

CHAPTER 455D

WASTE VOLUME REDUCTION AND RECYCLING

Referred to in §364.22, 455H.303

455D.1	Definitions.	455D.11H	Future repeal. Repealed by 2004 Acts, ch 1173, §2.
455D.2	Findings.	455D.11I	Registration of waste tire haulers — bond.
455D.3	Goals for waste stream reduction — procedures — reductions and increases in fees.	455D.12	Plastic container labeling.
455D.4	Waste volume reduction policies.	455D.13	Land disposal of used oil and used oil filters prohibited — collection and recycling.
455D.4A	Recycling.	455D.14	Products manufactured with chlorofluorocarbons prohibited.
455D.5	Statewide waste reduction and recycling network — established.	455D.15	Waste volume reduction and recycling fund.
455D.6	Duties of the director.	455D.15A	Permitting of waste conversion technologies operations — fees. Repealed by 2019 Acts, ch 14, §4.
455D.7	Duties of the commission.	455D.16	Mercury — thermostats.
455D.8	Deposits, rebates, and waste abatement fees. Repealed by 2011 Acts, ch 9, §11.	455D.17	and 455D.18 Repealed by 92 Acts, ch 1215, §19.
455D.9	Land disposal of yard waste — prohibited.	455D.19	Packaging — heavy metal content.
455D.9A	Disposal of baled solid waste at a sanitary landfill — prohibited.	455D.20	Refuse-derived fuel — calculation as portion of waste reduction goal. Repealed by 2004 Acts, ch 1078, §3.
455D.10	Land disposal of lead acid batteries — prohibited — collection for recycling.	455D.21	Local ordinance — curbside collection.
455D.10A	Household batteries — heavy metal content and recycling requirements.	455D.22	Civil penalty.
455D.10B	Batteries used in rechargeable consumer products.	455D.23	Administrative enforcement — compliance orders.
455D.11	Waste tires — land disposal prohibited.	455D.24	Judicial review.
455D.11A	Financial assurance — waste tire collection or processing sites.	455D.25	Civil actions for compliance — penalties.
455D.11B	Permitting of waste tire collection or processing sites — fees.	455D.26	Green advisory committee. Repealed by its own terms; 2010 Acts, ch 1166, §2.
455D.11C	Waste tire management fund.		
455D.11D	through 455D.11F Repealed by 2004 Acts, ch 1173, §2.		
455D.11G	Waste tire disposal fees and abatement costs.		

455D.1 Definitions.

As used in [this chapter](#) unless the context otherwise requires:

1. “*Commission*” means the environmental protection commission.
2. “*Department*” means the department of natural resources created pursuant to [section 455A.2](#).
3. “*Director*” means the director of the department.
4. “*Pollution prevention techniques*” means any of the following practices employed by the user of a toxic substance:
 - a. Input substitution, which is the replacement of a toxic substance or raw material used in a production process with a nontoxic or less toxic substance.
 - b. Product reformulation, which is the substitution of an end product which is nontoxic or less toxic upon use or release for an existing end product.
 - c. Production process redesign or modification, which is the development and use of production processes of a different design other than those currently in use.
 - d. Production process modernization, which is the upgrading or replacing of existing production process equipment or methods with other equipment or methods based on the same production process.
 - e. Improved operation and maintenance of existing production process equipment and

methods, which is the modification or addition to existing equipment or methods, including but not limited to such techniques as improved housekeeping practices, system adjustments, product and process inspections, and production process control equipment or methods.

f. Recycling, reuse, or extended use of toxic substances by using equipment or methods that become an integral part of the production process.

5. “*Recycling*” means any process by which waste, or materials that would otherwise become waste, are collected, separated, or processed and revised or returned to use in the form of raw materials or products pursuant to [section 455D.4A](#). “*Recycling*” includes but is not limited to the composting of yard waste which has been previously separated from other waste, but does not include any form of energy recovery.

6. “*Scrap metal*” means any ferrous or nonferrous metal suitable for reprocessing into a viable market commodity grade specification.

7. “*Waste reduction*” means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce, or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium.

[89 Acts, ch 272, §1; 2013 Acts, ch 12, §12, 13; 2018 Acts, ch 1023, §5, 6](#)

Referred to in [§455D.3](#)

455D.2 Findings.

The general assembly finds that:

1. Iowa’s environment is precious and no person has the right to pollute Iowa’s air, water, or soil. The environment is vulnerable and irreplaceable, and all Iowans have an ongoing responsibility to conserve, preserve, and enhance the state’s natural resources to guarantee their continued existence and use by the present and future generations.

2. The land itself is the source of Iowa’s livelihood not only for the purposes of an agricultural economy, but for the establishment of manufacturing plants, business offices, and residences. While zoning establishes restrictions on the use of land for social order, a similar system has not been established to maintain environmental order below the ground. Protection of the environment includes not only visible but invisible threats as well.

3. The rapidly rising volume of waste deposited by society threatens the capacity of existing and future landfills. The nature of waste disposal today means that unknown quantities of potentially toxic and hazardous materials are being buried and pose a constant threat to the groundwater supply. In addition, the nature of the waste and disposal methods utilized allow the waste to remain basically inert for decades, if not centuries, without decomposition.

4. Wastes filling Iowa’s landfills may, at best, represent a potential resource. However, without proper management, wastes are hazards to the environment and life itself.

5. The reduction of solid waste at the source and the recycling of reusable waste materials will reduce the flow of waste to sanitary landfills and increase the supply of reusable materials for the use of the public.

[89 Acts, ch 272, §2](#)

455D.3 Goals for waste stream reduction — procedures — reductions and increases in fees.

1. *Waste reduction goals.*

a. The goal of the state is to reduce the amount of materials in the waste stream, existing as of July 1, 1988, by an intermediate goal of twenty-five percent, and by a final goal of at least fifty percent, through the practice of waste volume reduction at the source and through recycling. For the purposes of [this section](#), “*waste stream*” means the disposal of solid waste as “*solid waste*” is defined in [section 455B.301](#).

b. Notwithstanding [section 455D.1, subsection 5](#), facilities which employ combustion of solid waste with energy recovery and refuse-derived fuel, which are included in an approved comprehensive plan, may include these processes in the definition of recycling for the purpose of meeting the state goal if at least thirty-five percent of the fifty percent waste

reduction goal is met through volume reduction at the source and recycling and reuse, as established pursuant to [section 455B.301A, subsection 1](#), paragraphs “a” and “b”.

2. *Departmental monitoring.*

a. If at any time the department determines that a planning area has met or exceeded the twenty-five percent goal, but has not met or exceeded the fifty percent goal, a planning area shall subtract sixty cents from the total amount of the tonnage fee imposed pursuant to [section 455B.310](#). If at any time the department determines that a planning area has met or exceeded the fifty percent goal, a planning area shall subtract fifty cents from the total amount of the tonnage fee imposed pursuant to [section 455B.310](#). The reduction in tonnage fees pursuant to this paragraph shall be taken from that portion of the tonnage fees which would have been allocated for funding alternatives to landfills pursuant to [section 455E.11, subsection 2](#), paragraph “a”, subparagraph (1).

b. If the department determines that a planning area has failed to meet the twenty-five percent goal, the planning area shall remit fifty cents per ton to the department. The moneys shall be deposited in the groundwater protection fund created in [section 455E.11, subsection 2](#), paragraph “a”, and credited to the solid waste account of the fund to be used for funding alternatives to landfills pursuant to [section 455E.11, subsection 2](#), paragraph “a”, subparagraph (1). Moneys shall continue to be remitted pursuant to this paragraph until such time as evidence of attainment of the twenty-five percent goal is documented in subsequent plans submitted to the department.

c. If at any time the department determines that a planning area has met or exceeded the fifty percent goal, the planning area shall subtract fifty cents from the total amount of the tonnage fee imposed pursuant to [section 455B.310](#). This amount shall be in addition to any amount subtracted pursuant to paragraph “a”. The reduction in tonnage fees pursuant to this paragraph shall be taken from that portion of the tonnage fees which would have been allocated to funding alternatives to landfills pursuant to [section 455E.11, subsection 2](#), paragraph “a”, subparagraph (1). A planning area failing to meet the fifty percent goal is not required to remit any additional tonnage fees to the department.

3. *Environmental management systems.* A planning area designated as an environmental management system pursuant to [section 455J.7](#) is exempt from the waste stream reduction goals of [this section](#).

89 Acts, ch 272, §3; 92 Acts, ch 1213, §2; 94 Acts, ch 1177, §4; 95 Acts, ch 80, §2; 95 Acts, ch 209, §25; 98 Acts, ch 1193, §3; 2001 Acts, ch 124, §2, 6; 2006 Acts, ch 1063, §2; 2008 Acts, ch 1109, §2; 2011 Acts, ch 25, §108; 2013 Acts, ch 12, §14, 15

Referred to in [§455B.306](#), [455B.310](#), [455J.5](#)

455D.4 Waste volume reduction policies.

1. It is the policy of this state to encourage the development of waste volume reduction programs and education at the local government level through incentives, technical assistance, grants, and other practical measures.

2. It is the policy of this state to support and encourage the development of new uses and markets for recycled goods, placing emphasis on the development, in Iowa, of businesses relating to waste reduction and recycling.

3. The provision of education concerning waste volume reduction at the elementary through high school levels and through community organizations will enhance the success of local programs requiring public involvement.

4. This state supports and encourages manufacturing methods which are environmentally sustainable, technologically safe, and ecologically sound. The state shall encourage manufacturing methods which enhance waste reduction by creating products with longer usage life, and by creating products which are adaptable to secondary uses, require less input material, and decrease resource consumption.

5. The people of this state recognize that a variety of benefits result from a comprehensive waste reduction policy including the following environmental, economic, governmental, and public benefits:

a. Not producing waste in the first instance is the most certain means for avoiding the widely recognized health and environmental damage associated with waste. Although waste

reduction will never eliminate all wastes, to the extent that waste reduction is achieved it results in the most certain form of direct risk reduction.

b. Waste reduction may result in reduced pollution control costs for industry by stimulating and promoting beneficial technological and management reorganization within industry in place of pollution control strategies which channel capital into nonproductive pollution control expenditures.

c. The government is better able to administer programs which offer a variety of benefits to industry and which reduce the overall cost of government involvement than it is to administer programs which offer few benefits to industry and require increasingly extensive, complex, and costly governmental actions.

d. Public confidence in environmental policies of the government is important for the effectiveness of these policies. Waste reduction poses no adverse environmental and public health effects and does not, therefore, lead to increased public concern. Waste reduction also increases the public confidence that the government and industry are doing all that is possible to protect human health and the environment.

[89 Acts, ch 272, §4](#)

455D.4A Recycling.

1. For the purpose of [this section](#), “*recycling facility*” means any facility, business, or operation that has the stated primary purpose of facilitating the recycling of materials that would otherwise be solid waste.

2. Recycling of materials for the purpose of being excluded from the solid waste provisions of [chapter 455B, division IV, part 1](#), must be legitimate. A material that is not legitimately recycled is discarded material and is a solid waste. In determining if recycling is legitimate, a recycling facility must establish all of the following:

a. The material is potentially recyclable and has a feasible means of being recycled into a valuable product.

b. The material is being managed as a valuable commodity while under the facility’s control.

c. The material is not being accumulated speculatively pursuant to [subsection 7](#).

3. If the department determines that a facility is not legitimately recycling material, the department may allow the facility owner or operator an opportunity to comply with the criteria in [subsection 2](#), or may immediately deem the facility subject to the solid waste provisions of [chapter 455B, division IV, part 1](#).

4. The criteria in [subsection 2](#) are intended to mitigate the risk posed by facilities that accumulate materials speculatively prior to recycling by preventing materials that are not otherwise regulated under [chapter 455B, division IV, part 1](#), from being stored indefinitely and potentially causing a public health nuisance or adverse environmental impact. In response to enforcement initiated by the department for alleged violations of [this section](#), the burden of proof falls on the recycling facility owner or operator to establish that materials are being legitimately recycled.

5. To establish that a material is potentially recyclable and has a feasible means of being recycled into a valuable product, a recycling facility owner or operator shall maintain with an end user at least one purchase contract, a letter of understanding, or other formal agreement. Such documentation must be provided to the department upon request. In addition, if the material is going to be recycled in an unusual manner, the owner or operator may use technical specifications from the end user or other documentation to prove recycling the material in such manner will result in a valuable product.

6. To establish that a material is being managed as a valuable commodity while under the facility’s control, a recycling facility owner or operator shall ensure that stockpiled material is not speculatively accumulated by maintaining current inventory records and is managed in a manner consistent with comparable recyclable materials or products in an equally protective manner.

7. To establish that a material is not being accumulated speculatively, the recycling facility owner or operator must document that, during a given calendar year, the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five

percent by weight or volume of the amount of material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method.

8. Failure to provide documentation upon request to the department relative to the requirements of [this section](#) is grounds for the department to immediately deem the facility not in compliance with [this section](#).

9. Scrap metal is not subject to the provisions of [this section](#).

[2018 Acts, ch 1023, §7](#); [2019 Acts, ch 59, §139 – 141](#)

Referred to in [§455B.301](#), [455D.1](#), [455D.22](#), [455D.23](#), [455D.25](#)

Subsection 2, unnumbered paragraph 1 amended

Subsection 2, paragraph b amended

Subsections 6 and 9 amended

455D.5 Statewide waste reduction and recycling network — established.

1. The department shall establish a statewide waste reduction and recycling network to promote the waste management policy contained in [section 455B.481](#) and the waste management hierarchy contained in [section 455B.301A](#). Programs established shall encourage waste generators to reduce the volume of waste generated and to recycle or properly dispose of the waste that is generated. The network shall utilize existing recycling companies when possible. The programs may utilize financial and legal incentives, education, technical assistance, regulation, and other methods as appropriate to implement the programs. The programs may involve the development of public and private sector initiatives, the development of markets and other opportunities for waste reduction and recycling, and other related efforts.

2. The elements of the network shall include but are not limited to all of the following:

- a. Promotion of efforts to increase the amount of recyclable materials used by the public.
- b. Promotion of efforts to recover recyclable materials from the waste stream.
- c. Promotion of local efforts to implement recycling collection centers located at disposal sites or other convenient local sites.
- d. Promotion of local efforts of curbside collection of separated recyclable waste materials.
- e. Provision of public education programs which promote public awareness of waste volume reduction and the use of recyclable materials.
- f. Promotion of the creation of markets for recyclable materials.
- g. Promotion of research, manufacturing processes, and product development, which provide for waste reduction through decreased material input, and resource consumption.
- h. Promotion of the concentration of the efforts of the business and industry resource search service by the small business assistance center for the safe and economic management of solid waste and hazardous substances at the university of northern Iowa, to locate existing waste streams and materials from businesses and industries which generate small amounts of waste and to catalyze the reuse of these materials in the production of goods and services.

[89 Acts, ch 272, §5](#); [95 Acts, ch 44, §4](#)

455D.6 Duties of the director.

The director shall:

1. Unless otherwise specified in [this chapter](#), recommend rules to the commission which are necessary to implement [this chapter](#).

2. Administer and coordinate the waste volume reduction and recycling fund created under [section 455D.15](#).

3. Enter into contracts and agreements, with the approval of the commission, for contracts in excess of twenty-five thousand dollars, with local units of government, other state agencies, governments of other states, governmental agencies of the United States, other public and private contractors, and other persons as may be necessary or beneficial in carrying out the department's duties under [this chapter](#).

4. Develop a strategy and recommend to the commission the adoption of rules necessary to implement a strategy for white goods and waste oil.

5. Develop a strategy and recommend to the commission the adoption of rules necessary to implement a strategy for the recycling of electronic goods and the disassembling and removing of toxic parts from electronic goods.

[89 Acts, ch 272, §6](#); [2002 Acts, ch 1162, §59](#); [2003 Acts, ch 145, §286](#); [2013 Acts, ch 12, §16, 17](#)

Referred to in [§455D.22](#), [455D.25](#)

455D.7 Duties of the commission.

The commission shall:

1. Unless otherwise specified in [this chapter](#), adopt rules necessary to implement [this chapter](#) pursuant to [chapter 17A](#).

2. Prohibit land disposal of specific components of the waste stream for which the department has developed and implemented a strategy for alternative disposal according to the waste management hierarchy.

3. Establish by rule standards for the acceptance of recyclable or rebatable products at redemption centers. The standards may address matters of public health and handling by the redemption center.

[89 Acts, ch 272, §7](#); [2013 Acts, ch 12, §18, 19](#)

455D.8 Deposits, rebates, and waste abatement fees. Repealed by 2011 Acts, ch 9, §11.

455D.9 Land disposal of yard waste — prohibited.

1. Land disposal of yard waste as defined by the department is prohibited. A sanitary landfill may accept yard waste under any of the following circumstances:

a. When the yard waste is separated at its source from other solid waste and is accepted by the sanitary landfill for the purposes of soil conditioning and composting.

b. When the yard waste is collected for disposal as a result of a severe storm and the yard waste originates in an area declared to be a disaster area in a declaration issued by the president of the United States or the governor.

c. When the yard waste is collected for disposal to control, eradicate, or prevent the spread of insect pests, tree and plant diseases, or invasive plant species problems.

d. When the yard waste is collected for disposal by a sanitary landfill that operates a methane collection system that produces energy.

2. The department shall assist local communities in the development of collection systems for yard waste generated from residences and shall assist in the establishment of local composting facilities. Each city and county shall, by ordinance, require persons within the city or county to separate yard waste from other solid waste generated.

3. The department shall adopt rules which define yard waste and provide for the safe and proper method of composting yard waste and other organic materials.

4. State and local agencies responsible for the maintenance of public lands in the state shall give preference to the use of composted materials in all land maintenance activities.

5. [This section](#) does not prohibit the use of yard waste as land cover or as soil conditioning material.

6. [This section](#) prohibits the open burning of yard waste within the permitted boundary at a sanitary disposal project.

[89 Acts, ch 272, §9](#); [90 Acts, ch 1191, §4](#); [92 Acts, ch 1182, §5](#); [2013 Acts, ch 12, §20](#); [2014 Acts, ch 1060, §1, 2](#); [2015 Acts, ch 19, §1](#)

455D.9A Disposal of baled solid waste at a sanitary landfill — prohibited.

Beginning January 1, 1992, a person shall not dispose of baled solid waste at a sanitary landfill and a sanitary landfill shall not accept baled solid waste for final disposal. Solid waste which is baled on-site may be disposed of at the sanitary landfill.

[91 Acts, ch 113, §1](#); [99 Acts, ch 14, §1](#)

455D.10 Land disposal of lead acid batteries — prohibited — collection for recycling.

1. Beginning July 1, 1990, land disposal of lead acid batteries is prohibited.
2. A person offering for sale or selling lead acid batteries at retail in the state shall do all of the following:
 - a. Accept used lead acid batteries from customers who purchase new lead acid batteries, at the point of sale.
 - b. Post written notice that land disposal of lead acid batteries is prohibited and that state law requires the retailer to accept lead acid batteries for recycling when new lead acid batteries are purchased.
3. A person offering for sale or selling lead acid batteries at wholesale shall accept used lead acid batteries from retailers who purchase new lead acid batteries for resale to consumers, or from wholesale customers.

[89 Acts, ch 272, §10](#)

455D.10A Household batteries — heavy metal content and recycling requirements.

1. *Definitions.* As used in [this section](#) and in [section 455D.10B](#) unless the context otherwise requires:

- a. “*Button cell battery*” means a household battery which resembles a button or coin in size and shape.
- b. “*Consumer*” means a person who purchases household batteries for personal or business use.
- c. “*Easily removed*” means a battery or battery pack which can be removed from a battery-powered product by the consumer, using common household tools.
- d. “*Household battery*” means any type of dry cell battery used by consumers, including but not limited to mercuric oxide, carbon-zinc, zinc air, silver oxide, nickel-cadmium, nickel-hydride, alkaline, lithium, or sealed lead acid batteries.
- e. “*Institutional generator*” means a governmental, commercial, industrial, communications, or medical facility which generates waste mercuric oxide, nickel-cadmium, or sealed lead acid rechargeable batteries.
- f. “*Rechargeable consumer product*” means a product that is primarily powered by a rechargeable battery and is primarily used or purchased to be used for household purposes.
- g. “*Rechargeable household battery*” means a small sealed nickel-cadmium or sealed lead acid battery used for nonvehicular purposes and weighing less than twenty-five pounds, which can be recharged by the consumer and reused.

2. *Mercury content limited.*

a. A person shall not sell, distribute, or offer for retail sale in this state an alkaline manganese battery that contains more than twenty-five one-thousandths of a percent mercury by weight. A person shall not sell, distribute, or offer for sale at retail in this state an alkaline manganese household battery manufactured on or after January 1, 1996, to which mercury has been added. This paragraph does not apply to alkaline manganese button cell batteries.

b. A person shall not sell, distribute, or offer for retail sale in this state an alkaline manganese button cell battery which contains more than twenty-five milligrams of mercury.

3. *Recycling/disposal requirements for household batteries.*

a. Beginning July 1, 1996, a system or systems shall be in place to protect the health and safety of Iowans, and the state’s environment, from the toxic components of used household batteries. The system or systems shall include at least one of the following elements:

(1) Elimination or reduction to the extent established by rule of the department, of heavy metals and other toxic components in nickel-cadmium, mercuric oxide, or sealed lead acid household batteries, to ensure protection of public health, safety, and the environment when placed in or disposed of as part of mixed municipal solid waste.

(2) Establishment of a comprehensive recycling program for each type of battery listed in subparagraph (1) that is sold, distributed, or offered for sale in this state. An institutional generator shall provide for the on-site source separation and collection of used mercuric oxide batteries, nickel-cadmium rechargeable batteries, and sealed lead acid rechargeable batteries. All participants in the stream of commerce relating to the batteries, which are listed in subparagraph (1) and which are not designated as exempt pursuant to [section 455D.10B](#),

subsection 2, paragraph “a”, subparagraph (3) or (4), shall, individually or collectively, be responsible for developing and operating a system for collecting and transporting used batteries to the appropriate dry cell battery manufacturer or to a site or facility designated by a manufacturer. Additionally, dry cell battery manufacturers shall be responsible for the recycling of used batteries in an environmentally sound manner.

(3) Provision for collection, transporting, and proper disposal of used household batteries of the types listed in subparagraph (1) which are distributed, sold, or offered for retail sale in the state. For the purposes of this paragraph, “*proper disposal*” means disposal which complies with all applicable state and federal laws. All participants in the stream of commerce relating to the batteries, which are listed in subparagraph (1) and which are not designated as exempt pursuant to section 455D.10B, subsection 2, paragraph “a”, subparagraph (3) or (4), shall, individually or collectively, be responsible for developing and operating a system for collecting and transporting used batteries to the appropriate dry cell battery manufacturer or to a site or facility designated by a manufacturer. Additionally, dry cell battery manufacturers shall be responsible for proper disposal of the used batteries.

b. To meet the recycling and disposal requirements of this subsection, participants in the systems established under this subsection, either individually or collectively, shall do all of the following:

(1) Identify a collection entity, other than a local government collection system, unless the local government agrees otherwise, through which the discarded batteries listed in paragraph “a”, subparagraph (1) shall be returned for collection and recycling or disposal.

(2) Inform each customer of the prohibition of disposal of batteries listed in paragraph “a”, subparagraph (1), and a safe and convenient return process available to the customer for recycling or proper disposal.

c. After July 1, 1996, nickel-cadmium, sealed lead acid, or mercuric oxide household batteries shall not be sold, distributed, or offered for sale in the state, unless a system required by this section is in operation.

d. The department may make recommendations to the commission to include other types of household or rechargeable batteries, not enumerated in paragraph “a”, subparagraph (1), in the requirements of this subsection.

e. This subsection does not apply to batteries subject to regulation under the federal Resource Conservation and Recovery Act, 42 U.S.C. §6901 et seq.

4. *Rules adopted.* The commission shall adopt, upon recommendation of the director, the rules necessary to carry out the provisions of this section pursuant to chapter 17A.

92 Acts, ch 1215, §15; 95 Acts, ch 99, §1; 2007 Acts, ch 151, §1; 2011 Acts, ch 25, §140

Referred to in §455D.10B, 455D.25

455D.10B Batteries used in rechargeable consumer products.

1. A person shall not distribute, sell, or offer for retail sale in the state a rechargeable consumer product manufactured on or after January 1, 1994, unless all of the following conditions are met:

a. The battery can be easily removed by the consumer, or is contained in a battery pack that is separate from the product and can be easily removed.

b. The battery, the instruction manual, and the product package are clearly labeled to indicate that the battery must be recycled or disposed of properly and includes the designation “Cd” or “Ni-Cd” for nickel-cadmium batteries and “Pb” or “Lead” for small lead batteries.

2. a. A rechargeable consumer product manufacturer may apply to the department for exemption from the requirements of subsection 1 if any of the following apply:

(1) The product cannot be redesigned or manufactured to comply with the requirements prior to January 1, 1994.

(2) The redesign of the product to comply with the requirements would result in significant danger to public health and safety.

(3) The battery poses no unreasonable hazard to public health, safety, or the environment when placed in and processed or disposed of as part of mixed municipal solid waste, pursuant to section 455D.10A.

(4) The consumer product manufacturer has in operation a program to recycle used batteries in an environmentally sound manner.

b. A manufacturer of a product that is powered by a battery that cannot be easily removed who has been granted an exemption under [this subsection](#) shall label the product as required in [subsection 1](#), paragraph “b”.

3. An exemption granted by the department under [subsection 2](#), paragraph “a”, subparagraph (1), is limited to a maximum of two years, but may be renewed.

[92 Acts, ch 1215, §16; 94 Acts, ch 1037, §1, 2; 2011 Acts, ch 25, §109](#)

Referred to in [§455D.10A](#)

455D.11 Waste tires — land disposal prohibited.

1. As used in [this section](#), unless the context otherwise requires:

a. “Permit” means a permit issued by the department to establish, construct, modify, own, or operate a tire stockpiling facility.

b. “Processing” means producing or manufacturing usable materials from waste tires.

c. “Processing site” means a site which is used for the processing of waste tires and which is owned or operated by a tire processor who has a permit for the site.

d. “Tire collector” means either a person who owns or operates a site used for the storage, collection, or deposit of more than five hundred waste tires or an authorized vehicle recycler who is licensed by the state department of transportation pursuant to [section 321H.4](#) and who owns or operates a site used for the storage, collection, or deposit of more than three thousand five hundred waste tires.

e. “Tire processor” means a person engaged in the processing of waste tires.

f. “Waste tire” means a tire that is no longer suitable for its originally intended purpose due to wear, damage, or defect. “Waste tire” does not include a nonpneumatic tire.

g. “Waste tire collection site” means a site which is used for the storage, collection, or deposit of waste tires.

2. Land disposal of waste tires is prohibited beginning July 1, 1991, unless the tire has been processed in a manner established by the department. A sanitary landfill shall not refuse to accept a waste tire which has been properly processed.

3. The department shall conduct a study and make recommendations to the general assembly by January 1, 1991, concerning a waste tire abatement program which includes but is not limited to the following:

a. The number and geographic distribution of waste tires generated and existing in the state.

b. The development of markets for the recycling and processing of waste tires, in the midwestern states.

c. The methods to establish reliable sources of waste tires for users of waste tires.

d. The permitting of waste tire collection sites, waste tire processing facilities, and waste tire haulers.

e. The methods for the cleanup of existing stockpiles of waste tires.

4. Upon completion of the study pursuant to [subsection 3](#), the department shall determine the number of stockpiling facilities which are necessary and shall develop rules for stockpiling facilities which include but are not limited to the following:

a. The prohibition of burning within one hundred yards of a tire stockpile.

b. The maximum height, width, and length of a tire stockpile.

c. Plans to control mosquitoes and rodents.

d. A facility closure plan.

e. Specifications for fire lanes between stockpiles.

f. Limitations of the total number of tires allowed at a single stockpile site.

5. The department shall develop criteria for the issuance of permits and shall issue permits to qualified stockpiling facilities.

6. The department shall provide financial assistance to persons who establish recycling and processing sites for waste tires, subject to the rules established by the department for the establishment of such sites and subject to the conditions prescribed by the department for application for and awarding of such financial assistance.

7. The commission shall adopt rules which provide the following:

a. That a person who contracts with another person to transport more than forty waste tires is required to contract only with a person registered as a waste tire hauler pursuant to [section 455D.111](#).

b. That a person who transports waste tires for final disposal is required to only dispose of the tires at a permitted sanitary disposal facility.

8. The department shall adopt rules relating to the storage and disposal of nonpneumatic tires and processed tires.

[89 Acts, ch 272, §11](#); [91 Acts, ch 257, §7](#); [92 Acts, ch 1218, §3](#); [96 Acts, ch 1117, §2](#); [97 Acts, ch 24, §1](#); [2002 Acts, ch 1121, §2](#); [2004 Acts, ch 1030, §1](#); [2007 Acts, ch 151, §2](#); [2013 Acts, ch 90, §110](#)

Referred to in [§455D.22](#), [455D.25](#)

455D.11A Financial assurance — waste tire collection or processing sites.

1. A person owning or operating a waste tire collection or processing site shall provide a financial assurance instrument to the department prior to the initial approval of a permit or prior to the renewal of a permit for an existing or expanding facility. The financial assurance instrument shall be used to provide for closure of the waste tire collection or processing facility.

2. The financial assurance instrument shall meet all requirements adopted by rule by the commission, and shall not be canceled, revoked, disbursed, released, or allowed to terminate without the approval of the department.

3. Financial assurance instruments may include instruments such as cash or surety bond, a letter of credit in a form prescribed by the department, a secured trust fund, a corporate guarantee, or a combination of such instruments and guarantees sufficient to satisfy the requirements of [subsection 5](#). The department may request an annual audit, which shall remain confidential, to be performed by a third party.

4. If the owner or operator of a waste tire collection or processing site chooses to provide financial assurance in the form of a surety bond, the bond shall be executed by a surety company authorized to do business in this state. The bond shall be continuous in nature until canceled by the surety. A surety shall provide at least ninety days' notice in writing to the owner or operator and to the department indicating the surety's intent to cancel the bond and the effective date of the cancellation. The surety bond shall be for the benefit of the citizens of this state and shall be conditioned upon compliance with [this section](#). The surety's liability under [this subsection](#) is limited to the amount of the bond or the amount of the damages or moneys due, whichever is less. However, [this subsection](#) does not limit the amount of damages recoverable from an owner or operator to the amount of the surety bond. The bond shall be made in a form prescribed by the commissioner of insurance and written by a company authorized by the commissioner of insurance to do business in this state. If a surety bond is canceled which has been provided as financial assurance under [this subsection](#), the owner or operator of the waste tire collection or processing site shall demonstrate to the department within thirty days of the cancellation, a means of continued compliance with the financial assurance requirements of [this section](#). If a means of continued compliance is not demonstrated within the thirty-day period, the department shall suspend the permit for the site, and the owner or operator shall perform proper closure of the site within thirty days. If the owner or operator does not properly close the site within the time period allowed, the department shall file a claim with the surety company, prior to the effective date of cancellation of the bond, to collect the amount of the bond for use in performing proper closure. A person who fails to provide for proper closure, notwithstanding collection by the department of the amount of the bond, is guilty of a serious misdemeanor.

5. Financial assurance shall be provided in the amounts as follows:

a. For a waste tire collection or processing site, the financial assurance instrument for a waste tire collection site shall provide coverage in an amount which is equivalent to thirty-five cents per passenger tire equivalent collected by the site prior to July 1, 1998. The financial assurance instrument for a waste tire processing site shall provide coverage in an amount which is equivalent to thirty-five cents per passenger tire equivalent collected for processing

by the site which is above the three-day processing supply of tires for the site as determined by the department.

b. For a waste tire collection or processing site, the financial assurance instrument for a waste tire collection site shall provide coverage in an amount which is equivalent to eighty-five cents per passenger tire equivalent collected by the site on or after July 1, 1998, and the financial assurance instrument for a waste tire processing site shall provide coverage in an amount which is equivalent to eighty-five cents per passenger tire equivalent collected for processing by the site which is above the three-day processing supply of tires for the site as determined by the department.

6. The financial assurance instrument shall not be assigned for the benefit of creditors with the exception of the state, and shall not be used to pay any final judgment against a permit holder arising out of the ownership or operation of the site. The commission shall adopt rules to establish conditions under which the department may gain access to the financial assurance instrument.

7. The requirement for financial assurance shall not apply to waste tire collection or processing sites operated by a city or county, or operated in conjunction with a sanitary landfill.

92 Acts, ch 1218, §4; 94 Acts, ch 1023, §56; 97 Acts, ch 53, §1, 2; 98 Acts, ch 1180, §1, 2; 2015 Acts, ch 30, §134, 135

Referred to in §455D.11C, 455D.22, 455D.25

455D.11B Permitting of waste tire collection or processing sites — fees.

An owner or operator of a waste tire collection or processing site, including an enclosed site, shall obtain a permit from the department prior to operation of the site. The owner or operator shall pay an annual fee of eight hundred fifty dollars to the department. The moneys collected by the department shall be deposited in the hazardous substance remedial fund established pursuant to [section 455B.423](#) and shall be used for the purposes of administering the waste tire collection or processing site permit program.

92 Acts, ch 1218, §5

Referred to in §455D.22, 455D.25

455D.11C Waste tire management fund.

1. A waste tire management fund is created within the state treasury. Notwithstanding [section 8.33](#), any unexpended balance in the fund at the end of each fiscal year shall be retained in the fund. Notwithstanding [section 12C.7](#), any interest or earnings on investments from moneys in the fund shall be credited to the fund. Moneys from the fund that are expended by the department in closing or bringing into compliance a waste tire collection site pursuant to [section 455D.11A](#) and later recouped by the department shall be credited to the fund.

2. Moneys in the waste tire management fund are appropriated and shall be used for the following purposes:

a. Thirty percent of the moneys shall be used for all of the following positions:

(1) One full-time equivalent position for the administration of permits and registrations for tire processing, storage, and hauling activities, and tire program initiatives.

(2) One and one-half full-time equivalent positions for waste tire-related compliance checks and inspections. The full-time equivalent positions shall be divided equally between the field offices in the state.

b. Ten percent of the moneys shall be used for a public education and awareness initiative related to the proper tire disposal options and environmental and health hazards posed by improper tire storage.

c. Thirty percent of the moneys shall be used for market development initiatives for waste tires.

d. Thirty percent of the moneys shall be used for waste tire stockpile abatement initiatives which would require a cost-share agreement with the landowner.

96 Acts, ch 1117, §3; 2004 Acts, ch 1173, §1; 2008 Acts, ch 1113, §116; 2011 Acts, ch 34, §103

455D.11D through 455D.11F Repealed by 2004 Acts, ch 1173, §2.

455D.11G Waste tire disposal fees and abatement costs.

1. A retail tire dealer who currently charges a fee relating to disposal of used tires is encouraged to include the fee within the sales price of new tires. The practice by retail tire dealers of adding the fee as a separate charge on sales invoices is discouraged.

2. Notwithstanding any provision in [this chapter](#), any generator of waste tires who is identified as being a contributor to the materials which are the object of an abatement and who can document full compliance with [this chapter](#) and administrative rules adopted pursuant to [this chapter](#) in disposing of such waste tires shall not be liable for any of the cost of recovery actions of the abatement.

[96 Acts, ch 1117, §7; 98 Acts, ch 1180, §5](#)

455D.11H Future repeal. Repealed by [2004 Acts, ch 1173, §2](#).

455D.11I Registration of waste tire haulers — bond.

1. For the purposes of [this section](#), “*waste tire hauler*” means a person who transports for hire more than forty waste tires in a single load for commercial purposes.

2. A waste tire hauler shall register with, and obtain a certificate of registration from, the department before hauling waste tires in this state. Requirements for registration of a waste tire hauler shall include a provision that waste tire haulers shall pay all amounts due to any individual or group of individuals when due for damages caused by improper disposal of waste tires by the waste tire hauler or the waste tire hauler’s employee while acting within the scope of employment. The waste tire hauler may apply for a certificate of registration by submitting the forms provided for that purpose and shall provide the name of the applicant and the address of the applicant’s principal place of business and any additional information as deemed appropriate by the department.

3. A certificate of registration issued under [this section](#) is valid for one year from the date of issuance. A registered waste tire hauler may renew the certificate by filing a renewal application in the form prescribed by the department, accompanied by any applicable renewal fee.

4. A certificate of registration shall at all times be carried and displayed in the vehicle used for transportation of waste tires and shall be shown to a representative of the department of natural resources or the state department of transportation, upon request. The state department of transportation may inspect vehicles used for the transportation of waste tires and request that the certificate of registration of the waste tire hauler be shown.

5. The department shall establish a reasonable registration fee sufficient to offset expenses incurred in the administration of [this section](#).

6. The department shall require that a waste tire hauler have on file with the department before the issuance or renewal of a registration certificate, a surety bond executed by a surety company authorized to do business in this state in the sum of a minimum of ten thousand dollars, which bond shall be continuous in nature until canceled by the surety. A surety shall provide at least thirty days’ notice in writing to the waste tire hauler and to the department indicating the surety’s intent to cancel the bond and the effective date of the cancellation. The surety bond shall be for the benefit of the citizens of this state and shall be conditioned upon the waste tire hauler’s willingness to comply with [this section](#). The surety’s liability under [this subsection](#) is limited to the amount of the bond or the amount of the damages or moneys due, whichever is less. However, [this subsection](#) does not limit the amount of damages recoverable from a waste tire hauler to the amount of the surety bond. The bond shall be made in a form prescribed by the commissioner of insurance and written by a company authorized by the commissioner of insurance to do business in this state.

7. The department shall adopt rules necessary for the implementation and administration of [this section](#).

[2002 Acts, ch 1121, §4; 2003 Acts, ch 44, §69; 2007 Acts, ch 151, §3, 4](#)

Referred to in [§455D.11, 455D.22, 455D.25](#)

455D.12 Plastic container labeling.

1. In [this section](#) unless the context otherwise requires:

a. “*Label*” means a molded imprint or raised symbol on or near the bottom of a plastic product.

b. “*Plastic*” means any material made of polymeric organic compounds and additives that can be shaped by flow.

c. “*Plastic bottle*” means a plastic container that has a neck that is smaller than the body of the container, accepts a screw-type, snap cap, or other closure, and has a capacity of sixteen fluid ounces or more, but less than five gallons.

d. “*Rigid plastic container*” means any formed or molded container, other than a bottle, intended for single use, composed predominantly of plastic resin, and having a relatively inflexible infinite shape or form with a capacity of eight ounces or more, but less than five gallons.

2. A person shall not distribute, sell, or offer for sale in this state a plastic bottle or rigid plastic container unless the product is labeled with a code indicating the plastic resin used to produce the bottle or container. Rigid plastic bottles or rigid plastic containers with labels and basecaps of a different material shall be coded by their basic material. The code shall consist of a number placed within a triangle of arrows and letters placed below the triangle of arrows. The triangle shall be equilateral, formed by three arrows with the apex of each point of the triangle at the midpoint of each arrow, rounded with a short radius. The arrowhead of each arrow shall be at the midpoint of each side of the triangle with a short gap separating the pointer from the base of the adjacent arrow. The triangle, formed by the three arrows curved at their midpoints, shall depict a clockwise path around the code number. The numbers and letters used shall be as follows:

a. 1 and PETE (polyethylene terephthalate)

b. 2 and HDPE (high density polyethylene)

c. 3 and V (vinyl)

d. 4 and LDPE (low density polyethylene)

e. 5 and PP (polypropylene)

f. 6 and PS (polystyrene)

g. 7 and OTHER (includes multilayer)

3. A container manufacturer or distributor who violates [this section](#) is subject to a civil penalty of not more than five hundred dollars for each violation.

[89 Acts, ch 272, §12; 2013 Acts, ch 12, §21, 22](#)

455D.13 Land disposal of used oil and used oil filters prohibited — collection and recycling.

1. A sanitary landfill shall not accept used oil for final disposal.

2. A person offering for sale or selling oil or oil filters at retail in the state shall do the following:

a. Accept at the point of sale, used oil and used oil filters from customers, or post notice of locations where a customer may dispose of used oil and used oil filters.

b. Post written notice that it is unlawful to dispose of used oil in a sanitary landfill.

3. A business that generates used oil filters or collects used oil filters from a person shall not dispose of the oil filters in a sanitary landfill and shall source-separate and recycle the oil filters.

[89 Acts, ch 272, §13; 2008 Acts, ch 1167, §1, 2](#)

455D.14 Products manufactured with chlorofluorocarbons prohibited.

Beginning January 1, 1990, a person shall not sell, offer for sale, purchase, or use plastic foam packaging products or food service items manufactured with chlorofluorocarbons. Beginning January 1, 1998, a person shall not sell, offer for sale, purchase, or use plastic foam products, not previously prohibited, which are manufactured with fully halogenated chlorofluorocarbons. A person violating [this section](#) is guilty of a serious misdemeanor.

[89 Acts, ch 272, §14](#)

455D.15 Waste volume reduction and recycling fund.

1. A waste volume reduction and recycling fund is created within the state treasury. Moneys received by the department from fees, including general revenue, federal funds, awards, wills, bequests, gifts, or other moneys designated shall be deposited in the state treasury to the credit of the fund. Notwithstanding [section 8.33](#), any unexpended balance in the fund at the end of each fiscal year shall be retained in the fund. Any interest and earnings on investments from money in the fund shall be credited to the fund, [section 12C.7](#) notwithstanding.

2. The fund shall be utilized by the department for providing technical assistance to Iowa businesses in developing and implementing pollution prevention techniques.

[89 Acts, ch 272, §15; 2011 Acts, ch 9, §6; 2013 Acts, ch 12, §23, 24](#)

Referred to in [§29C.8A, 455D.6](#)

455D.15A Permitting of waste conversion technologies operations — fees. Repealed by 2019 Acts, ch 14, §4.

455D.16 Mercury — thermostats.

1. As used in [this section](#), unless the context otherwise requires:

a. (1) “*Manufacturer*” means any person, firm, association, partnership, corporation, governmental entity, organization, combination, or joint venture that owns or owned the brand name of the thermostat.

(2) This paragraph “a” is repealed on January 1, 2022.

b. “*Mercury-added thermostat*” means a product or device that uses a mercury switch to sense and control room temperature through communication with heating, ventilating, or air-conditioning equipment. “*Mercury-added thermostat*” includes thermostats used to sense and control room temperature in residential, commercial, industrial, and other buildings but does not include thermostats used to sense and control temperature as part of a manufacturing process.

c. (1) “*Thermostat retailer*” means a person who sells thermostats of any kind directly to homeowners or other nonprofessionals through any selling or distribution mechanism, including but not limited to sales using the internet or catalogues. A thermostat retailer may also be a thermostat wholesaler if it meets the definition of thermostat wholesaler.

(2) This paragraph “c” is repealed on January 1, 2022.

d. (1) “*Thermostat wholesaler*” means a person who is engaged in the distribution and wholesale selling of large quantities of heating, ventilation, and air-conditioning components, including thermostats, to contractors who install heating, ventilation, and air-conditioning components, including thermostats.

(2) This paragraph “d” is repealed on January 1, 2022.

2. A person shall not sell, offer for sale, or install a mercury-added thermostat in this state.

3. Except as otherwise provided, a person who generates a discarded mercury-added thermostat shall manage the mercury-added thermostat as a hazardous waste or universal hazardous waste, according to all applicable state and federal regulations. A contractor who replaces or removes mercury-added thermostats shall assure that any discarded mercury-added thermostat is subject to proper separation and management as hazardous waste or universal hazardous waste. A contractor who replaces a mercury-added thermostat in a residence shall deliver the mercury-added thermostat to an appropriate collection location for recycling.

4. a. Each thermostat manufacturer that has offered for final sale, sold at final sale, or distributed mercury-added thermostats in the state shall individually, or in conjunction with other thermostat manufacturers, do all of the following:

(1) Not later than October 1, 2008, submit a plan to the department for approval describing a collection program for mercury-added thermostats. The program contained in the plan shall ensure that all the following take place:

(a) That an education and outreach program is developed. The program shall be directed toward thermostat wholesalers, thermostat retailers, contractors, and homeowners and

ensure a maximum rate of collection of mercury-added thermostats. There shall not be a cost to thermostat wholesalers or thermostat retailers for education and outreach materials.

(b) That handling and recycling of mercury-added thermostats are accomplished in a manner that is consistent with the provisions of the universal waste rules.

(c) That containers for mercury-added thermostat collection are provided to all thermostat wholesalers. The cost to thermostat wholesalers for such containers shall be limited to an initial, reasonable, one-time fee per container as specified in the plan.

(d) That collection points will be established to serve homeowners. The collection points shall include but are not limited to regional collection centers permitted under [567 IAC ch. 123](#). Collection points may include but are not limited to thermostat retailers.

(e) That collection systems are provided to all collection points. Collection systems may include individual product mail back or multiple collection containers. The costs of collection shall not be passed on to a collection point. The costs to a collection point shall be limited to an initial, reasonable, one-time fee per container as specified in the plan.

(2) Implement a mercury-added thermostat collection plan approved by the department.

(3) Beginning in 2010, submit an annual report to the department by April 1 of each year that includes, at a minimum, all of the following:

(a) The number of mercury-added thermostats collected and recycled by that manufacturer during the previous calendar year.

(b) The estimated total amount of mercury contained in the thermostat components collected by that manufacturer during the previous calendar year.

(c) A list of all participating thermostat wholesalers and all collection points for homeowners.

(d) An evaluation of the effectiveness of the manufacturer's collection program.

(e) An accounting of the administrative costs incurred in the course of administering the collection and recycling program.

b. [This subsection](#) is repealed on January 1, 2022.

5. a. (1) A thermostat wholesaler shall do all of the following:

(a) Act as a collection site for mercury-added thermostats.

(b) Promote and utilize the collection containers provided by thermostat manufacturers to facilitate a contractor collection program.

(2) A thermostat retailer shall participate in an education and outreach program to educate consumers on the collection program for mercury-added thermostats.

b. [This subsection](#) is repealed on January 1, 2022.

6. a. All of the following sales prohibitions shall apply to thermostat manufacturers, thermostat wholesalers, and thermostat retailers:

(1) A thermostat manufacturer not in compliance with [this section](#) is prohibited from offering any thermostat for final sale in the state. A thermostat manufacturer not in compliance with [this section](#) shall provide the necessary support to thermostat wholesalers and thermostat retailers to ensure the manufacturer's thermostats are not offered for final sale.

(2) A thermostat wholesaler or thermostat retailer shall not offer for final sale any thermostat of a manufacturer that is not in compliance with [this section](#).

b. [This subsection](#) is repealed on January 1, 2022.

7. a. The department shall do all of the following:

(1) Review and grant approval of, deny, or approve with modifications a manufacturer plan required under [this section](#). The department shall not approve a plan unless all elements of [subsection 4](#), paragraph "a", subparagraph (1), are adequately addressed and the program outlined in the plan will assure a maximum rate of collection of mercury-added thermostats. In reviewing a plan the department may consider consistency of the plan with collection requirements in other states and consider consistency between thermostat manufacturer collection programs. In reviewing plans, the department shall ensure that education and outreach programs are uniform and consistent to ensure ease of implementation by thermostat wholesalers and thermostat retailers.

(2) The department shall establish a process for public review and comment on all plans submitted by thermostat manufacturers prior to plan approval. The department shall

consult with interested persons, including representatives of thermostat manufacturers, environmental groups, thermostat wholesalers, thermostat retailers, contractors, and local government.

b. [This subsection](#) is repealed on January 1, 2022.

8. a. The goal of the collection and recycling efforts under [this section](#) is to collect and recycle as many mercury-added thermostats as reasonably practicable. By January 1, 2009, the department shall determine collection goals for the program in consultation with interested persons, including the national electrical manufacturers association and representatives of thermostat manufacturers, thermostat wholesalers, thermostat retailers, contractors, environmental groups, and local government. If collection efforts fail to meet the collection goals described in [this subsection](#), the department shall, in consultation with the national electrical manufacturers association and other interested persons, consider modifications to collection programs in an attempt to improve collection rates in accordance with these goals.

b. [This subsection](#) is repealed on January 1, 2022.

[2008 Acts, ch 1168, §1; 2015 Acts, ch 29, §60; 2018 Acts, ch 1023, §8; 2019 Acts, ch 59, §142; 2019 Acts, ch 131, §37](#)

See Code editor's note on simple harmonization at the end of Vol VI
Section amended

455D.17 and 455D.18 Repealed by 92 Acts, ch 1215, §19.

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 “a”, subparagraph (3). 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 “a”, subparagraph (3).

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. “*Regulated metal*” means any metal regulated under [this section](#).

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

- (1) Six hundred parts per million by weight by July 1, 1992.
- (2) Two hundred fifty parts per million by weight by July 1, 1993.
- (3) One hundred parts per million by weight by July 1, 1994.

b. 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. (1) Packages or packaging components that are reused, but exceed contaminant levels set forth in [subsection 4](#), paragraph “a”, subparagraph (3), if all of the following criteria are met:

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

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

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

(2) 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. (1) Packages or packaging components which qualify as reusable entities that exceed the contaminant levels set forth in [subsection 4](#), paragraph “a”, subparagraph (3), 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 “a”, subparagraph (3). The department may grant a two-year exemption, if warranted by the circumstances, and an exemption may, upon meeting the four criteria listed in subparagraph (2), subparagraph divisions (a) through (d), be renewed for additional two-year periods.

(2) 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:

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

(b) 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.

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

(d) 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.

(3) The application for an exemption must document the measures to be taken by the applicant as set out in subparagraph (2), subparagraph divisions (a) through (d).

6. a. 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](#).

b. 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, §5 – 7; 2009 Acts, ch 41, §134, 135; 2015 Acts, ch 30, §136](#)

Referred to in [§455D.22](#), [455D.25](#)

455D.20 Refuse-derived fuel — calculation as portion of waste reduction goal. Repealed by [2004 Acts, ch 1078, §3](#).

455D.21 Local ordinance — curbside collection.

A city council or county board of supervisors which provides for the collection of solid waste by its residents shall consider as a proposed ordinance, the mandatory curbside collection

of recyclable materials which have been separated from other solid waste. The proposed ordinance shall be considered in accordance with [chapter 331](#) or [380](#).

[92 Acts, ch 1215, §17](#)

455D.22 Civil penalty.

A person who violates [section 455D.4A](#), [455D.6](#), [subsection 4](#), [section 455D.11](#), [455D.11A](#), [455D.11B](#), [455D.11I](#), or [455D.19](#), or any rule, permit, or order issued pursuant thereto shall be subject to a civil penalty which shall be established, assessed, and collected in the same manner as provided in [section 455B.109](#). Any civil penalty collected shall be deposited in the general fund of the state.

[2007 Acts, ch 151, §8](#); [2018 Acts, ch 1023, §9](#)

455D.23 Administrative enforcement — compliance orders.

The director may issue any order necessary to secure compliance with or prevent a violation of the provisions of [this chapter](#) or any rule adopted or permit or order issued pursuant to [this chapter](#). Any order issued to enforce [section 455D.4A](#) may include a requirement to remove and properly dispose of materials being accumulated speculatively from a property and impose costs and penalties as determined by the department by rule. The person to whom such compliance order is issued may cause to be commenced a contested case within the meaning of [chapter 17A](#) by filing a notice of appeal to the commission. On appeal, the commission may affirm, modify, or vacate the order of the director. The applicable time frames for the issuance and appeal of the order are defined in [section 455B.110](#).

[2007 Acts, ch 151, §9](#); [2018 Acts, ch 1023, §10](#); [2019 Acts, ch 97, §8](#)

Section amended

455D.24 Judicial review.

Judicial review of any order or other action of the commission or director may be sought in accordance with the terms of [chapter 17A](#). Notwithstanding the terms of [chapter 17A](#), petitions for judicial review may be filed in the district court of the county in which the alleged offense was committed.

[2007 Acts, ch 151, §10](#)

455D.25 Civil actions for compliance — penalties.

1. The attorney general, on request of the department, shall institute any legal proceedings necessary to obtain compliance with an order of the commission or the director, including proceedings for a temporary injunction, or prosecuting any person for a violation of an order of the commission or the director or the provisions of [this chapter](#) or any rules adopted or permit or order issued pursuant to [this chapter](#).

2. Any person who violates [section 455D.4A](#), [455D.10A](#), [455D.11](#), [455D.11A](#), [455D.11B](#), [455D.11I](#), or [455D.19](#), or any order or permit issued or rule adopted pursuant to [section 455D.6](#), [subsection 4](#), [section 455D.10A](#), [455D.11](#), [455D.11A](#), [455D.11B](#), [455D.11I](#), or [455D.19](#), shall be subject to a civil penalty, not to exceed ten thousand dollars for each day of such violation.

[2007 Acts, ch 151, §11](#); [2018 Acts, ch 1023, §11](#)

Referred to in [§455D.19](#)

455D.26 Green advisory committee. Repealed by its own terms; [2010 Acts, ch 1166, §2](#).