TPCH Model Legislation

Section 1. The Toxics in Packaging Act

Section 2. The legislature finds and declares that:

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 and other toxic chemicals in packaging is a part of the total concern in light of their likely presence in emissions or ash when packaging is incinerated, in leachate when packaging is landfilled, or when packaging has elevated levels of toxic chemicals due to post-consumer materials being recycled into new packaging components;

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

Commented [ALH1]: Spell out the acronym here.

e. It is desirable, as a first step in reducing the toxicity of packaging waste, to eliminate the addition of these heavy metals, phthalates, and PFAS to packaging; and

f. The intent of this Act is to achieve this reduction in toxicity without impeding or discouraging the expanded use of recycled materials in the production of packaging and its components.

Section 3. Definitions:

a. **Alternative**. "Alternative" means a substitute process, product, material, chemical, strategy or combination of these that serves a functionally equivalent purpose to a chemical in a package or packaging component.

b. **Chemical.** "Chemical" means a substance with a distinct molecular composition or a group of structurally related substances and includes the breakdown products of the substance or substances that form through decomposition, degradation or metabolism.

c. **Credible scientific evidence**. "Credible scientific evidence" means the results of a study, the experimental design and conduct of which have undergone independent scientific peer review, that are published in a peer-reviewed journal or in a publication of an authoritative federal or international governmental agency, including but not limited to the United States Department of Health and Human Services; National Toxicology Program; Food and Drug Administration and Centers for Disease Control and Prevention; the United States Environmental Protection Agency; the World Health Organization; and the European Union, European Chemicals Agency.

d. **Distribution. "**Distribution" means the practice of taking title to (a) package(s) or packaging component(s) for promotional purposes or resale. Persons involved solely in delivering (a) package(s) or packaging component(s) on behalf of third parties are not considered distributors.

e. **Distributor**. "Distributor" means any person, firm or corporation who takes title to packages or packaging components, produced either domestically or in a foreign country, purchased for resale or promotional purposes.

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

g. **Intentional Introduction**. **"**Intentional Introduction**"** means the act of deliberately utilizing a regulated metal or other regulated chemical in the formation 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.

The use of a regulated metal or other regulated chemical as a processing agent or intermediate to impart certain chemical or physical changes during manufacturing, whereupon the incidental retention of a residue of said metal or chemical in the final package or packaging component is neither desired nor deliberate, is not considered intentional introduction for the purposes of this Act where said final package or packaging component is in compliance with Section 4 of this Act.

The use of post-consumer recycled materials as feedstock for the manufacture of new packaging materials, where some portion of the post-consumer package or packaging component may contain amounts of the regulated metals or chemicals but is neither desired nor deliberate, is not considered intentional introduction for the purposes of this Act where said final package or packaging component is in compliance with Section 4 of this Act.

Commented [ALH2]: Are fluoropolymers used in packaging materials? Perfluoroalkyl acids, the class of PFAS that appear to pose the greatest health risk, are used as polymerization aids during the synthesis of fluoropolymers, so incidental retention is a potential concern; if fluoropolymers are included in packaging but are not one of the target analytes in whatever methodology is employed, this provision could be a problematic loophole. That said, given that the proposed legislation applies to all PFAS, this is a moot point.

Commented [ALH3]: While the intent of this legislation is to avoid hindering recycling, note that PFAS would definitely not be broken down during the recycling process. If anything, polyfluoroalkyl precursors would transform to perfluoroalkyl acids.

h. **Manufacturer**. "Manufacturer" means any person, firm, association, partnership, or corporation producing (a) package(s) or packaging component(s) as defined in this Act.

i. **Manufacturing**. "Manufacturing" means: Physical or chemical modification of (a) material(s) to produce packaging or packaging components.

j. **Package**. "Package" means any container, produced either domestically or in a foreign country, providing a means of marketing, protecting or handling a product and shall include a unit package, an intermediate package or a shipping container as defined in American Society of Testing and Materials (ASTM) specification D 996. "Package" shall also mean and include such unsealed receptacles as carrying cases, crates, cups, pails, rigid foil and other trays, wrappers and wrapping films, bags and tubs.

k. **Packaging Component**. “Packaging Component” means any individual assembled part of a package which is produced either domestically or in a foreign country, such as, but not limited to, any interior or exterior blocking, bracing, cushioning, weatherproofing, exterior strapping, coatings, closures, inks, dyes, pigments, adhesives, stabilizers, labels or any other additives. Tin-plated steel that meets the American Society for Testing and Materials (ASTM) specification A 623 shall be considered as a single package component. Electro-galvanized coated steel and hot dipped coated galvanized steel that meets the American Society for Testing and Materials (ASTM) specifications A653, A924, A879 and A591 shall be treated in the same manner as tin-plated steel.

l. **Perfluoroalkyl and polyfluoroalkyl substances; PFAS**. "Perfluoroalkyl and polyfluoroalkyl substances" or "PFAS" means any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.

Commented [ALH4]: Is it valid to make PFAS a singular (vs. plural) noun in this case?

More importantly, is this intended to apply to specific PFAS or to the entire class? If it’s the latter, would be clearer to say “all members of the class…”

m. **Phthalates**. "Phthalates" means any member of the class of organic chemicals that are esters of phthalic acid and that contain 2 carbon chains located in the ortho position.

n. **Post-Consumer Recycled Material**: "Post-Consumer Recycled Material" means a finished material that would normally be discarded as a solid waste having completed its life cycle as a consumer item but instead is separated from mixed municipal solid waste for the purpose of recycling or reuse, including but not limited to paper, glass, plastics, and metals. Refuse-derived fuel or other material that is destroyed by incineration is not a recycled material.

o. **Recycling**. "Recycling" means the process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use.

p. **Substitute material.** “Substitute material” means a material used to replace lead, cadmium, mercury, hexavalent chromium, phthalates or PFAS in a package or packaging component.

q. **Supplier**. “Supplier” means any person, firm, association, partnership, or corporation who sells, offers for sale, or offers for promotional purposes packages or packaging components which shall be used by any other person, firm, association, partnership, or corporation to package (a) product(s).

r. **Toxic Chemical.** “Toxic chemical” is a chemical listed as a packaging chemical of high concern as listed in Section 6.

Section 4. Prohibition/Schedule for Removal of Intentional Amounts; Substitute Materials.

a. Prohibition of sale or distribution of package or packaging components containing lead, cadmium, mercury or hexavalent chromium. Beginning XXXXXX a manufacturer, supplier or distributor may not offer for sale or for promotional purposes a package or packaging component to which lead, cadmium, mercury or hexavalent chromium has been intentionally introduced during manufacturing or distribution in any amount greater than an incidental presence. The sum of the concentration levels of lead, cadmium, mercury or hexavalent chromium incidentally present in any package or packaging component shall not exceed 100 parts per million by weight (0.01%). (*for states newly adopting this legislation, Section 4(a) can take place immediately as it has already been enacted for 25+ years in 19 U.S. states*)

b. Prohibition of sale or distribution of package or packaging components containing phthalates. Beginning XXXXXX, a manufacturer, supplier or distributor may not offer for sale or for promotional purposes a package or packaging component to which phthalates have been intentionally introduced during manufacturing or distribution in any amount greater than an incidental presence. The concentration levels of phthalates incidentally present in any package or packaging component shall not exceed 100 parts per million by weight (0.01%).

c. Prohibition of sale or distribution of a package or packaging components containing PFAS. Beginning XXXXXX, a manufacturer, supplier or distributor may not offer for sale or for promotional purposes a package or packaging component to which PFAS has been intentionally introduced during manufacturing or distribution in any amount greater than an incidental presence. The concentration levels of PFAS incidentally present in any package or packaging component shall not exceed 100 parts per million by weight (0.01%).

Commented [ALH5]: This seems high. How was this cutoff derived?

d. Substitute materials. No material used to replace a chemical regulated by this Act in a package or packaging component may be used in a quantity or manner that creates a hazard as great as or greater than the hazard created by the chemical regulated by this Act. The Certificate of Compliance will require an assurance to this effect.

Commented [ALH6]: How is this measured/defined?

Section 5. Exemptions. All packages and packaging components shall be subject to this Act, unless, an individual state adopts into their law, any or all of the below exemptions, which shall then apply only in that state.

a. those 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 State or Federal law, provided that the manufacturer of a package or packaging component must petition the [state administrative agency] for any exemption from the provisions of this subsection for a particular package or packaging component based upon either criterion; and provided further that the [state administrative agency] may grant an

exemption for up to two years if warranted by the circumstances; and provided further that such an exemption may, upon reapplication for exemption and meeting the criteria of this subsection, be renewed at two-year intervals; or

b. those packages or packaging components to which lead, cadmium, mercury or hexavalent chromium have been added in the manufacturing, forming, printing or distribution process for which there is no feasible alternative, provided that the manufacturer of a package or packaging component must petition the [state administrative agency] for any exemption from the provisions of this subsection for a particular package or packaging component based upon the criterion and submit such documentation as necessary to support the request for the exemption; and provided further that the [state administrative agency] may grant an exemption for up to two years if warranted by the circumstances; and provided further that such an exemption may, upon reapplication for exemption and meeting the criterion of this subsection, be renewed at two-year intervals. For purposes of this subsection, a use for which there is no feasible alternative is one in which the petitioner conclusively demonstrates that the regulated substance is essential to the protection, safe handling, or function of the package's contents and that technical constraints preclude the use of alternatives. "No feasible alternative" does not include use of any of the regulated metals for the purposes of marketing.

Section 6. Identification and Prohibition of packaging chemicals of high concern:

In accordance with the requirements of this section, the department may periodically revise and publish a list of packaging chemicals of high concern.

1. Criteria. A chemical may be included on the list under this section only if:

A. The chemical is included on the list of chemicals of concern published by the [state administrative agency] or the chemical has been identified by an authoritative governmental entity on the basis of credible scientific evidence as being:

(1) A carcinogen, a reproductive or developmental toxicant or an endocrine disruptor; or

(2) Persistent, bioaccumulative and toxic; or

(3) Very persistent and very bioaccumulative; or

B. The [state administrative agency] determines that there is strong credible scientific evidence that the chemical is a reproductive or developmental toxicant, endocrine disruptor or human carcinogen; and

C. The [state administrative agency] determines that there is strong credible scientific evidence that the chemical meets one or more of the following additional criteria:

(1) The chemical has been found through biomonitoring studies to be present in human blood, human breast milk, human urine or other human bodily tissues or fluids; or

Commented [HAL7]: How is "very" defined in this provision?

Commented [ALH8]: The way this is written is a bit confusing. Does a chemical have to meet either 1A or 1(B&C)?

(2) The chemical has been found through sampling and analysis to be present in packaging; or

(3) The chemical has been added to or is present in a package.

2. Revisions. The [state administrative agency] may periodically review the list published pursuant to this section and shall remove from the list any packaging chemical of high concern that no longer meets the criteria of subsection 1. The [state administrative agency] may add to the list additional packaging chemicals of high concern that meet the criteria of subsection 1, except that the list under this section may not at any one time include more than 10 packaging chemicals of high concern.

3. Toxic Chemical. A packaging chemical of high concern listed pursuant to this section is defined as a toxic chemical. To fulfill this statute's goal of reducing the toxicity of packaging waste, the [state administrative agency] may:

A. prohibit by rule the sale of packaging and packaging components to which the toxic chemical has been intentionally introduced, or;

B. recommend to the state legislature that the toxic chemical be added to the prohibited chemicals identified in Section 4 of this statute, with an effective date no later than 2 years after date of enactment.

4. Regulatory efficiency. The [state administrative agency] may, in exercising its discretionary authority under this section, consider the extent to which a chemical known to be used or present in a package or packaging component is adequately regulated by the Federal Government or an agency of this State to reduce or prevent the same public health threats that would be the basis for addressing the chemical under this section.

Section 7. Certificate of Compliance:

a) A Certificate of Compliance stating that a package or packaging component is in compliance with the requirements of this Act shall be furnished by its manufacturer or supplier to its purchaser (upon request). Where compliance is achieved under any state exemption(s) provided in Section 5, the Certificate of Compliance shall state the specific basis upon which the exemption is claimed. The Certificate of Compliance shall be signed by an authorized official of the manufacturing or supplying company. The purchaser shall retain the Certificate of Compliance for as long as the package or packaging component is in use. A copy of the Certificate of Compliance shall be kept on file by the manufacturer or supplier of the package or packaging component.

b) Public Access. Certificates of Compliance, or copies thereof, shall be furnished to the [state administrative agency] and to members of the public upon request.

1. Any request from a member of the public for any Certificate of Compliance from the manufacturer or supplier of a package or packaging component shall be:

- Made in writing with a copy provided to the [state administrative agency];
- Made specific as to package or packaging component information requested;
- Responded to by the manufacturer or supplier within 60 days.

c) If the manufacturer or supplier of the package or packaging component reformulates or creates a new package or packaging component, the manufacturer or supplier shall provide an amended or new Certificate of Compliance for the reformulated or new package or packaging component to all current purchasers.

d) Enforcement: Certificate of compliance. If there are grounds to suspect that a package is being offered for sale in violation of this chapter, the [state administrative agency] may request that the manufacturer or distributor of the package provide a certificate of compliance with the applicable provisions of this chapter. Within 30 days of receipt of a request under this subsection, the manufacturer or distributor shall:

Commented [ALH9]: In the case of PFAS, how will presence/absence be determined—i.e., what analytical methods? Does TOP (total organic precursor) or TOF (total organic fluorine) analysis apply?

1. Provide the [state administrative agency] with the certificate attesting that the package does not contain a chemical regulated under this act; or

2. Notify persons who sell the package in this State that the sale of the package is prohibited and provide the [state administrative agency] with a copy of the notice and a list of the names and addresses of those notified.

Section 8. State Review:

The [state administrative agency] shall, in consultation with the Toxics in Packaging Clearinghouse (TPCH), review the effectiveness of this Act within five years of its adoption and every 5 years thereafter. The [state administrative agency] may provide a report based upon that review to the Governor and Legislature. The report may contain recommendations to add other chemicals contained in packaging to the list set forth in this Act in order to further reduce the toxicity of packaging waste, and a description of the nature of the substitutes used in lieu of lead, mercury, cadmium, hexavalent chromium, PFAS, phthalates and other regulated chemicals.

Section 9. Toxics in Packaging Clearinghouse:

The [state administrative agency] is authorized to participate in a multi-state clearinghouse to assist in carrying out the requirements of this [Title/Act/section] and help coordinate joint outreach and education, responses to manufacturer inquiries, review of exemption requests, and any other activities or related functions that benefit from the cooperative efforts of multiple states regarding implementation of their toxics in packaging provisions.

Section 10. Implementation, administration and enforcement; rules; violations:

1. The department shall implement, administer and enforce this chapter and may adopt rules as necessary for the implementation, administration and enforcement of this chapter.

2. Violations. A person that violates any provision of this chapter is subject to penalties in accordance with (the appropriate state authority). Each state to add its own enforcement provisions as necessary.

Section 11. Severability and Construction.

The provisions of this Act shall be severable, and if any court declares any phase, clause, sentence, or provision of this Act to be invalid, or its applicability to any government, agency, person, or circumstance is declared invalid, the remainder of the Act and its relevant applicability shall not be affected. The provisions of this Act shall be liberally construed to give effect to the purposes thereof.

Section 12. Effective Date.

This Act shall become effective immediately upon adoption.

As revised, December 1998, October 2004, December 2008, July 2012 and June 2020.