disposed of in a manner consistent with the following criteria:

(1) A means of identifying in a permanent and visible manner those reusable entities containing regulated metals for which an exemption is sought.

(2) A method of regulatory and financial accountability so that a specified percentage of the reusable entities manufactured and distributed to another person are not discarded by that person after use, but are returned to the manufacturer or the manufacturer's designee.

(3) A system of inventory and record maintenance to account for the reusable entities placed in, and removed from, service.

(4) A means of transforming returned entities, that are no longer reusable, into recycled materials for manufacturing or into manufacturing wastes which are subject to existing federal or state laws or regulations governing manufacturing wastes to ensure that these wastes do not enter the commercial or municipal waste stream.

The application for an exemption must document the measures to be taken by the applicant as set out in subparagraphs (1) through (4).

6. By July 1, 1992, a manufacturer or distributor of packaging or packaging components shall make available to purchasers, to the department, and to the general public upon request, certificates of compliance which state that the manufacturer's or distributor's packaging or packaging components comply with, or are exempt from, the requirements of this section.

If the manufacturer or distributor of the package or packaging component reformulates or creates a new package or packaging component, the manufacturer or distributor shall provide an amended or new certificate of compliance for the reformulated or new package or packaging component.

7. The commission shall adopt rules to administer this section and recommend any other toxic substances contained in packaging to be added to the list in order to further reduce the toxicity of packaging waste.

90 Acts, ch 1255, § 29; 91 Acts, ch 203, § 5; 91 Acts, ch 255, §15; 94 Acts, ch 1085, §1; 96 Acts, ch 1095, § 1; 2004 Acts, ch 1086, §75, 106; 2007 Acts, ch 151, §57