INITIAL STATEMENT OF REASONS
SUSTAINABLE PACKAGING FOR THE STATE OF CALIFORNIA ACT OF 2018
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TITLE 14. NATURAL RESOURCES
DIVISION 7. DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY
CHAPTER 4. RESOURCE CONSERVATION PROGRAMS
ARTICLE 8. SUSTAINABLE PACKAGING FOR THE STATE OF CALIFORNIA

PROBLEM ADDRESSED BY AND BENEFITS OF THE REGULATION

Packaging comprises an estimated 26 percent of the waste disposed in California, and single use food service packaging is a significant component of these discards, according to the Department of Resources Recycling and Recovery’s (department) 2014 waste characterization study.\(^1\) In 2018, the statewide recycling rate was estimated at 40 percent,\(^2\) well below the department’s goal of 75 percent by 2020, indicating that further efforts are needed to meet the state’s recycling goal. Reducing the amount of packaging disposed will help the department meet its goal of 75 percent recycling, composting, or source reduction of solid waste by 2020, as required by Assembly Bill (AB) 341 (Chesbro, Chapter 476, Statutes of 2011).

Additionally, non-recyclable or non-compostable food service packaging is a contaminant when it is placed in a recycling or composting container that reduces the effectiveness of those programs. For example, non-recyclable food packaging that is placed in a recycling container may impact the physical properties of recyclable materials collected through the program and harm the overall economic and technical viability of the recycling program.

Improperly discarded single use food service packaging contributes to environmental pollution, adversely impacts wildlife, and poses potential health risks to communities across the state. Efforts to increase the recovery of packaging will improve the statewide recycling rate and will have the additional benefit of reducing litter and its negative impacts to the environment. According to the National Oceanic and Atmospheric Administration (NOAA), approximately 80 percent of marine debris comes

\(^1\) CalRecycle. 2014 Disposal-Facility-Based Characterization of Solid Waste in California. 2015. [https://www2.calrecycle.ca.gov/Publications/Download/1301](https://www2.calrecycle.ca.gov/Publications/Download/1301)

from land-based sources, with food and beverage packaging making up the largest component of that debris.\textsuperscript{3} These types of food service packaging materials can enter the marine environment through inefficient or improper waste management, intentional or accidental littering, and through storm water runoff. Moreover, the chemicals found in some food service packaging may pose public health and wildlife impacts through potential exposure risk to toxic ingredients that are released from packaging into soil, compost, and water.

Senate Bill (SB) 1335 (Allen, Chapter 610, Statutes of 2018), the Sustainable Packaging for the State of California Act of 2018 (Act) requires food service facilities located in a state-owned facility, a concessionaire on state-owned property, or a business under contract to a provide food service to a state agency to dispense prepared food using food service packaging that is reusable, recyclable, or compostable. The Act further requires the department to establish criteria and a process for determining the types of food service packaging that are reusable, recyclable, or compostable. The department must publish a List of Approved Food Service Packaging (List) within 90 days of the regulation being approved and evaluate the List to add or remove products at least once every 5 years.

The Act is intended to address the above problems by requiring that state facilities only use food service packaging items that are reusable, recyclable, or compostable. The regulation implementing SB 1335 will result in the following benefits to public health and the environment:

1. Reduction of litter and cleanup costs, improved water quality, and reduced impacts to wildlife: Increasing the use of reusable, recyclable, or compostable food service packaging items in state facilities will result in less litter in the state’s waterways and marine environments where it harms wildlife and destroys habitats. Reducing litter cleanup costs will help alleviate the burden on local communities. The department estimates $300,000 in annual litter cleanup costs may be saved as a result of reducing the amount of non-recyclable food service packaging used at food service facilities.

2. Increase recovery and reuse: Materials that have robust recycling markets are more likely to be collected for recovery. Much of the food service packaging currently sold in the state, despite labeling claims of “recyclable” or “compostable,” are not compatible with California’s infrastructure and are often contaminants that negatively impact recycling and composting programs. The criteria required by the Act and regulations will help harmonize

recovery and reuse requirements throughout the state and will help the state in achieving its 75 percent source reduction, recycling, and composting goal.

3. Reduction in greenhouse gas emissions: Materials that can be composted and are accepted at compost facilities are more likely to be diverted from landfills. Diverting compostable food service packaging and the associated food waste to compost facilities will help the department achieve its organic waste diversion goals and reduce greenhouse gas emissions associated with landfilling organic materials, as required by SB 1383 (Lara, Chapter 395, Statutes of 2016).

4. Reducing toxic chemicals in food service packaging items: Certain chemicals, such as per- and polyfluoroalkyl substances, can be harmful to humans and wildlife. The regulations will reduce the amount of these chemicals contained in food service packaging. The magnitude of the reduction in toxic chemicals is unknown, but the reduction will have positive environmental and public health benefits.

GENERAL COMMENTS APPLICABLE TO STATEMENT OF REASONS

SB 1335 and the proposed regulation will further the department’s ability to meet its statewide recycling and diversion goals by establishing new food service packaging requirements on state food service facilities that will increase the distribution of food service packaging that is compatible with California’s recycling and composting streams. Specifically, the Act requires the department to evaluate food service packaging items based on criteria unique to the state (such as existing infrastructure, material markets, material composition, and potential environmental impacts) to ensure that only reusable, recyclable, or compostable packaging is used by state facilities.

SPECIFIC PURPOSE AND NECESSITY OF REGULATIONS

§17989. Definitions.
Subsection (a)

The purpose of Section 17989 is to define terms used in the regulations that have a meaning which is not readily apparent without further clarification. This section is necessary as several technical and administrative terms appear in the Act and in the regulation that require more specific descriptions to assure regulatory consistency and clarity. Subsection (a) explains that the definitions contained in this section are provided as a supplement to the definitions contained in section 42370.1 of the Public Resources Code (PRC). This section is necessary to set forth the following definitions:
Subsection (1)

Subsection (1) defines the term “accept.” This subsection clarifies that a compost facility must knowingly accept a food service packaging item as feedstock to produce finished compost. This clarification is necessary because many food service packaging items are delivered to a compost facility along with associated food waste, but the food service packaging items are often identified as contaminants that are intentionally screened out for disposal. Disposal of a food service packaging item after it has entered the compost facility does not meet the definition of “accept.” This definition is needed for clarifying how to calculate the number of compost facilities that “accept” compostable food service packaging items for further processing and may be counted toward the compostable criterion of 75 percent of compost facilities that accept compostable food service packaging.

Subsection (2)

Subsection (2) defines the term “aesthetic change.” This term is not defined in in the Act but determines when a food service packaging manufacturer must submit a new application to the department as a result of a change it makes to a food service packaging item. This definition is necessary to distinguish when a modification to a food service packaging item constitutes an aesthetic change that does not impact its material composition or construction and therefore would not require a re-evaluation to determine if it still meets the criteria for inclusion on the List. However, a “non-aesthetic” change to a food service packaging item would require a manufacturer to submit a new application pursuant to Section 17989.1(e). This definition will allow a manufacturer to determine if it has made an aesthetic change to a food service packaging item which does not require submittal of a new application to the department for evaluation.

Subsection (3)

Subsection (3) defines the term “collect.” This definition clarifies that after a food service packaging item has been used, it must be picked up and delivered to a recycling or composting facility. The definition is needed to establish a transparent, consistent definition for what constitutes collection for purposes of determining the percentage of recycling programs that collect food service packaging materials as required by Sections 17989.4(a)(3) and 17989.5(a)(1).

Subsection (4)

Subsection (4) defines the term “compost facility.” This subsection is necessary to clarify the meaning of a compost facility by referencing existing definitions in the California Code of Regulations (CCR). The purpose is to maintain consistency in the department’s regulations and to align the department’s definitions with PRC Section
42370.2(e)(1) of the statutory requirements for the Act that describe compost facilities’ process and feedstock.

**Subsection (5)**

Subsection (5) defines “cooking or food preparation technique,” a term that is used in the statutory definition of “prepared food” as codified in PRC Section 42370.1(d). This definition provides a list of three categories of multiple techniques used to cook and prepare food and beverages, such as cooking food (e.g., roasting), preparing beverages (e.g., juicing), and preparing food (e.g., icing). This definition is necessary to clarify that many techniques are used to cook and prepare food and beverage products that result in “prepared food” which would need to be served on reusable, recyclable, or compostable food service packaging, versus “mass produced” food, which is not subject to the requirements of the Act.

**Subsection (5)(A)**

Subsection (5)(A) identifies examples of common cooking techniques. This subsection is necessary because the cooking techniques used by food service facilities are one of the fundamental components necessary to identify “prepared foods,” as required by the Act.

**Subsection (5)(B)**

Subsection (5)(B) lists common beverage preparation techniques. This subsection is necessary to clarify that food service facilities must consider beverages as part of the food service packaging requirements, and that beverage preparation techniques are one of the fundamental components necessary to identify “prepared foods,” as required by the Act.

**Subsection (5)(C)**

Subsection (5)(C) lists common food preparation techniques. This subsection is necessary because the food preparation techniques used by food service facilities are one of the fundamental components necessary to identify “prepared foods,” as required by the Act.

**Subsection (6)**

Subsection (6) defines the term “department” to mean the Department of Resources Recycling and Recovery. This definition is needed to clarify that “department,” as used in the regulation, refers to the Department of Resources Recycling and Recovery and not to the Department of General Services, which also bears responsibilities under the Act.
**Subsection (7)**

Subsection (7) further clarifies the statutory definition of “food service facility,” as codified in PRC Section 42370.1(b). This subsection is necessary to clarify that there are three types of State-related operations or businesses that are subject to the requirements of the Act. The definition provides specific examples to more clearly describe what constitutes a food service facility for purposes of determining compliance with the Act.

**Subsection (7)(A)**

Subsection (7)(A) identifies examples of operations or businesses located in a state-owned facility. This subsection is necessary to define one of three scenarios that identify whether an operation or business is considered a “food service facility” for purposes of the Act and provide illustrative examples.

**Subsection (7)(B)**

Subsection (7)(B) identifies that an operation or business operating on State property or acting as a concessionaire on State property is considered a “food service facility” if it also meets the requirements of subsection (7). This subsection is necessary to define one of three scenarios that identify whether an operation or business is considered a “food service facility” for purposes of the Act.

**Subsection (7)(C)**

Subsection (7)(C) identifies that an operation or business under contract to provide food service to a State agency is considered a “food service facility” if it also meets the requirements of subsection (7). This subsection is necessary to define one of three scenarios that identify whether an operation or business is considered a “food service facility” for purposes of the Act.

**Subsection (8)**

Subsection (8) defines the term “food service packaging item.” This subsection is necessary to clarify that this definition refers to a specific combination of a food service packaging type (e.g., plate) and material (e.g., polyethylene terephthalate). It further specifies that the description of “material” must be specific to the type of plastic used to make the food service packaging item as opposed to describing the material more broadly as “plastic.” This subsection is necessary to ensure that food service packaging manufacturers provide the required information in the application submitted to the department so that it can evaluate the functionality and composition of a food service packaging item against the applicable criteria for inclusion on the List.
Subsection (9)

Subsection (9) defines the term “food service packaging manufacturer.” This subsection clarifies that the entity responsible for submitting the information contained in an application to the department is the manufacturer of a food service packaging product. This is necessary because the food service packaging manufacturer possesses direct, first-hand and potentially proprietary knowledge of the materials used to make the food service packaging item and is responsible to test its product(s) to demonstrate it meets the applicable criteria.

Subsection (10)(A)

Subsection (10) defines the term “food service packaging type” or “type of food service packaging.” This subsection is necessary to clarify the conditions under which a food service packaging product is used, whereby it meets the statutory definition of “food service packaging” pursuant to PRC Section 42370.1(c), and to provide the list of statutorily excluded types of food service packaging for ease of reference by the regulated community. A type of food service packaging must meet at least one of three minimum conditions stated in the following subsections to meet this definition and is subject to the requirements of the Act.

Subsection (10)(A)(i)

Subsection (10)(A)(i) clarifies that a food service packaging type must come into direct contact with the prepared food or beverage to be considered a food service packaging type. This subsection is necessary to define one of three minimum conditions necessary to determine whether a type of food service packaging is subject to the requirements of the Act.

Subsection (10)(A)(ii)

Subsection (10)(A)(ii) identifies that a food service packaging type must keep the prepared food contained while transporting it on or off a food service facility’s premises. This subsection is necessary to define one of three minimum conditions necessary to determine whether a type of food service packaging is subject to the requirements of the Act.

Subsection (10)(A)(iii)

Subsection (10)(A)(iii) clarifies that a food service packaging type must aid in the consumption of the prepared food or beverage. This subsection is necessary to define one of three minimum conditions necessary to determine whether a type of food service packaging is subject to the requirements of the Act.
Subsection (10)(B)

Subsection (10)(B) provides clarifying examples of food service packaging types that are not subject to the requirements of the Act. This subsection is necessary to make the “food service packaging type” or “type of food service packaging” definition complete by also including specific items that might otherwise meet the definition but are statutorily exempt.

Subsection (11)

Subsection (11) defines the term “group of food service packaging items” or “group of items.” This definition clarifies that multiple food service packaging items made from the same material can be consolidated into a group and may be submitted in a single application by a person acting on behalf of food service packaging manufacturers. The purpose of this subsection is to define a term used in later regulatory provisions that are intended to reduce the administrative and financial burden that would otherwise be placed on individual food service packaging manufacturers to independently complete and submit applications for the same type of food service packaging product.

Subsection (12)

Subsection (12) defines the term “hauler” by referencing the existing definition in CCR, Title 14 to maintain consistency in the department’s regulations. This subsection is necessary to clarify the term “hauler” as it is used in the regulations for the purposes of evaluating a recycling program under the recyclable criteria.

Subsection (13)

Subsection (13) defines the term “jurisdiction” as having the same meaning as defined in PRC 40145 to maintain consistency between the department’s regulations and statute. This subsection is necessary in order to clarify that a jurisdiction, as it is used in the regulations, is the entity that must establish a recycling program as one of the criteria to determine recyclability.

Subsection (14)

Subsection (14) defines the term “List of Approved Food Service Packaging” or “List.” This subsection designates the name of the department’s list that will identify food service packaging items that are reusable, recyclable, or compostable and will be published on the department’s website. This is necessary to ensure that food service facilities can readily find the List and verify they are purchasing compliant food service packaging items. The List also needs to be readily identifiable and accessible to the Department of General Services pursuant to PRC Section 42370.6(b).
Subsection (15)
Subsection (15) defines “mass produced,” a term that is used in the statutory definition of “prepared food” as codified in PRC Section 42370.1(d). This definition is necessary to clarify that “mass produced” means food or beverage products that are prepared for general sale by a third-party not affiliated with a food service facility as opposed to “prepared food,” which is subject to the Act. The purpose of this definition is to clarify which types of food are mass produced and are not required to be served in food service packaging that is subject to the requirements of the Act and regulations.

Subsection (16)
Subsection (16) defines the term “material.” This subsection is necessary to clarify what is meant by “description of the material(s) used” to manufacture a food service packaging item or group of items that must be included in an application submitted to the department pursuant to Section 17989.6(a)(4). This subsection specifies that a description of the material(s) must include the name of the feedstock used to make a food service packaging item and it includes several examples of types of feedstocks for clarity. This subsection further establishes that coatings or other ingredients used to manufacture a food service packaging item must be included in the description of the “material.” This is necessary because feedstocks, coatings, and other ingredients can affect the reusability, recyclability, or compostability of a food service packaging item and the department must be able to evaluate whether a food service packaging item meets the established criteria. This subsection also clarifies that a plastic material used to make a food service packaging item may be identified by its plastic polymer name or by its corresponding #1-6 resin name pursuant to PRC Sections 18013-18015, excluding resin code #7 because that resin code is not defined as a specific material, may include multiple plastic polymers, and is of limited utility in determining if a material type is marketed for sale.

Subsection (17)
Subsection (17) defines the term “on-site.” The version of the proposed regulations that was approved for noticing incorrectly includes this definition. This term is not used in the proposed regulations and may be removed during formal rulemaking.

Subsection (18)
Subsection (18) defines the term “person.” This subsection clarifies that a person has the same meaning as defined in PRC 40170, and is necessary to describe the individual or entities that may act on behalf of a food service packaging manufacturer for purposes of the Act.
**Subsection (19)**

Subsection (19) defines the term “per- and polyfluoroalkyl substance” (PFAS). This definition provides clarity to the regulated community and is necessary because it defines the chemicals that must not be contained in a food service packaging item at a level above 100 parts per million, pursuant to the public health and litter impacts criteria in Section 17989.2 (a)(3).

**Subsection (20)**

Subsection (20) defines “plastic bag,” a term that is used in the statutory definition of “food service packaging” as codified in PRC Section 42370.1(c). This definition provides a description of a plastic bag’s style and design and is necessary to clarify what type of plastic bag meets the definition of “plastic bag” and is not subject to the requirements of the Act and regulations.

**Subsection (21)**

Subsection (21) defines the term “Proposition 65 list.” This definition describes the name of the list that indicates the chemicals that must be disclosed by a food service packaging manufacturer if the use of its food service packaging item results in exposure to those specified chemicals. This subsection is necessary to identify the source that must be used by a food service packaging manufacturer in order to complete the application requirement in Section 17989.6(a)(6). The subsection is also necessary to clarify the origin of the specific names of chemicals that will be included in the List that is published and maintained by the department.

**Subsection (22)**

Subsection (22) defines the term “recycling” by referencing the existing definition in PRC Section 40180. This subsection provides clarity regarding how the department shall evaluate whether a food service packaging item is considered recyclable pursuant to Section 17989.4. This subsection is necessary to maintain consistency in the department’s regulations and to clarify the comprehensive actions and processes that constitute “recycling.”

**Subsection (23)**

Subsection (23) defines the term “recycling facility” by referencing the definition of “recycling center” in CCR, Title 14. This subsection is necessary to maintain consistency in the department’s regulations and to clarify the types of facilities that must receive and process food service packaging items from takeback programs as one pathway to meet the recyclable criteria.
Subsection (24)

Subsection (24) defines the term “recycling program” by referencing the existing definition of “diversion program” in PRC section 40127 and clarifies that only programs that regularly collect recyclables and organics within a jurisdiction by an authorized hauler will be considered eligible for meeting the recyclable and compostable criteria. Materials collected by an individual for personal use do not meet the definition. This subsection is necessary to establish a transparent, consistent definition for what constitutes a recycling program and may be counted toward the required percentage of recycling programs that collect a food service packaging material for recycling or composting.

Subsection (25)

Subsection (25) defines the term “safe and timely manner.” This subsection is necessary to clarify the requirements of the compostable food service packaging criteria, pursuant to Section 17989.5(a)(3). This subsection specifies the certification requirements and timeframe that determine if a food service packaging item meets one of the compostable food service packaging criteria. Specifically, this definition clarifies that the food service packaging item must be third-party certified to demonstrate 90 percent conversion of organic carbon to carbon dioxide in no more than 60 days in the active compost process and must also show that the degraded item has no adverse impacts on the ability of the compost to support plant growth. This subsection is necessary to establish criteria requirements that ensure approved food service packaging items have been appropriately tested and certified to align with the timeframes of a typical California commercial compost facility to process compostable food service packaging during the course of its routine operations.

Subsection (26)

Subsection (26) defines the term “sort.” This subsection is necessary to clarify the activities that constitute sorting of food service packaging materials so the department can evaluate whether a material has sufficient value as a secondary commodity to be recycled. This definition is consistent with the Act’s statutory requirements in PRC 42370.2(d)(3) that requires the department to consider whether a type of food service packaging is regularly sorted and aggregated into defined streams for recycling processes.

Subsection (27)

Subsection (27) defines the term “takeback program.” This definition is necessary to clarify requirements of a takeback program, pursuant to Section 17989.4(a)(3)(B). This subsection clarifies requirements such as convenience for consumers and options for deposits and incentives, in order for the department to evaluate whether a food service
packaging item included in a takeback program meets the recyclable criteria. The purpose is to establish a transparent, consistent definition for what constitutes a takeback program for purposes of determining recyclability. This definition is needed for clarifying “takeback program” for the purposes of establishing the recyclable criterion that 75 percent food service packaging items included in a takeback program are collected and recycled.

**Subsection (28)**

Subsection (28) defines the term “third-party certification entity.” This subsection specifies the type of entity that must test and certify a food service packaging item to demonstrate it meets the applicable criteria in the regulation. This subsection is necessary to clarify what type of accreditation an independent laboratory needs in order to perform the required testing methods for certifying that a food service packaging item complies with the reusable, recyclable, or compostable criteria.

**Subsection (29)**

Subsection (29) defines the term “transfer/processor” by referencing the existing definition in CCR, Title 14. This definition is necessary to maintain consistency in the department’s regulations and to clarify “transfer/processor” as that term is used in the regulations for the purposes of determining that the recyclable criterion that 75 percent of transfer/processors sort and aggregate a food service packaging material into a single-named material bale, pursuant to Section 17989.4(a)(3)(A), has been met.

**§17989.1. List of Approved Food Service Packaging.**

**Subsection (a)**

Subsection (a) establishes the minimum information that will be included on the List, as stated in the following six subsections, for each approved food service packaging item. This subsection is necessary in order to demonstrate what is required to show compliance with the requirements of the Act and regulations and to provide transparency to stakeholders and the general public about the attributes of the approved items. It is also necessary to facilitate purchasing of approved food service packaging items by food service facilities and for updating state contract manuals and other materials published by the Department of General Services, as required by the Act.
Subsection (a)(1)

Subsection (a)(1) establishes that the List will specify whether a food service packaging item meets the requirements to be reusable, recyclable, or compostable. This subsection is necessary in order for food service facilities to identify and select the preferred type of food service packaging to purchase and to ensure the food service packaging items are appropriately managed (recycled or composted) at end-of-life.

Subsection (a)(2)

Subsection (a)(2) establishes that the List will include a description of the food service packaging type. This subsection is necessary in order for food service facilities to have the necessary information to purchase the appropriate types of food service packaging items that meet their needs.

Subsection (a)(3)

Subsection (a)(3) establishes that the List will include the names of the material(s) used to manufacture a food service packaging item. This subsection is necessary in order for food service facilities to have the necessary information about the specific composition of a food service packaging item to determine if it meets their needs.

Subsection (a)(4)

Subsection (a)(4) establishes that the List will include the size of the food service packaging item. This subsection is necessary in order for food service facilities to have the necessary information to purchase the appropriate sizes of food service packaging items that meet their needs.

Subsection (a)(5)

Subsection (a)(5) establishes that the List will include the name of the food service packaging manufacturer. This subsection is necessary in order for food service facilities to have the necessary information regarding what company made the food service packaging item for transparency and to determine where to get more information and purchase the food service packaging items that meet their needs.

Subsection (a)(6)

Subsection (a)(6) establishes that the List will include the names of chemicals on the Proposition 65 list that are contained in the food service packaging product. This subsection is necessary to provide transparency about the chemicals used to manufacture a food service packaging item and to allow the public to be informed of potential public health risks associated with exposure to these chemicals.
Subsection (b)

Subsection (b) establishes the process by which the initial List shall be developed, as stated in the following two subsections. This subsection is necessary to be consistent with requirements in statute for developing the List that must be produced for use by food service facilities and the Department of General Services.

Subsection (b)(1)

Subsection (b)(1) establishes that food service packaging manufacturers, or those acting on their behalf, have up to 30 days after the regulations become effective to submit an application to the department for evaluation in order to be considered for the initial List. This subsection is necessary to provide clarity to food service packaging manufacturers regarding application submittal timelines. Statute requires the department to publish the List within 90 days after the regulations are approved. Therefore, food service packaging manufacturers must submit an application within 30 days in order to provide the department sufficient time to perform a completeness review and evaluation, make a determination, and publish a List of approved types of food service packaging within 90 days as required by the Act.

Subsection (b)(2)

Subsection (b)(2) establishes that the department will review applications in the order they are received. This subsection is necessary to provide transparency about the application review process and to establish a neutral and unbiased method for evaluating applications. This subsection is also necessary to clarify that only applications for food service packaging items that meet the applicable criteria will be added to the List and that submitting an application does not guarantee that the food service packaging item will be added to the List.

Subsection (c)

Subsection (c) establishes a process for the department to evaluate and update the List with additional food service packaging items after the initial List is published. This subsection is necessary to clarify that the department will continuously evaluate applications in the order they are received and that the food service packaging items that meet the applicable criteria will be added to the List on an ongoing basis. This continuous evaluation process is intended to recognize that packaging technologies and innovations are constantly evolving, and to allow opportunities for manufacturers to submit applications for new types of food service packaging to be added to the List.

Subsection (d)

Subsection (d) states that the department must notify the Department of General Services and the public no more than 30 days after the List is updated. This subsection
is necessary to ensure that the Department of General Services and the public receives timely notification of changes made to the List. Notification will assist the Department of General Services in complying with its responsibility to revise relevant state contracting and procurement rules and procedures pursuant to PRC Section 42370.6

**Subsection (e)**

Subsection (e) establishes the process for application resubmittal after a non-aesthetic change is made to a food service packaging item. This subsection is necessary to clarify that non-aesthetic changes made to a food service packaging item require a manufacturer to submit a new application within 30 days. The timeframe of 30 days ensures that a new application is submitted promptly after the changes are made and that the department must review a food service packaging item to evaluate if the changes affecting its material composition or construction impact compliance with the applicable criteria. If so, the department will notify the manufacturer and the food service packaging item will be removed from the List.

**Subsection (f)**

Subsection (f) clarifies that the department will remove a food service packaging item from the List if it does not meet the requirements of the Act. This subsection is necessary to establish that the department will notify a manufacturer if an approved food service packaging item no longer meets the applicable criteria and will be removed from the List.

**Subsection (g)**

Subsection (g) establishes that a food service packaging manufacturer must submit a new application to the department within 180 days of being notified that the List is being evaluated. This subsection is necessary to align with PRC 42370.3(b) which requires the department to regularly, but no less than once every five years, evaluate the List to determine if a food service packaging item is reusable, recyclable, or compostable. The subsection further establishes that the department may remove or add a type of food service packaging item following its evaluation. The timeframe of 180 days is intended to provide a food service packaging manufacturer with adequate time to prepare and submit an application for an item or groups of items to the department for evaluation. This subsection also states that the department may remove a food service packaging item if a new application is not received. This is necessary to ensure all items on the List are in compliance with the Act.

Subsection (a)
Subsection (a) establishes the criteria to minimize impacts on public health, wildlife, and litter as stated in the following five subsections. This subsection is necessary to be consistent with PRC 42370.2(g) that requires the department to consider potential impacts on litter, public health, and wildlife.

Subsection (a)(1)
Subsection (a)(1) establishes that food service packaging items that are also subject to the Toxics in Packaging Prevent Act (Health and Safety Code 25214.11 et seq.) must not contain lead, mercury, cadmium, or hexavalent chromium or must not exceed 100 parts per million by weight of the sum of these metals (Health and Safety Code 25214.13(c)) because these substances are harmful to public health. This subsection is necessary to protect public health by limiting the amount of heavy metals in food service packaging.

Subsection (a)(2)
Subsection (a)(2) establishes that a food service packaging manufacturer or person acting on its behalf must disclose to the department any chemicals that are on the Proposition 65 list (Health and Safety Code 25249 et seq.). Chemicals on the Proposition 65 list may be intentionally added or be a known contaminant in the manufacturing process used to make food service packaging items. This subsection is necessary to inform the public of potential health risks associated with chemicals that are known to the State of California to cause cancer, birth defects, or other reproductive harm. By informing the public of these health risks the public will be better informed when making purchasing decisions for food service packaging items.

Subsection (a)(3)
This section specifies the requirement for plastic or fiber-based food packaging that is recyclable or compostable to have less than 100 parts per million (ppm) PFASs, as measured by total fluorine. This section is necessary to protect public health and wildlife, as required by the Act. Per- and Polyfluoroalkyl Substances, or PFASs, are a class of thousands of chemicals of growing concern due to their impacts on public health and the environment. PFASs or their degradation products, such as perfluoroalkyl acids (PFAAs), persist in the environment after use, and are associated with harm to humans and to wildlife, such as reproductive and developmental toxicity,
carcinogenicity, and liver toxicity. Fiber-based food packaging, which can be made from paper, paper board, and molded fiber, can contain PFASs to render the packaging resistant to oil, grease, and water. While most research on food packaging has focused on fiber-based products, the department is also concerned about the potential uses of PFASs in plastic food packaging manufacturing, and because of preliminary testing on one plastic food service item that had 1,300 ppm total fluorine.

Food packaging treated with PFASs can expose humans to health risks during the use of the products because PFASs can migrate into the food. These products can also expose humans and wildlife to PFASs through multiple pathways related to the product’s end-of-life management practices. For example, the food service packaging items subject to this requirement are intended to be composted or recycled. Higher levels of PFASs in compost has been associated with food packaging. PFASs can be taken up by plants, where they bioaccumulate in the edible portions of plants that are consumed by humans and wildlife when contaminated soil conditioners or treatments (e.g., compost, biosolids) are land applied. Recycling paper and plastic food service packaging may also result in environmental releases of PFASs due to management of

9 Food and Drug Administration. Inventory of Effective Food Contact Substance (FCS) Notifications, see Food Contact Notifications #206, 255, 628, 827, 1097, 1676 for examples. 2020. https://www.accessdata.fda.gov/scripts/fdcc/?set=FCN
10 Food and Drug Administration. Inventory of Effective Food Contact Substance (FCS) Notifications, see Food Contact Notifications #260, 1255, 1560, and 1601 for examples. 2020. https://www.accessdata.fda.gov/scripts/fdcc/?set=FCN
12 Personal communication. Maureen Kinyua, University of California, Davis. 2019.
14 Choi et al. Perfluoroalkyl Acid Characterization in U.S. Municipal Organic Solid Waste Composts. 2019. DOI: 10.1021/acs.estlett.9b00280
the residuals and byproducts. Land-applied papermill sludge and ash have been associated with contaminating crops on a dairy farm that resulted in high concentrations of PFASs in the farm’s milk.\textsuperscript{16} The plastic recycling process requires the use of water, which may be discharged to wastewater treatment plants or filtered onsite (department staff observations), and PFASs are typically not removed during wastewater treatment but certain PFASs partition to biosolids.\textsuperscript{17} Residuals remaining after onsite filtration may be discarded in landfills, which can also result in environmental exposures via landfill leachate.\textsuperscript{15}

The proposed regulations specify that recyclable or compostable food packaging made from plastic or fiber contain no more than 100 ppm total fluorine to limit exposure to PFASs. The 100 ppm total fluorine threshold in the proposed regulation is consistent with local ordinances that seek to limit PFASs in food packaging.\textsuperscript{18,19,20} Some industry organizations, including the leading certifier of compostable products in North America\textsuperscript{21} and an organization that conducts field tests of compostable products,\textsuperscript{22} also require certified compostable products to contain no more than 100 ppm total fluorine to limit the potential for PFASs in the resulting compost.

The proposed 100 ppm total fluorine threshold is not based on a risk assessment. A human health risk assessment involves estimating exposure and thus would require more information on exposure from this product throughout its life cycle, including migration data for PFASs (including impurities and contaminants). Additionally, more toxicity data would be needed for many of the PFASs in order to adequately estimate risk from exposure. For example, a risk assessment would require the development of Reference Doses for specific PFASs with enough whole animal or human data, and Relative Potency Factors for other PFASs to quantify the health effects from exposure.

\textsuperscript{16} Natural Resources Defense Council. America’s Dairyland May Have a PFAS Problem. 2019. \url{https://www.nrdc.org/stories/americas-dairyland-may-have-pfas-problem}
\textsuperscript{17} Department of Toxic Substances Control. Chemical Profile for Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs) in Carpets and Rugs. see page 20. 2018. \url{https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/10/Product-Chemical-Profile-PFAS-Carpets-and-Rugs.pdf}
\textsuperscript{21} Biodegradable Products Institute, Incorporated. Position on Fluorinated Chemicals. 2019. \url{https://Biodegradable Products Instituteworld.org/page-1857568}
to complex mixtures of PFASs. An ecological risk assessment would also require additional toxicity and exposure data to quantify the risk from these products to wildlife. Nonetheless, the threshold of 100 ppm total fluorine, at a minimum, will limit the amount of PFASs in food service packaging on the List because products that were identified as “likely containing fluorinated compounds” had an average of five to ten times higher detections of total fluorine compared to those that had “low fluorine” designation.

This proposed threshold is based on a total fluorine measurement, as opposed to PFAS-specific testing. Chemical-specific chromatographic-based methods (i.e., liquid chromatography, gas chromatography) have not been developed for PFASs. PFASs are a large class of structurally diverse chemicals posing a considerable challenge for chemical-specific analytical methods development. Therefore, total fluorine measurements (i.e., combustion ion chromatography (CIC), particle-induced γ-ray emission spectroscopy (PIGE), and instrumental neutron activation analysis (INAA)) allow for a rapid screening technique to quantify the total fluorine content independent of molecular structure.

Subsection (a)(4)

Subsection (a)(4) establishes that food service packaging items may be removed from the List if another state or federal department identifies a public health concern with a food service packaging item. This subsection is necessary to allow the department to protect public health or the environment if another state or federal department identifies the potential for harm from a food service packaging item or a food service packaging material.

Subsection (a)(5)

Subsection (a)(5) establishes that the department may not include or may remove from the List a food service packaging item that is subject to local ordinances that ban or restrict the material type as a result of litter or marine debris concerns. This subsection is necessary because statute requires the department to consider potential impacts of littered food service packaging on the environment in the development of its criteria. This subsection is necessary to allow the department to protect the environment from

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litter impacts based on determinations that the food service packaging item contributes to litter or marine debris.

§17989.3. Reusable Food Service Packaging Criteria.

Subsection (a)
Subsection (a) establishes that a reusable food service packaging item included on the List must meet the public health and litter impacts criteria in Section 17989.2 and one of the two criteria listed in the following subsections. This subsection is necessary to establish all the criteria that determine whether a food service packaging item is reusable and informs food service packaging manufacturers and food service facilities of the specific criteria the department will utilize to determine whether a food service packaging item is reusable.

Subsection (a)(1)
Subsection (a)(1) establishes standards for cleaning, sanitizing, and durability the department will use to determine if a food service packaging item is reusable. This subsection states that cleaning and sanitizing processes must conform with the mechanical sanitization requirements pursuant to Health and Safety Code Sections 114101 and 114099.7 that define surface temperature, cleaning solution composition, and mechanical machine washing. The minimum threshold of 125 cycles is necessary to provide clarity for testing the durability of a food service packaging product and aligns with the number of cycles required by Germany’s standard DIN EN 12875-1 for testing the mechanical dishwashing resistance of utensils. This subsection is also necessary to clarify that an independent, accredited laboratory must certify the washing and durability requirements in order to provide reliable certification test results from a neutral and qualified third-party.

Subsection (a)(2)
Subsection (a)(2) establishes that a food service packaging item is reusable if the manufacturer provides a minimum one-year express warranty that the item can be reused for one-year or the item will be replaced at the manufacturer’s expense. This subsection is necessary to provide an alternate method of compliance for a food service packaging manufacturer that produces a food service packaging item and already has a method in place to ensure consistent use and durability of its product, as opposed to

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incurring the financial burden of demonstrating compliance by meeting the certification requirements of subsection (a)(1).

§17989.4. Recyclable Food Service Packaging Criteria.

Subsection (a)

Subsection (a) establishes that a recyclable food service packaging item included on the List must meet the public health and litter impacts criteria in Section 17989.2 and the three criteria listed in the following subsections. This subsection is necessary to inform food service packaging manufacturers and food service facilities of all the criteria the department will use to determine whether a food service packaging item is recyclable.

Subsection (a)(1)

Subsection (a)(1) establishes that a food service packaging item must be a minimum of two inches, measured in two dimensions. This subsection is necessary to ensure food service packaging items can be captured for recycling by processing equipment at material recovery facilities (MRFs). Items smaller than two inches are not likely to be recovered and are typically disposed. The Association of Plastic Recyclers “Guide for Plastics Recyclability”28 states that items smaller than two inches in two dimensions are typically lost from industry standard screen sizes and are considered contaminants and disposed. Without this size requirement, even materials that meet all other “recyclable” criteria will not be processed and aggregated for recovery.

Subsection (a)(2)

Subsection (a)(2) establishes that the food service packaging item must not contain additives that accelerate fragmentation of the food service packaging item. According to the Association of Plastic Recyclers,28 degradable additives may shorten the useful life of the recycled product. This subsection is necessary to ensure food packaging items included on the List as recyclable to not contain additives that would contaminate the recycling stream and adversely impact recycling programs.

Subsection (a)(3)

Subsection (a)(3) establishes the criteria for the department to determine if a food service packaging item is regularly collected and recycled. This subsection is necessary to clarify the two pathways, as stated in the following two subsections, for a manufacturer to demonstrate that a food service packaging item is regularly collected

and recycled. The intent of this subsection is to provide flexibility for manufacturers to demonstrate compliance with the recyclable criteria.

**Subsection (a)(3)(A)**

Subsection (a)(3)(A) establishes the first of two pathways to demonstrate a food service packaging item is collected and recycled. A minimum of 75 percent of recycling programs, as defined in subsection 17989(a)(24), must collect the food service packaging material and the material must be sorted and aggregated into a single named bale by a minimum of 75 percent of transfer/processors.

The requirement for sorting and aggregating into a single named material bale aligns with PRC Section 42370.2(d)(6) that require the department to consider whether a food service packaging material is recycled in sufficient quantity and quality to maintain market value. Single named material bales, such as polyethylene terephthalate (PET) plastic or corrugated cardboard, have higher market value due to relatively little contamination when produced by the state’s existing collection, sorting, and recycling infrastructure. In contrast, the value of mixed material bales, such as plastics #3-7, is much lower due to the high costs of secondary sorting to screen out contaminants. Additionally, there are limited to non-existent markets for each of the resins in a #3-7 bale. Export markets for mixed material bales have largely vanished in the past several years due to China’s multiple policies that restrict imports of contaminated plastic and fiber bales, forcing more of these materials to remain in California where the market value of single named material bales is generally greater than mixed bales.

The minimum criteria of 75 percent of recycling programs and transfer/processors is necessary to align this subsection with the state’s recycling goal for not less than 75 percent of solid waste generated to be source reduced, recycled, or composted by the year 2020 established by AB 341.

This subsection is necessary in order to clarify the minimum percentage of recycling programs and transfer/processors that collect, sort, and aggregate a food service packaging material in order for the department to determine recyclability.

**Subsection (a)(3)(B)**

Subsection (a)(3)(B) establishes a second approach to demonstrate recyclability of a food service packaging item. Takeback programs, as defined in subsection 17989(a), must collect a minimum of 75 percent of food service packaging items for reuse or recycling in order for the department to consider the item recyclable. Similar to subsection (a)(3)(A), the criteria of 75 percent aligns this subsection with the state’s recycling goal for not less than 75 percent of solid waste generated to be source reduced, recycled, or composted by the year 2020 established by AB 341. This subsection is necessary to provide an alternative method for food service packaging
items, that may not meet the recycling program criteria in subsection (a)(3)(A), to meet the recyclable criteria and to allow for a regional approach pursuant to PRC Section 42370.2(b)(3).

**Subsection (a)(3)(B)(i)**

Subsection (a)(3)(B)(i) establishes that takeback programs that include reuse must indicate how many times the food service packaging item may be reused. This subsection is necessary so that the department can evaluate the number of times a food service packaging item may be reused prior to being recycled and to consider reuse, which is preferable to recycling, when evaluating if 75 percent of the items collected by the takeback program are transported to a transfer/processor or recycling facility for aggregation.

**Subsection (a)(3)(B)(ii)**

Subsection (a)(3)(B)(ii) establishes that a minimum of 75 percent of food service packaging items must be collected by the takeback program, and those items must be transported to a transfer/processor or recycling facility for aggregation into a single named material bale. This subsection is necessary to clarify that the food service packaging items used in a takeback program must be collected for recycling to meet the criteria.

**Subsection (a)(3)(C)**

Subsection (a)(3)(C) establishes that mixed paper bales are considered a single named material bale. This is necessary because the paper items comprising a mixed paper bale are placed into a pulper for recycling as one unit, as opposed to being separated prior to recycling. In contrast, mixed plastic bales require further processing into individual resin types prior to recycling.

**§17989.5. Compostable Food Service Packaging Criteria.**

**Subsection (a)**

Subsection (a) establishes that a compostable food service packaging item included on the List must meet the public health and litter impacts criteria in Section 17989.2 and the four criteria listed in the following subsections. This subsection is necessary to inform food service packaging manufacturers and food service facilities of all the criteria the department will use to determine whether a food service packaging item is compostable.
Subsection (a)(1)

Subsection (a)(1) establishes that a minimum of 75 percent of organics recycling programs must collect the food service packaging material for composting. PRC Section 42370.2(e)(3) requires the department to consider whether a food service packaging item is regularly collected. The minimum criteria of 75 percent is necessary to align this subsection with the state’s recycling goal for not less than 75 percent of solid waste generated to be source reduced, recycled, or composted by the year 2020 established by AB 341. This subsection clarifies the minimum percentage of organics recycling programs that must collect a food service packaging material in order for the department to determine it is compostable.

Subsection (a)(2)

Subsection (a)(2) establishes that a food service packaging item must be accepted by a minimum of 75 percent of compost facilities permitted to accept mixed materials. This is necessary to clarify that only the facilities that “accept” mixed materials, as defined in subsection 17989(a)(1), and not all composting facilities located in the state shall be counted toward the 75 percent threshold. Only compost facilities permitted to accept mixed materials are included because only such facilities are permitted to accept food waste. Compost facilities that knowingly accept compostable food service packaging must be permitted to accept food waste as the packaging used to serve prepared food will frequently be contaminated with food waste. Similar to subsection (a)(1), the minimum criteria of 75 percent is necessary to align this subsection with the state’s recycling goal for not less than 75 percent of solid waste generated to be source reduced, recycled, or composted by the year 2020 established by AB 341.

Subsection (a)(3)

Subsection (a)(3) establishes the requirement for a food service packaging item to biodegrade in a “safe and timely manner” as defined in subsection 17989(a)(25). This is necessary as PRC 42370.2(e)(1) requires the department to consider whether a food service packaging item will break down in a safe and timely manner. This subsection is necessary to establish one of the criteria requirements needed to ensure that food service packaging items have been appropriately tested and certified to biodegrade within the timeframes used by commercial compost facilities in California prior to placement on the List.

Subsection (a)(4)

Subsection (a)(4) establishes that food service packaging items labeled “compostable” must comply with the Federal Trade Commission Guides for the Use of Environmental Marketing Claims (Part 260 commencing with Section 260.1 of Subchapter B of Chapter I of Title 16 of the Code of Federal Regulations.) These guidelines specify criteria that
promote clear and easily identifiable environmental labeling with emphasis on scientifically substantiated claims regarding compostability and degradability. This subsection is necessary to ensure that all compostable food service items abide by federal labeling laws in order to provide clear and easily identifiable environmental labeling for consumers.

§17989.6. Application Requirements and Submittal Process.

Subsection (a)

Subsection (a) establishes the information, as stated in the following eight subsections, that a food service packaging manufacturer, or person acting on its behalf, must submit to the department as part of an application to add an item to the List. This subsection also clarifies the application must be submitted electronically. This is necessary in order to inform manufacturers of the information the department requires in the application, and to clarify the method of submittal.

Subsection (a)(1)(A) through (F)

Subsection (a)(1)(A) through (F) specifies the information that must be submitted in the application for each food service packaging item or group of items. This information is necessary to assist the department in communicating with the food service packaging manufacturer, or person acting on their behalf. The contact name, contact title, company or organization name, mailing and physical addresses, phone number, email address, and manufacturer name are necessary to allow for efficient correspondence.

Subsection (a)(2)

Subsection (a)(2) specifies that the application must contain a statement that a food service packaging item or group of items is being submitted to be considered for evaluation against the reusable, recyclable, or compostable criteria. This subsection is necessary to clarify for the department which criteria should be used in its evaluation.

Subsection (a)(3)

Subsection (a)(3) specifies that the application must include a description of the food service packaging items or group of items. This subsection is necessary for the department to determine whether the item meets the definition of “food service packaging type” under Section 17989(a)(10) and to confirm it is not one of the excluded types of food packaging not subject to the requirements of the Act. In the case of a submission for a group of food service packaging items, it will also assist the department in determining whether a group submittal is possible or if items need to be submitted separately for individual consideration.
**Subsection (a)(4)**

Subsection (a)(4) specifies that the application must include a description of the material(s) used to manufacture the food service packaging item or group of items. This subsection is necessary because the material is a fundamental component of determining compliance with the criteria and the department requires this information in order to perform its evaluation of a food service packaging item or group of items.

**Subsection (a)(5)**

Subsection (a)(5) specifies that the application must include documentation that the food service packaging item or group of items meet the public health criteria described in Section 17989.2(a)(1), if applicable. This subsection is necessary because it provides the department the necessary information to evaluate whether a food service packaging item meets the criteria established by Section 17989.2(a)(1). This information is not otherwise publicly available.

**Subsection (a)(6)**

Subsection (a)(6) specifies that the application must include the chemical name(s) and Chemical Abstract Services Registry Number(s) (CASRN(s)) to demonstrate compliance with the public health criteria required by Section 17989.2(a)(2). This subsection also clarifies that any food service packaging item that requires a Proposition 65 warning shall be disclosed in the application because it provides the department the necessary information to evaluate whether a food service packaging item meets the criteria established by Section 17989.2(a)(2). This information is not otherwise publicly available.

**Subsection (a)(7)**

Subsection (a)(7) specifies that the application must include the accreditation number(s) of the ISO/IEC 17025 laboratory(ies) that served as the third-party certification entity and performed the required testing to determine if the food service packaging met the applicable criteria for reusable, recyclable, or compostable. This is necessary to assist the department in reviewing whether the third-party certification entity meets the accreditation requirements.

**Subsection (a)(8)**

Subsection (a)(8) specifies that the application must include a declaration signed under penalty of perjury stating that all information and data submitted is true and correct. This subsection is necessary for completeness and to ensure food service packaging manufacturers are aware there is a legal responsibility to submit accurate and complete information.
Subsection (b)

Subsection (b) specifies that a food service packaging manufacturer must identify confidential or proprietary portions of the application to the department. This is necessary to clarify how a food service packaging manufacturer shall mark confidential or proprietary information, and that any unlabeled portions will be treated as a public document. It is also necessary that none of the confidential information be redacted prior to submission so that the department may still conduct its review by viewing all information in the submittal. The Public Records Act and the department’s statutory and regulatory provisions on record treatment will apply to all submittals; however, this additional clarity signals to submitting manufacturers that their submittals are public documents and the actions they must take to protect and confidential, proprietary, or trade secret information in their submittals.

Subsection (c)

Subsection (c) specifies that an application for a reusable food service packaging item must include test results from a third-party certification entity verifying that the food service packaging item maintains its shape, structure, and function after 125 cycles in a cleaning and sanitizing process or a copy of the manufacturer’s warranty. This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered reusable.

Subsection (d)

Subsection (d) specifies that an application for a recyclable food service packaging item must include documentation to verify the food service packaging item meets the criteria in Section 17989.4. This is necessary to clarify that an application must include information as stated in the following four subsections in order for the department to evaluate whether an item has met the criteria to be considered recyclable.

Subsection (d)(1)

Subsection (d)(1) specifies that an application for a recyclable food service packaging item must include documentation to verify the food service packaging item meets minimum size requirements of two inches in two dimensions. This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered recyclable.

Subsection (d)(2)

Subsection (d)(2) specifies that an application for a recyclable food service packaging item must include a statement that the food service packaging item does not contain additives that cause fragmentation. This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered recyclable.
Subsection (d)(3)

Subsection (d)(3) specifies that an application for a recyclable food service packaging item must include test results from a third-party certification entity demonstrating that total fluorine concentrations do not exceed 100 parts per million as required by Section 17989.2(a)(3). This subsection also specifies that the test must be conducted within six months of the application submittal date. This is necessary to ensure that food service packaging manufacturers have sufficient time to obtain third-party certification. The department concluded that six months is the minimum necessary timeframe for obtaining third-party certification, based on the protocol used by the Biodegradable Products Institute\(^{29}\) used to demonstrate that PFASs have not been intentionally added to food service packaging products.

Subsection (d)(4)

Subsection (d)(4) specifies that an application for a recyclable food service packaging item must include information demonstrating that the item is regularly collected for recycling by either a recycling program or a takeback program, according to the requirements of Section 17989.4(a)(3). This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered recyclable.

Subsection (e)

Subsection (e) specifies that an application for a compostable food service packaging item must include documentation to verify the food service packaging item meets the criteria in Section 17989.5. This is necessary to clarify that an application must include information as stated in the following five subsections in order for the department to evaluate whether an item has met the criteria to be considered compostable.

Subsection (e)(1)

Subsection (e)(1) specifies that an application for a compostable food service packaging item must include information demonstrating that the item is regularly collected for composting as required by Section 17989.5(a)(1). This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered compostable.

Subsection (e)(2)

Subsection (e)(2) specifies that an application for a compostable food service packaging item must include information demonstrating that the item is regularly accepted by compost facilities permitted to accept mixed materials and that the material is not

screened out for disposal as required by 17989.5(a)(2). This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered compostable.

**Subsection (e)(3)**

Subsection (e)(3) specifies that an application for a compostable food service packaging item must include test results from a third-party certification entity to demonstrate the item biodegrades in a safe and timely manner. This is necessary in order for the department to evaluate whether an item has met one of the criteria to be considered compostable.

**Subsection (e)(4)**

Subsection (e)(4) specifies that an application for a compostable food service packaging item must include test results from a third-party certification entity demonstrating that total fluorine concentrations do not exceed 100 parts per million as required by Section 17989.2(a)(3). This subsection also specifies that the test must be conducted within six months of the application submittal date. This is necessary to ensure that food service packaging manufacturers have sufficient time to obtain third-party certification. The department concluded that six months is the minimum necessary timeframe for obtaining third-party certification, based on the protocol used by the Biodegradable Products Institute used to demonstrate that PFASs have not been intentionally added to food service packaging products.

**Subsection (e)(5)**

Subsection (e)(5) specifies that an application for a compostable food service packaging item must include a statement that the item complies with the Federal Trade Commission’s guidelines for the use of environmental marketing claims. This subsection is necessary to clarify that compostable food service packaging must meet federal standards for environmental claims and the information that must be provided for the department to evaluate whether an item has met one of the criteria to be considered compostable.

**Subsection (f)**

Subsection (f) specifies that applications will be reviewed in the order in which they are received. This subsection is necessary to clarify the application review process and to establish a neutral and unbiased method for determining the order in which applications will be evaluated.
**Subsection (f)(1)**

Subsection (f)(1) defines the term “complete” as it relates to the department’s review of applications. This subsection is necessary because it clarifies the review that the department will conduct under subsection (f) is limited to ensuring a food service packaging manufacturer’s application is complete. This means the department will not review the detailed contents of the applications to ensure compliance with statutory requirements prior to conducting a completeness review. The department’s review is initially limited to making sure all of the required components are included thus rendering the application “complete.”

**Subsection (f)(1)(A)**

Subsection (f)(1)(A) specifies that the department shall notify a food service packaging manufacturer, or person acting on its behalf, if the application is complete. This subsection is necessary to clarify that the department will provide a response affirming completeness of an application.

**Subsection (f)(1)(B)**

Subsection (f)(1)(B) informs food service packaging manufacturers that they will be notified by the department if an application is incomplete and will be provided an allotted deadline to submit the missing information. This subsection is necessary to inform manufacturers that they have an opportunity to submit missing documentation in the event the application is incomplete. It is necessary to specify the amount of time the food service packaging manufacturer has in order for the department to maintain clear records for applications that are actively seeking evaluation and those that are not.

**Subsection (f)(2)**

Subsection (f)(2) specifies that the department will evaluate each complete application to determine if a food service packaging item or group of items meets the applicable criteria. This subsection is necessary to clarify that the department will only conduct detailed reviews of a “complete” application, defined in subsection (f)(1).

**Subsection (f)(2)(A)**

Subsection (f)(2)(A) establishes that the department will add the food service packaging items to the List and will notify the applicant accordingly. This subsection is necessary to clarify to food service packaging manufacturers what will happen after the department’s reviews and when items will be added to the List.

**Subsection (f)(2)(B)**

Subsection (f)(2)(B) specifies that if the department determines that a food service packaging item does not meet the criteria, the applicant will be notified and the item will
not be added to the List. This subsection in necessary to clarify the process for when an application does not meet the criteria and an item is not added to the List.

Subsection (f)(3)
Subsection (f)(3) specifies that the department will maintain the confidentiality of information submitted in each application as required by laws and regulations governing submittals of documents. This section estates existing laws governing records submitted to the department, but is is necessary for completeness, to be responsive to stakeholder concerns, and to underscore to manufacturers the department’s obligations and procedures to maintain confidentiality.

§17989.7. Noncompliant Food Service Packaging Inventories.

Subsection (a)
Subsection (a) clarifies that a food service facility may use its pre-existing food service packaging inventory, under the conditions described in subsections (a)(1) – (a)(4), if an approved food service packaging item or group of items is removed from the List. This subsection is intended to ensure that approved food service packaging items that have been purchased, but are subsequently removed from the List, are not unnecessarily disposed and to limit the financial burden placed on a food service facility when an item is removed from the List.

Subsection (a)(1)
Subsection (a)(1) clarifies that a food service facility may continue to use its pre-existing inventory of food service packaging item(s) if the food service facility possessed that specific inventory prior to the publication of the initial List or prior to the List subsequently being updated to remove that item. This subsection is necessary to clarify one of the conditions in which a food service facility may use specific inventories of food service packaging items that are removed from the List. This language is modeled off of and is consistent with provisions in the Act governing use of packaging inventory prior to the adoption of these regulations to implement the Act.

Subsection (a)(2)
Subsection (a)(2) clarifies that a food service facility may continue to use its pre-existing inventory of food service packaging item(s) that were removed from the List if that food service packaging item was on the List when the food service facility took possession of it. This subsection is necessary to clarify one of the conditions in which a food service facility may use specific inventories of food service packaging items that are not on the List. This language is modeled off of and is consistent with provisions in the Act
governing use of packaging inventory prior to the adoption of these regulations to implement the Act.

Subsection (a)(3)

Subsection (a)(3) clarifies that a food service facility may continue to use its pre-existing inventory of food service packaging items if that food service facility entered into a contract to purchase the food service packaging items prior to the List being published or subsequently updated to remove the item. This subsection is necessary to clarify one of the conditions in which a food service facility may use specific inventories of food service packaging items that are not on the List. This language is modeled off of and is consistent with provisions in the Act governing use of packaging inventory prior to the adoption of these regulations to implement the Act.

Subsection (a)(4)

Subsection (a)(4) clarifies that a food service facility may continue to use its pre-existing inventory of food service packaging items if that food service facility entered into a contract to purchase the food service packaging items prior to the List being updated. This subsection is necessary to clarify one of the conditions in which a food service facility may use specific inventories of food service packaging items that are not on the List. This language is modeled off of and is consistent with provisions in the Act governing use of packaging inventory prior to the adoption of these regulations to implement the Act.

Subsection (b)

This subsection explains it is the responsibility of the food service facility to ensure that the food service packaging items it purchases are on the List. This is necessary to inform food service facilities that they are responsible for monitoring the List for updates to make sure any new, renewed, or updated contracts comply with the Act and regulations. This language is modeled off of and is consistent with provisions in the Act governing use of packaging inventory prior to the adoption of these regulations to implement the Act.

§17989.8. Records.

Subsection (a)

Subsection (a) establishes that a food service facility shall provide the department reasonable and timely access to purchasing records for food service packaging items, as specified in the following two subsections, within 60 days of a written request from the department. This subsection is necessary to align with PRC Section 42370.5(b) and to facilitate the department’s reasonable and timely access to records to verify
compliance with the Act. The timeframe of 60 days is intended to provide the food service facility sufficient time to provide the requested documents to the department. In the department's experience inspecting and reviewing records of similar types of regulated entities, 60 days is a reasonable and workable period of time for entities to gather and submit records to make the submittal timely without placing an unreasonable administrative burden on the regulated entity.

Subsection (a)(1)

Subsection (a)(1) establishes the required information that a food service facility must provide to the department upon request in order for the department to verify a food service packaging item meets the reusability criteria of Section 17989.3. This subsection is necessary to specify that invoices or purchase orders are the records needed for the department to verify purchase of reusable food service packaging items. The date of purchase is required in order for the department to verify the reusable food service packaging item was on the List at time of purchase. The material, type, and manufacturer of the food service packaging item is required in order for the department to verify this information against the List. The number of food service packaging items purchased is necessary so the department may determine noncompliant food service packaging inventories.

Subsection (a)(2)

Subsection (a)(2) establishes the required information that a food service facility must provide to the department upon request in order for the department to verify a food service packaging item meets the recyclable or compostable criteria of Sections 17989.4 and 17989.5. This subsection is necessary to specify that invoices or purchase orders are the records needed for the department to verify purchase of recyclable or compostable food service packaging items. The date of purchase is required in order for the department to verify the recyclable or compostable food service packaging item was on the List at time of purchase. The material, type, and manufacturer of the food service packaging item is required in order for the department to verify this information against the List. The number of food service packaging items purchased is necessary so the department may determine noncompliant food service packaging inventories.

REASONABLE ALTERNATIVES TO THE PROPOSED REGULATORY ACTION

The department considered two alternatives to the proposed regulations. Alternative one consists of two changes to the proposed regulations that make the regulations less burdensome and would result in the inclusion of more materials on the List of Approved Food Service Packaging. The changes would include (1) reducing the criteria for access to collection of recyclable and compostable food service packaging items from 75 percent of communities having access to 60 percent of communities having access, and
(2) reducing the criterion for compostable food service packaging items by removing the requirement that the item spends no more than 60 days in the active phase in the composting process. Rather, the degradation of the food service packaging item would align with the ASTM International (ASTM) standard D6400 which allows materials to break down within 84 – 180 days. The department anticipates these changes would allow polypropylene to be considered recyclable and a wide range of compostable plastic materials (such as polylactic acid (PLA), waxed paper products, and thick starch-based food service packaging items to be considered compostable under this alternative. There are no alternatives to the regulation that would lessen adverse impacts on small businesses because the scope of the entities covered by the Act cannot be modified by the regulations and the proposed regulations constitute the approach that would have the least adverse impact on small businesses. Additionally, there are no alternatives to the regulation that are less burdensome and equally effective in achieving the purposes of the regulation in a manner that achieves the purpose of the Act.

Alternative one was not selected as it would not significantly improve the standards by which materials are considered recyclable or compostable but would still impose significant annual costs on regulated businesses of $6 million. These regulations are needed to clarify the performance standards, and collection and processing requirements to ensure products are recycled and composted. Under alternative one, relying on the biodegradation timeline established in the ASTM D6400 standard would allow more materials to be approved, but would not ensure that they break down under operating conditions utilized by commercial compost facilities in California. Items that do not biodegrade at commercial compost facilities would either be disposed of or would remain in the finished compost. Undegraded materials in finished compost could include microplastics and chemical additives and which would potentially contaminate agricultural land and food crops. To prevent this contamination, Alternative one was not selected and instead the proposed regulations include more stringent performance standards that align with operating conditions utilized by commercial compost facilities in California.

Alternative two considers two major changes to the proposed regulation that results in a more detailed List by (1) requiring the department to establish five regional Lists rather than a single statewide List and, (2) requiring food service facilities to maintain and provide the department with access to additional records. This alternative was considered to allow for regional variability in collection infrastructure, recycling and composting facilities, and recycling rates throughout the state. Regional Lists may prevent disruptions to small, local programs and allow the continued use of certain materials in areas that have developed the infrastructure to process it.
In order to implement the five regionalized Lists, a number of adjustments would be needed in the regulations as follows:

1. The department would use the five geographical regions from its waste characterization studies\textsuperscript{30}. These studies utilize shared characteristics, such as demographics, climate geography, and economics to identify five regions: bay area, coastal, mountain, southern, and central valley.
2. The department would develop and maintain five Lists; ensuring that the Department of General Services has all necessary information to implement contracts relevant to these five regional lists.
3. Food service packaging item manufacturers who submit an application for evaluation of their food service packaging items will be required to provide regional-specific information in each region for which an application is being submitted. This would require the food service packaging item manufacturers to fund studies to determine regional recycling and composting acceptance rates by conducting bale studies and characterizing loads of waste at material recovery facilities. Bale studies will determine which materials are being aggregated for sale and processing, while characterization studies of the waste will determine what materials that are collected do not get recycled.

Alternative two would also require food service facilities to maintain and provide records regarding (1) the types and quantities of food service packaging purchased and used, and (2) whether their local recycling or composting service providers accept each of the food service packaging items for recycling or composting, as requested. The records would be accessed by the department to ensure the five regional Lists are up to date and accurate.

Alternative two was not selected because the department determined the increased record keeping requirements imposes an undue burden on food service facilities, most of whom are small businesses, and food service packaging item manufacturers without a corresponding increase in benefits. This alternative would create a confusing and fragmented recycling system. For California’s recycling and composting system to be effective consumers need to be able to understand what to do with their food service packaging items at end of life and a system must be in place to effectively manage those materials. When materials are only recyclable or compostable regionally this creates confusion leading to increased contamination and decreasing the quality of materials being aggregated for further processing. The proposed regulation establishes a set of criteria for recyclability and compostability that will ensure consistency for successful recycling and composting of food service packaging items statewide.

https://www2.calrecycle.ca.gov/Publications/Download/911
INITIAL DETERMINATION THAT THE ACTION WILL NOT HAVE A SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS

The department conducted an economic analysis, as required by the rulemaking process and has made the initial finding that the proposed regulations will not have a significant adverse economic impact on businesses and will not affect the ability of California businesses to compete with businesses in other states.

Typical and small businesses are expected to incur initial costs of $1,050 and $600, respectively, in ongoing annual compliance costs to purchase compliant food service packaging items. Food service facilities will experience slightly increased costs for some of the food service packaging items they purchase to serve prepared food. Food service packaging manufacturers will experience decreased demand for products that are not approved as reusable, recyclable, or compostable.

Food service facilities are not expected to be adversely impacted as a result of this regulation because the increased costs incurred by food service facilities will be minimal compared to their total sales. This regulation is expected to increase costs by $0.02 per item and the increased costs will primarily be passed on to customers purchasing meals. Food service facilities will experience some increased food service packaging costs if they are currently purchasing less expensive, non-compliant packaging.

Food service packaging manufacturers are not expected to be adversely impacted because the regulations impact a small fraction of their customers and product lines. Most food service packaging manufacturers with 100 or more employees make some food service packaging items that CalRecycle anticipates will be compliant and some items that are anticipated to be noncompliant. Smaller food service packaging manufacturers may already be producing food service packaging items that will be considered compliant or may adjust their manufacturing process, so their products comply with the new regulations. Staff evaluated product manufacturer webpages to identify the types of products currently produced. This investigation revealed that most companies manufacture a wide range of food service packaging types that include both compliant and noncompliant materials. For example, Dart manufactures food service packaging items made from polystyrene, polyethylene terephthalate (PET), paper, sugar cane, and polylactic acid. Pactiv manufactures items made from polypropylene, aluminum, polystyrene, polylactic acid, paper, and molded fiber. Smaller businesses have less diverse product portfolios. For example, Zenith manufactures PET packaging items, and World Centric manufactures paper fiber packaging items. The research results indicate that both large and small manufacturers make compliant packaging and support the finding that no businesses will be eliminated.
Pursuant to Government Code Section 11346.2(b)(6), the department found that there are no federal laws or regulations comparable to the proposed regulations. These regulations do not duplicate or conflict with any federal law or regulation.

**ECONOMIC IMPACT ASSESSMENT**

**CREATION OR ELIMINATION OF JOBS WITHIN CALIFORNIA**

One Senior Environmental Scientist (Specialist) job was created at the department beginning in Fiscal Year 2019-2020 to develop and implement the regulations. This position will conduct ongoing evaluations of food service packaging and establish and update a List of approved (compliant) food service packaging items. The statute requires the Department of General Services to update its website and ensure that any relevant contract or agreement is updated to conform to these regulations. The Department of General Services did not identify a fiscal impact associated with contracting for reusable, recyclable, or compostable foods service packaging that is above and beyond its existing workload. The regulations require food service facilities to maintain records that are consistent with existing business practices, and to provide information to the department, upon request. The department determined the nominal work associate with these tasks will be performed by existing employees.

The department does not expect the loss or creation of industry jobs as a direct result of the regulation. However, the department used the Regional Economic Models Inc. (REMI) economic model to estimate the indirect and induced impacts of the regulations to the California economy. The results of the REMI economic model show a slight decrease in the forecasted gross domestic product (GDP) and employment growth due to (1) the increased administrative costs and testing by food service packaging manufacturers, (2) the increased costs of food service packaging being passed on to consumers, and (3) changes in consumer and government spending patterns. As a result of this change in employment growth, we also see a reduction in personal income growth. The decrease in employment and personal income growth is not specific to the impacted industries, but rather is spread out over the entire economy as a result of a decrease in state GDP growth.

**CREATION OF NEW BUSINESSES OR ELIMINATION OF EXISTING BUSINESSES WITHIN CALIFORNIA**

The regulations impact food service facilities and food service packaging manufacturers. Food service facilities will experience increased costs for some of the food service packaging items they purchase to serve prepared food. Food service packaging manufacturers will experience decreased demand for products that are not
approved as reusable, recyclable, or compostable. Recycling and composting facilities will receive increased quantities of food service packaging for processing.

The number of food service facilities is not expected to change as a result of this regulation because the increased costs incurred by food service facilities will be minimal compared to their total sales. This regulation is expected to increase costs by $0.02 per item and the increased costs will primarily be passed on to customers purchasing meals. Food service facilities will experience increased food service packaging costs if they are currently purchasing less expensive, non-compliant packaging.

The number of food service packaging manufacturers is not expected to change as the regulations impact a small fraction of their customers and product lines. Most food service packaging manufacturers with 100 or more employees make some food service packaging items that the department anticipates will be compliant and some items that are anticipated to be noncompliant. Smaller food service packaging manufacturers may already be producing food service packaging items that will be considered compliant or may adjust their manufacturing process, so their products comply with the new regulations. Staff evaluated product manufacturer webpages to identify the types of products currently produced. This investigation revealed that most companies manufacture a wide range of food service packaging types that include both compliant and noncompliant materials. For example, Dart manufactures food service packaging items made from polystyrene, PET, paper, sugar cane, and PLA. Pactiv manufactures items made from polypropylene, aluminum, polystyrene, polylactic acid, paper, and molded fiber. Smaller businesses have less diverse product portfolios. For example, Zenith manufactures PET packaging items, and World Centric manufactures paper fiber packaging items. The research results indicate that both large and small manufacturers make compliant packaging and support the finding that no businesses will be eliminated.

EXPANSION OF BUSINESSES CURRENTLY DOING BUSINESS WITHIN THE STATE

Food service packaging manufacturers are likely to experience increased demand for compliant products. Food service packaging manufacturers produce a portfolio of items, including some that may be deemed compliant and others that will likely be deemed noncompliant. The department does not anticipate any expansion of these companies’ operations in California based on the requirements of this regulation.

BENEFITS OF THE REGULATION

The department has determined that the proposed regulations will result in the following benefits: increased use of reusable food service packaging, more uniform materials sent for recycling and composting, decreased litter, and improved public health. The benefits are described in reports from local governments with polystyrene bans as well as
independent research regarding reduced food service packaging use. The benefits include improved water quality, reduced impacts to wildlife, reduced litter cleanup costs, and reduced greenhouse gas emissions. The qualitative benefits and quantitative benefits are presented below.

- Increasing the use of recyclable food service packaging items will result in less food service packaging being littered and more being recycled. Materials that have robust recycling markets are more likely to be put into the waste management and recycling collection and handling system for proper management. By requiring food service facilities to use food service packaging items that are recyclable, the department expects a reduction of litter in California’s waterways and on its highways.
  - The department estimates $300,000 in annual litter cleanup costs may be saved as a result of reducing the amount of non-recyclable polystyrene food service packaging used at food service facilities. Reports provide some information regarding costs to clean littered items on beaches and roadways. Calculations are based on research indicating that 25% of the polystyrene found on beaches and roadways originates from dining establishments and that the regulation will impact approximately 4% of California’s dining establishments.
  - Other types of packaging associated with food such as wraps, bags, rigid plastics, and paper items are routinely found in 78% of Southern California streams and are likely to generate litter across the state.

- Materials that can be composted and are accepted at compost facilities are more likely to be diverted from landfills. Diverting food service packaging and the associated food waste to compost facilities will help the department achieve its organic waste diversion goals and reduce greenhouse gas emissions associated with landfilling organic materials.
  - Organic material in landfills produces methane, which is a potent greenhouse gas that is 25 times more harmful than carbon dioxide. Diverting organic material, including food service packaging and the food that it contains, reduces the generation of methane in landfills.

- Reducing toxic chemicals in food service packaging items may reduce exposure to harmful chemicals throughout the food service packaging item’s life cycle.
  - Polystyrene food service packaging may not be included on the List of approved Food Service Packaging because if it is not collected and recycled. Polystyrene is made of styrene monomer, which is identified as a carcinogen by several authoritative organizations. These chemicals can put food service packaging manufacturers, staff at food service packaging restaurants, and consumers of food served in polystyrene at risk.
The proposed regulation is designed to ensure that recyclable and compostable food service packaging do not contain intentionally added per- and polyfluoroalkyl substances. Various government organizations have efforts underway to better manage these substances because they are widespread in the environment and have a variety of hazard traits.

Reducing harmful or potentially harmful chemicals from materials that enter our landfills, compost facilities, and recycling facilities is an important way to reduce the amount of these chemicals entering the environment. It is unknown how much of any specific chemical will be reduced, or how to quantify the impacts of this change, but any reduction will have positive environmental and public health benefits.

FINDING ON NECESSITY OF REPORTS [GOVERNMENT CODE SECTION 11346.3(d)]

The Act (PRC Sections 42370 – 42370.7) does not mandate reporting requirements.

TECHNICAL STUDIES, REPORTS, OR DOCUMENTS


https://biomonitoring.ca.gov/sites/default/files/downloads/PotenDesigPFASs_031315.pdf


28. Trier, Xenia; Taxvig, Camilla; Rosenmai, Anna Kjerstine; Pedersen, Gitte Alsing. *PFAS in paper and board for food contact - options for risk management of poly- and perfluorinated substances*. Copenhagen K, Denmark: Nordic Council of