ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS)

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT

DEPARTMENT NAME	CONTACT PERSON	EMAIL ADDRESS	TELEPHONE NUMBER
Resources Recycling and Recovery	Craig Castleton	regulations@calrecycle.ca.gov	(916) 327-0089

DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400	NOTICE FILE NUMBER
SB 1013 Addition of New Beverage Containers Regulations	Z

A. ESTIMATED PRIVATE SECTOR COST IMPACTS *Include calculations and assumptions in the rulemaking record.*

1. Check the appropriate box(es) below to indicate whether this regulation:

- [x] a. Impacts business and/or employees
- [x] b. Impacts small businesses
- [ ] c. Impacts jobs or occupations
- [ ] d. Impacts California competitiveness
- [x] e. Imposes reporting requirements
- [ ] f. Imposes prescriptive instead of performance
- [ ] g. Impacts individuals
- [ ] h. None of the above (Explain below):

If any box in Items 1 a through g is checked, complete this Economic Impact Statement.
If box in Item 1.h. is checked, complete the Fiscal Impact Statement as appropriate.

2. The Dept. Resources Recycling & Recovery (Agency/Department) estimates that the economic impact of this regulation (which includes the fiscal impact) is:

- [ ] Below $10 million
- [x] Between $10 and $25 million
- [ ] Between $25 and $50 million
- [ ] Over $50 million *[If the economic impact is over $50 million, agencies are required to submit a Standardized Regulatory Impact Assessment as specified in Government Code Section 11346.3(c)]*

3. Enter the total number of businesses impacted: 378

Describe the types of businesses (Include nonprofits): Plastic Processors, Beverage Manufacturers and Distributors

Enter the number or percentage of total businesses impacted that are small businesses: 47 percent

4. Enter the number of businesses that will be created: 0 eliminated: 0

Explain: CalRecycle does not anticipate that new businesses will be created nor eliminated due to these regulations.

5. Indicate the geographic extent of impacts:
- [x] Statewide
- [ ] Local or regional (List areas):

6. Enter the number of jobs created: 0 and eliminated: 0

Describe the types of jobs or occupations impacted: CalRecycle does not anticipate a change in the number of people employed at jobs.

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?
- [ ] YES
- [x] NO

If YES, explain briefly:

ECONOMIC IMPACT STATEMENT (CONTINUED)

B. ESTIMATED COSTS *Include calculations and assumptions in the rulemaking record.*

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? $ 14,881,113

   a. Initial costs for a small business: $ 9,154 Annual ongoing costs: $ 11,275 Years: 3

   b. Initial costs for a typical business: $ 149,152 Annual ongoing costs: $ 81,274 Years: 3

   c. Initial costs for an individual: $ ______ Annual ongoing costs: $ ______ Years: ______

   d. Describe other economic costs that may occur: ______

2. If multiple industries are impacted, enter the share of total costs for each industry: Processors: $790,365, Beverage Manufacturers: $1,281,591, Distributors: $12,872,157

3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements. *Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted.* $ 1,126

4. Will this regulation directly impact housing costs? ☐ YES ☒ NO

   If YES, enter the annual dollar cost per housing unit: $ ______

   Number of units: ______

5. Are there comparable Federal regulations? ☐ YES ☒ NO

   Explain the need for State regulation given the existence or absence of Federal regulations: ______

   Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: $ ______

C. ESTIMATED BENEFITS *Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment: These regulations will benefit the health and safety of residents of California and the state's environment by ensuring that these beverage containers are recovered instead of littered.

2. Are the benefits the result of: ☒ specific statutory requirements, or ☐ goals developed by the agency based on broad statutory authority?

   Explain: Public Resources Code Sections 14572, 14573(a)(2), 14575(b), 14585

3. What are the total statewide benefits from this regulation over its lifetime? $ 585,867

4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation: None anticipated

D. ALTERNATIVES TO THE REGULATION *Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not: The cost-effectiveness ratio for the regulations as proposed is lower than alternative 1 and 2. Therefore, the regulation as proposed is more cost effective than both alternatives.

ECONOMIC IMPACT STATEMENT (CONTINUED)

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation: Benefit: $ 2,807,457 Cost: $ 15,056,824

Alternative 1: Benefit: $ 43,125 Cost: $ 1,846,402

Alternative 2: Benefit: $ 919,862 Cost: $ 15,543,615

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives: Benefits are based on processing payments, handling fees, and administrative fees paid to recyclers

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs? ☐ YES ☒ NO

Explain: The proposed regulations do not mandate the use of specific technologies or equipment nor did it prescribe specific actions or procedures.

E. MAJOR REGULATIONS *Include calculations and assumptions in the rulemaking record.*

California Environmental Protection Agency (Cal/EPA) boards, offices and departments are required to submit the following (per Health and Safety Code section 57005). Otherwise, skip to E4.

1. Will the estimated costs of this regulation to California business enterprises **exceed $10 million**? ☒ YES ☐ NO

If YES, complete E2. and E3
If NO, skip to E4

2. Briefly describe each alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: Exclude paperboard cartons

Alternative 2: Exempt plastic processors from having to accept bags in boxes, multi-layer pouches, and paperboard cartons

(Attach additional pages for other alternatives)

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation: Total Cost $ 15,056,824 Cost-effectiveness ratio: $ 0.79

Alternative 1: Total Cost $ 1,846,402 Cost-effectiveness ratio: $ 2.82

Alternative 2: Total Cost $ 15,543,615 Cost-effectiveness ratio: $ 0.82

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding $50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through12 months after the major regulation is estimated to be fully implemented?

☐ YES ☒ NO

If YES, agencies are required to submit a Standardized Regulatory Impact Assessment (SRIA) as specified in Government Code Section 11346.3(c) and to include the SRIA in the Initial Statement of Reasons.

5. Briefly describe the following:

The increase or decrease of investment in the State: None anticipated

The incentive for innovation in products, materials or processes: None anticipated

The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency: Incorporates boxes, bladders, and pouches into existing BCRP framework to encourage their recycling, reducing litter, and reduce other negative environmental effects

STATE OF CALIFORNIA — DEPARTMENT OF FINANCE
ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS)
STD. 399 (Rev. 10/2019)

FISCAL IMPACT STATEMENT

A. FISCAL EFFECT ON LOCAL GOVERNMENT *Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

☐ 1. Additional expenditures in the current State Fiscal Year which are reimbursable by the State. (Approximate) (Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

$ __________

☐ a. Funding provided in __________

Budget Act of __________ or Chapter __________ , Statutes of __________

☐ b. Funding will be requested in the Governor's Budget Act of __________

Fiscal Year: __________

☒ 2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate) (Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

$ 4,022

Check reason(s) this regulation is not reimbursable and provide the appropriate information:

☐ a. Implements the Federal mandate contained in __________

☐ b. Implements the court mandate set forth by the __________ Court.

Case of: __________ vs. __________

☐ c. Implements a mandate of the people of this State expressed in their approval of Proposition No. __________

Date of Election: __________

☐ d. Issued only in response to a specific request from affected local entity(s).

Local entity(s) affected: __________

☐ e. Will be fully financed from the fees, revenue, etc. from: __________

Authorized by Section: __________ of the __________ Code;

☐ f. Provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each;

☐ g. Creates, eliminates, or changes the penalty for a new crime or infraction contained in __________

☐ 3. Annual Savings. (approximate)

$ __________

☐ 4. No additional costs or savings. This regulation makes only technical, non-substantive or clarifying changes to current law regulations.

☐ 5. No fiscal impact exists. This regulation does not affect any local entity or program.

☒ 6. Other. Explain Incurs non-reimbursable cost to plastic processors, two of which are owned at the option of local governments, for handling and disposal of wine and distilled spirit coolers sold in bag in boxes, multi-layer pouches, or paperboard cartons

FISCAL IMPACT STATEMENT (CONTINUED)

B. FISCAL EFFECT ON STATE GOVERNMENT *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

☒ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

$ 52,708

It is anticipated that State agencies will:

☒ a. Absorb these additional costs within their existing budgets and resources.

☐ b. Increase the currently authorized budget level for the ______ Fiscal Year

☐ 2. Savings in the current State Fiscal Year. (Approximate)

$ ______

☐ 3. No fiscal impact exists. This regulation does not affect any State agency or program.

☐ 4. Other. Explain ______

C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

$ ______

☐ 2. Savings in the current State Fiscal Year. (Approximate)

$ ______

☒ 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program.

☐ 4. Other. Explain ______

FISCAL OFFICER SIGNATURE	DATE
Digitally signed by Andrew Robertson Date: 2025.06.20 10:04:40 -07'00'	

The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary must have the form signed by the highest ranking official in the organization.

AGENCY SECRETARY	DATE
Brandy Hunt (Jul 31, 2025 16:47:33 PDT)	

Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD. 399.

DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER	DATE
Digitally signed by Andrew March Date: 2026.05.08 15:40:48 -07'00'	

Department of Resources Recycling and Recovery
SB 1013 Addition of New Beverage Containers Permanent Regulations

Economic Impact Statement Supplemental Information

Background of Bill and Regulations

The Department of Resources Recycling and Recovery (CalRecycle or department) is proposing to adopt permanent regulations contained in title 14, division 2, chapter 5 of the California Code of Regulations (14 CCR) to implement the addition of new beverage types and container types pursuant to Senate Bill (SB) 1013 (Chapter 610, Statutes of 2022). 14 CCR clarifies and makes specific the provisions of the California Beverage Container Recycling and Litter Reduction Act (Act), beginning with Public Resources Code (PRC) section 14500.

SB 1013 amended PRC sections 14504 and 14528.5 to expand the Beverage Container Recycling Program (BCRP) to includes the following eligible beverages: wine, distilled spirits, and wine and distilled spirits coolers exceeding 7 percent alcohol by volume. SB 1013 also expanded the types of beverage containers eligible for redemption to include a beverage container that is a box, bladder, or pouch, or similar container so long as the box, bladder, or pouch contains wine or distilled spirits (PRC section 14504). In addition, SB 1013 specified an increased CRV of 25 cents for a beverage container that is a box, bladder, or pouch, or similar container, containing wine or distilled spirits (PRC section 14560).

Prior to the passage of SB 1013, 14 CCR established a framework for the BCRP that includes a system of payments and procedures among a variety of program participants. This regulatory framework is built upon the previously eligible beverages and beverage containers. CalRecycle is seeking to establish permanent regulations to incorporate these new beverages and beverage containers into the BCRP's regulatory framework where clarification is needed.

Specifically, PRC section 14504(a)(12) includes in the Act's definition of "beverage" "wine or distilled spirits contained in a beverage container that is a box, bladder, or pouch, or similar container, regardless of the material type from which the beverage container is made." There is no universal understanding of what types of beverage containers constitute a "box, bladder, or pouch, or similar container," which necessitates the adoption of the proposed regulations to make it clear to the public and regulated entities the specific types of new beverage containers included in the BCRP: bag in box, multi-layer pouch, and paperboard carton containing wine, distilled spirits, or wine and distilled spirit cooler (proposed 14 CCR section 2000(a)(3.05), (a)(31.7), and (a)(33.5)).

SB 1013 also added various provisions to the Act related to implementation of the new beverages and beverage containers. For instance, under PRC section 14560(c), "a beverage container that is a box, bladder, or pouch, or similar container, containing wine or distilled spirits, as described in paragraph (12) of subdivision (a) of Section 14504, sold or offered for sale in the state shall have a redemption payment and refund value of twenty-five cents ($0.25).” CalRecycle has determined it is necessary to clarify and make specific that the boxes, bladders, and pouches subject to the 25-cent CRV and redemption payment under PRC section 14560(c) includes plastic #1-7 pouches containing wine, distilled spirits, or wine and distilled spirit cooler and bags in boxes, multi-layer pouches, and paperboard cartons containing wine and distilled spirit coolers (proposed 14 CCR section 2900(b)(2)).

Certain other provisions of SB 1013 relating to the addition of new beverages and beverage containers are ambiguous and require clarification through regulations. For example, PRC section 14547(a)(4) states with regard to postconsumer recycled plastic percentage requirements that “A beverage container that is a box, bladder, or pouch, or similar container, that contains wine or distilled spirits, shall have an additional two years to comply with each of the deadlines in paragraphs (1), (2), and (3).” The statutory language is unclear regarding exactly how those postconsumer recycled plastic percentage requirements apply to the new beverages and beverage containers. Therefore, CalRecycle is proposing to adopt a timeline of when those postconsumer recycled plastic percentage requirements are effective (proposed 14 CCR section 2243) and a process for reporting the postconsumer recycled plastic percentages (proposed 14 CCR section 2240(b)(5)) for the new types of beverage containers.

Anticipated Benefits from this Regulatory Action

These proposed regulations will implement, interpret, and make specific SB 1013 by integrating the new types of beverage containers and beverages into the regulatory framework of the BCRP as part of 14 CCR. The regulatory framework includes a system of payments and procedures among a variety of program participants built upon the previously eligible beverages and beverage containers. These proposed regulations support the implementation of SB 1013 by clarifying how program participants should handle these new container material types to help them comply with the new statutes.

Factual Basis/Rationale

CalRecycle has identified specific sections of these proposed regulations that either bear private sector costs or impose fiscal effects to state government.

1. Processor Cancellation Costs for Wine and Distilled Spirit Boxes, Bladders, and Pouches

Section 2400(a)(2)(B) of these proposed regulations specify that “A processor that accepts plastic beverage containers shall accept bags in boxes, multi-layer pouches, and paperboard cartons.” This is consistent with the existing regulatory requirement in 14 CCR section 2400(a)(2), which states a “processor shall accept one or more type(s) of redeemable beverage container(s)” and with PRC section 14539(d)(3), which requires a processor to “accept, and pay at least the refund value for, all empty beverage containers, regardless of type, for which the processor is certified." This has the effect that when a processor becomes certified to accept plastic beverage containers, it must accept any type of plastic beverage container, including any of plastic #1-7 beverage containers. Processors have been accepting plastic #7 beverage containers even though they are generally difficult to recycle. Therefore, there is an existing precedent for requiring a plastic processor to accept certain types of containers. While bags in boxes, paperboard cartons, and multi-layer pouches are not plastic beverage containers as defined in PRC section 14517, they generally do contain some amount of plastic, and therefore it logically follows that processors that accept plastic must also accept the new container types.

Section 2000(a)(4)(D) of these proposed regulations establishes a cancellation method for the new types of beverage containers. Specifically, the provision establishes that a bag in box, multi-layer pouch, or paperboard carton is considered cancelled when the original form has been so altered as to make its reconstitution physically impossible. Section 2501(b)(5) of these proposed regulations specifies how processors will receive this material upon delivery from recycling centers by requiring recycling centers to ship bags in boxes, multi-layer pouches, and paperboard cartons separately from other container types and to prohibit bags in boxes, multi-layer pouches, and paperboard cartons from being commingled. PRC section 14518 specifies that a processor is any person "who cancels, or who certifies to the department in a form prescribed by the department the cancellation of, the refund value of … empty beverage containers by processing empty beverage containers, in any manner which the department may prescribe."

The handling of the new types of beverage containers bears a private sector cost to processors since cancellation is one of the primary functions of a processor within the BCRP. The impacted processors who are required to accept bags in boxes, multi-layer pouches, and paperboard cartons are those who accept plastic beverage containers (section 2400(a)(2)(B) of these proposed regulations).

2. Postconsumer Recycled Plastic Minimum Content

Section 2243 of these proposed regulations specifies that the total weight of plastic in bags in boxes, multi-layer pouches, or paperboard cartons sold in the state by a beverage manufacturer shall, on average, contain specified percentages of postconsumer recycled (PCR) plastic per year, consisting of 15 percent beginning in 2024, 25 percent beginning in 2027, and 50 percent beginning in 2032. This inclusion of the new beverage container types is supported by PRC section 14547(a)(4), which specifies that a box, bladder, or pouch has two additional years to comply with the PCR plastic content requirements of the Act. Section 2240(b)(5) of these proposed regulations requires a beverage manufacturer to report the weight of PCR and virgin plastic used in a plastic component of a bag in box, multi-layer pouch, or paperboard carton under the relevant plastic resin type in the Plastic Beverage Container Virgin and Postconsumer Resin Report. Sections 2240(b)(1)(A) and 2240(b)(5) also clarifies that this requirement applies to a bag in box, multi-layer pouch, or paperboard carton that contains plastic even though those types of beverage containers as defined in these proposed regulations are not considered plastic beverage containers. In summary, completing the Plastic Beverage Container Virgin and Postconsumer Resin Report bears a private sector cost to beverage manufacturers who sell wine, distilled spirits, or wine and distilled spirit coolers in bags in boxes, multi-layer pouches, or paperboard cartons that contain plastic.

Failure to meet the minimum content standard will subject beverage manufacturers selling over 16 million of any combination of plastic beverage containers and bags in boxes, multi-layer pouches, or paperboard cartons containing plastic annually to administrative penalties as specified in PRC section 14547(b) and (i)(2) and proposed 14 CCR section 2243(b). CalRecycle has identified five beverage manufacturers that sell wine, distilled spirits, or wine and distilled spirit coolers in bags in boxes, multi-layer pouches, or paperboard cartons that contain plastic and are also anticipated to sell over 16 million plastic beverage containers or bags in boxes, multi-layer pouches, or paperboard cartons containing plastic annually, based on 2024 sales reported to date, and are therefore subject to administrative penalties if they do not meet the minimum content standard. Since boxes, bladders, and pouches have an additional two years to comply with the plastic minimum content standard, the lowest standard of 15 percent minimum content applies through 2026. Any potential costs for penalties for not meeting the standard are as yet unknown but not expected to be significant until the 50 percent minimum content standard applies beginning in 2032.

3. Wine and Distilled Spirit Cooler Boxes, Bladders, and Pouches Subject to CRV

SB 1013 amended PRC section 14528.5 to add wine and distilled spirit coolers exceeding seven percent alcohol by volume as beverages included in the BCRP. In addition, SB 1013 amended PRC section 14504(a)(12) to expand the types of beverage containers eligible for redemption to include a beverage container that is a box, bladder, or pouch, or similar container if the box, bladder, or pouch contains wine or distilled spirits. Furthermore, SB 1013 amended PRC section 14560(c) to specify a CRV of 25 cents for a beverage container that is a box, bladder, or pouch, or similar container containing wine or distilled spirits. PRC sections 14504(a)(12) and 14560(c) only explicitly reference wine and distilled spirits and not wine and distilled spirit coolers.

To provide consistency in the regulatory framework impacting all new beverage types and container types added due to SB 1013, sections 2000(a)(3.05), (31.7), and (33.5) of these proposed regulations add wine and distilled spirit coolers, in addition to wine and spirits, to the definitions of bag in box, multi-layer pouch, and paperboard carton respectively. This is necessary because SB 1013's removal of the 7 percent alcohol by volume maximum for wine and distilled spirit coolers makes wine and distilled spirits with an imperceptible amount of flavoring virtually indistinguishable from a wine and distilled spirit cooler under the definition in PRC section 14528.5 These regulations interpret wine and distilled spirit coolers to be a type of wine or distilled spirit. Therefore, all regulations that apply to wine and distilled spirits also apply to wine and distilled spirit coolers. In addition, section 2900(b)(2) of these proposed regulations specifies that bags in boxes, multi-layer pouches, and paperboard cartons are subject to a CRV of 25 cents. As a consequence, wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons are added to the BCRP with a CRV of 25 cents. Adding wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons to the BCRP bears a cost on beverage manufacturers, who pay processing fees; distributors, who pay redemption payments; and plastic processors, who are required to handle bags in boxes, multi-layer pouches, and paperboard cartons. Furthermore, the State bears costs for paying handling fees to recycling centers as specified in PRC section 14585 and processing fee offsets as specified in PRC 14581(a)(5)[1]. The costs associated with including wine and distilled spirits in bags in boxes, multi-layer pouches, and paperboard cartons in the BCRP is not included in this cost analysis because wine and distilled spirits in boxes, bladders, and pouches is explicitly mentioned in the Act as being subject to a 25-cent CRV at PRC 14560(c).

4. Plastic #1-7 Pouches Containing Wine and Distilled Spirits Subject to 25-cent CRV

Section 2900(b)(2)(C) of these proposed regulations specifies that a plastic #1-7 pouch containing wine, distilled spirits, or wine and distilled spirit coolers shall have a CRV of 25 cents. CalRecycle has observed limited use of plastic #1-7 pouches for non-alcoholic beverages; however, no plastic #1-7 pouches are currently known to be used for selling wine, distilled spirits, or wine and distilled spirit coolers in the California market. As a result, the estimated cost impact of section 2900(b)(2)(C) of these proposed regulations is currently unknown. General Process, Data Sources, and Assumptions

The scope of this economic and fiscal analysis (analysis) generally includes the estimated costs of activities to be conducted by beverage manufacturers who sell wine, distilled spirits, or wine and distilled spirit coolers in boxes, bladders, or pouches. The scope also includes estimated costs incurred by processors who are required to handle boxes, bladders, or pouches in which wine, distilled spirits, or wine and distilled spirit coolers as specified in section 2400(a)(2)(B) of these proposed regulations.

Sections 2240 and 2310 of these proposed regulations specify reporting requirements for beverage manufacturers and distributors for maintaining pay on behalf agreements. Both provisions will not become operative until January 1, 2030. On or before that date, CalRecycle anticipates that a new CalRecycle software system will be developed that will facilitate the reporting of information related to pay on behalf agreements. Due to the delay of the operative date of these proposed regulations and the unknown cost reductions provided by the yet to be developed information system, CalRecycle cannot

[1] The processing fee offset identifies the payment made from the Beverage Container Recycling Fund to cover processing payment expenditure where not covered by processing fee revenue, applying to material types with a recycling rate at least 30% or more.

estimate the costs to be incurred by beverage manufacturers and distributors to report information related to pay on behalf agreements.

Government Code section 11342.610 defines a “small business” as a retail trade that is independently owned and operated, not dominant in its field, and does not exceed annual gross receipts of $2,000,000.

To model the Government Code definition of a small business for beverage manufacturers, CalRecycle applied the $15,000 annual payment of processing fees which is the maximum amount specified for beverage manufacturers for annual reporting and payment of processing fees in PRC section 14575(g)(3)(A)(ii). For purposes of this analysis, the $15,000 annual threshold amount is used to categorize small businesses because the Legislature established it to relieve beverage manufacturers with smaller sales volumes of the burden to report and pay processing fees on a standard monthly schedule.

To model the Government Code definition of a small business for beverage distributors, CalRecycle applied the $75,000 annual payment of redemption payments which is the maximum amount specified for distributors for annual reporting and payment of redemption payments in PRC section 14574(b)(1). The $75,000 annual threshold amount is used to categorize small businesses because the Legislature established it to relieve distributors with smaller sales volumes of the burden to report and pay redemption payments on a standard monthly schedule.

To model the Government Code definition of a small business for processors, CalRecycle analyzed the annual refund value (also known as CRV) processors pay to certified recycling programs. For purposes of this analysis, CalRecycle’s review of plastic processor data established a threshold of $200,0000 annual payment of refund value as a cutoff whereby processors below that amount generally exclude processors known to operate material recovery facilities (MRFs) or share a common ownership consisting of multiple facilities that serve large regional markets.

Any beverage manufacturer paying over $15,000 annually in processing fees, any distributor paying over $75,000 annually in redemption payments, or processor paying over $200,000 annually in refund value are considered a “typical business.”

Sales volumes of beverage containers sold by beverage manufacturers, redemption payments made by distributors, and refund values paid to certified recycling programs are sourced from CalRecycle’s Division of Recycling Integrated Information System (DORIIS).

Methodologies for Individual Answers – Economic Impact Statement

A. Estimated Private Sector Cost Impacts

1. These proposed regulations impact processors who handle plastic beverage containers and are thus required to accept bags in boxes, multi-layer pouches, and

paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers delivered from recyclers. In addition, these proposed regulations impact beverage manufacturers who sell bags in boxes, multi-layer pouches, paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers by reporting PCR and virgin plastic content for any plastic component that is part of or affixed to the beverage container, and by paying processing fees for wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons. Furthermore, these proposed regulations impact distributors who sell wine and distilled spirit coolers in bags in boxes, multi-layer pouches, and paperboard cartons by paying redemption payments. These proposed regulations impact both typical and small business processors, beverage manufacturers, and distributors.

2. The estimated economic and fiscal impact of these proposed regulations is estimated to be between $10 million and $25 million based on the explanation that follows, and the summary of costs shown in Table 5 “Estimated Costs by Industry”.

<u>Processor Handling and Disposal</u>

Processor handling of bags in boxes, multi-layer pouches, and paperboard cartons includes acceptance and purchase of empty containers from recyclers and cancellation of their refund value by altering their original form making their reconstitution physically impossible (proposed regulation section 2000(a)(4)(D)). Under limited cases, cancellation may also include disposal subject to an approved request for disposal where viable markets for the material are limited or nonexistent. (Regulations section 2410). Disposal costs were included in addition to the estimate of processor handling costs because bags in boxes, multi-layer pouches, and paperboard cartons consist of multiple material types that are currently difficult to separate and recycle when compared to traditional beverage container materials that consist of a single material type. As a result, bags in boxes, multi-layer pouches, and paperboard cartons currently lack mature end user markets that generally exist for traditional beverage container material types. While end user markets may be further developed for these new beverage container material types, the extent and timeline of that development is unknown and therefore cannot be quantified.

Processor handling of bags in boxes, multi-layer pouches, and paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers, including disposal costs, is estimated to cost about $263,455 annually based on the estimated volume of these containers collected for recycling and the estimated cost of handling by the processor.

Table 1 “Processor Handling and Disposal Costs” below details the methodology for estimating processor handling and cancellation costs beginning in 2026. Estimated annual sales for bags in boxes and paperboard cartons are based on sales reported by distributors during January and February 2025. Sales data prior to 2025 was not used because in 2024, the first year that SB 1013 became effective, sales for boxes, bladders, and pouches were reported collectively as one material type. The estimated 17 percent recycling rate is based on the combined recycling rate of #3-#7 plastic beverage containers in 2023 since sales estimates for bags in boxes, multi-layer pouches, and paperboard cartons are similar to actual sales observed for #3-#7 plastic beverage containers. Although the initial recycling rate was much lower than the estimated 17 percent based on refund value claimed by recycling centers in the beginning of 2024, CalRecycle anticipates that the recycling rate will increase as consumers become more aware of the higher 25-cent refund value applying to bags in boxes, multi-layer pouches, and paperboard cartons versus the five- or ten-cent refund value applying to other beverage container types. Annual returns in tons are based on container sales reported by distributors multiplied by the estimated 17 percent recycling rate multiplied by the container per pound rates for bags in boxes, multi-layer pouches, and paperboard cartons effective 1/1/2025[2]. The estimated processor handling and cancellation costs are based on the cost per ton for processors handling PET #1 plastic containers contained in the *California Beverage Container Recycling and Litter Reduction Study* prepared by the University of California, Berkeley in 2002[3], and disposal costs were provided from the report *Landfill Tipping Fees in California* prepared by CalRecycle in 2015[4]. The costs obtained from both reports were adjusted to current costs based on the California Consumer Price Index for All Urban Consumers provided by the Department of Industrial Relations.[5].

Table 1: Processor Handling and Disposal Costs

Container Type	Estimated Annual Sales (Containers)	Estimated Recycling Rate	Estimated Annual Returns (Containers)	Annual Returns (Tons)	Processor Handling Cost Per Ton	Disposal Costs Per Ton	Total Processor Costs
Bag in box	12,830,160	17%	2,181,127	657.0	$271.06	$62.53	$219,157
Paperboard Carton	23,059,548	17%	3,920,123	129.1	$271.06	$62.53	$43,074
Multi-layer Pouch	1,425,060	17%	242,260	3.7	$271.06	$62.53	$1,224
Totals	**37,314,768**	**17%**	**6,343,511**	**789.8**	**$271.06**	**$62.53**	**$263,455**

[2] California Recycling Program Rates, January 1, 2025, CalRecycle: https://www2.calrecycle.ca.gov/Docs/Web/129219

[3] *California Beverage Container Recycling and Litter Reduction Study*, December 2, 2002, University of California, Berkeley (page 19): see documents relied upon

[4] *Landfill Tipping Fees in California*, February 2015, CalRecycle (page 3): https://www2.calrecycle.ca.gov/Publications/Download/1145

[5] California Consumer Price Index for All Urban Consumers (1955-2024), Department of Industrial Relations: http://www.dir.ca.gov/DLSR/CPI/EntireCCPI.PDF. To bring 1999 processor handling costs to current, the published cost is $133.57; the annual index values for 1999 is 168.5 and 341.951 for 2024; thus $133.57 * (341.951/168.5) = $271.06. To bring 2014 disposal costs to current, the published cost is $45; the annual index values for 2014 is 246.055 and 341.951 for 2024; thus $45 * (341.951/246.055) = $62.53

Plastic Minimum Content Reporting

Beverage manufacturers selling bags in boxes, multi-layer pouches, or paperboard cartons containing plastic that are filled with wine, distilled spirits, or wine and distilled spirit cooler will be required to complete the Plastic Beverage Container Virgin and Postconsumer Resin Report annually (proposed regulations section 2240 and 2243). The estimated cost per beverage manufacturer, regardless of whether the beverage manufacturer is a small business or a typical business, for completing the report is $1,126 annually. The department has identified 87 beverage manufacturers selling bags in boxes, multi-layer pouches, and paperboard cartons containing plastic that are filled with wine, distilled spirits, or wine and distilled spirit cooler resulting in an aggregate cost totaling $97,962 ($1,126*87).

The estimated annual cost for this activity for each beverage manufacturer is detailed in Table 2, below. The cost estimate is based on an hourly rate commensurate to a senior analyst with benefits. The equivalent compensation for a similar analyst used in the department is the salary of a Research Data Specialist II with a 49% benefit factor.

Table 2: Beverage Manufacturer Cost of Completing Plastic Beverage Container Virgin and Postconsumer Resin Report

Activity	Hours	Hourly Rate	Cost
Establish/Maintain relationship with container manufacturer	2	$86.63	$173.26
Establish/Maintain relationship with manufacturer of caps/other affixed parts of the container	2	$86.63	$173.26
Aggregate data and calculate for submission to CalRecycle	8	$86.63	$693.04
Fill out reporting form	1	$86.63	$86.63
Total	**13**	**$86.63**	**$1,126.19**

Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons

Beverage manufacturers will be required to pay processing fees and distributors will be required to pay redemption payments for selling wine and distilled spirit coolers in bags in boxes, multi-layer pouches, and paperboard cartons.

CalRecycle estimates that the percentage of wine and distilled spirit coolers sold by container type comprises 90 percent of multi-layer pouches, 70 percent of paperboard cartons, and zero percent of bags in boxes as a proportion of all wine, distilled spirit, and wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons reported by beverage manufacturers and distributors for sale in the state. The estimates are based on observations from CalRecycle's experience in managing beverage manufacturer accounts for paying processing fees and distributor accounts for paying redemption payments. The observations are limited by the lack of beverage type reported in sales data and the recency of separate reporting of bags in boxes, multi-layer pouches, and paperboard cartons beginning in January 2025. Estimates are expected to improve as CalRecycle gains more experience collecting data regarding these types of beverage containers.

The primary determinant for the amount of processing fees paid for bags in boxes, multi-layer pouches, and paperboard cartons is the recycling rate. For the initial scenario covering calendar years 2024 and 2025, the processing fee for bags in boxes, multi-layer pouches, and paperboard cartons is based on the processing fee paid for HDPE #2 plastic containers as specified in PRC section 14575(k)(1). The recycling rate for HDPE #2 plastic was 56 percent in 2023[6]. The processing fee for material types with a recycling rate of 30 percent or more is substantially reduced as specified in PRC section 14575(e). For the ongoing scenario beginning in 2026, the estimated processing fees for bags in boxes, multi-layer pouches, and paperboard cartons will be significantly higher than the processing fee in effect during the initial scenario due to an estimated recycling rate of 17 percent, which is based on the recycling rate of #3-#7 plastics.

Table 3 "Annual Processing Fees and Redemption Payments Applying to Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons" shows the estimated annual processing fees paid by beverage manufacturers and estimated redemption payments paid by distributors. Processing fees based on the initial scenario for 2024 and 2025 are based on rates applying to HDPE #2 plastic equaling $113,955 (17,424,238 containers sold * $0.00654 processing fee/container[7]). Processing fees for the ongoing scenario for years 2026 and beyond are based on an estimated recycling rate of 17 percent and an estimated cost of recycling equal to the current cost of recycling for HDPE #2 plastic. The actual cost of recycling for bags in boxes, multi-layer pouches, and paperboard cartons will be measured during the next cost survey undertaken by the department as specified in PRC section 14575(b)(1) scheduled for 2025 with results applied to the rates effective on January 1, 2026. For the ongoing scenario for 2026 and beyond, scrap value is assumed to be $0 because bags in boxes, multi-layer pouches, and paperboard cartons consist of multiple materials that are difficult to separate and recycle and currently lack mature end-user markets. In limited cases, some scrap values have been reported above $0 from recovered cardboard from bags in boxes, but this type of container is not generally used

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[6] Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates, May 2, 2024, CalRecycle: https://www2.calrecycle.ca.gov/Docs/Web/119868

[7] 2025 Processing Fees for Beverage Manufacturers, December 16, 2024, CalRecycle: https://www2.calrecycle.ca.gov/Docs/Web/129486

at present for selling wine and distilled spirit coolers. Annual processing fees for the ongoing scenario for 2026 and beyond equal $696,795 (17,424,238 containers sold * $0.03999 processing fee per container). The processing fee per container is calculated as follows: $1,033.63 cost of recycling per ton[8] ÷ (2,000 lbs./ton * 8.4 containers/lb.[9]) * 65 percent (manufacturer-paid portion of the processing payment as specified in PRC section 14575(e)(1)(I)).

Redemption payments paid by distributors equal 25 cents per container as specified in section 2900(b)(2) of these proposed regulations less a 1.5 percent administrative fee as specified in PRC section 14574(a)(1).

Table 3: Annual Processing Fees and Redemption Payments Applying to Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons

Container Type	Estimated Annual Sales (Containers)	Estimated Proportion of Wine and Distilled Spirit Cooler Sales	Estimated Wine and Distilled Spirit Cooler Sales (Containers)	Estimated Annual Processing Fee (Initial Each of 2024 & 2025)	Estimated Annual Processing Fee (Ongoing 2026 and beyond)	Estimated Annual Redemption Payment (Net of 1.5% Administrative Fee)
Bag in box	12,830,160	0%	0	$0	$0	$0
Paperboard Carton	23,059,548	70%	16,141,684	$105,567	$645,506	$3,974,890
Multi-layer Pouch	1,425,060	90%	1,282,554	$8,388	$51,289	$315,829
Totals	**37,314,768**	**n/a**	**17,424,238**	**$113,955**	**$696,795**	**$4,290,719**

3. CalRecycle has identified a total of 378 businesses impacted by these proposed regulations, and of those, 177 businesses (approximately 47 percent) are considered small businesses. The impacted business consists of 131 processors that accepted plastic beverage containers during 2024 and are required to accept bags in boxes, multi-layer pouches, and paperboard cartons under these proposed regulations. In addition, 87 beverage manufacturers and 160 distributors have reported sales of bags in boxes, multi-layer pouches, and paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers during 2024. All impacted beverage manufacturers will be required to report virgin and postconsumer plastic minimum content under these proposed regulations. An unknown proportion of impacted beverage manufacturers and distributors will be required to pay processing fees and redemption payments respectively for selling wine and distilled spirit coolers in bags in boxes, multi-layer

[8] Ibid
[9] Ibid

pouches, and paperboard cartons since sales by beverage type is not required to be reported. Instead, sales by container type is being used as an alternative method to quantify the number of impacted businesses and is considered to be an upper bound estimate. Table 4 shows the number of small and typical businesses impacted by these proposed regulations.

Table 4: Number of Impacted Small and Typical Businesses

Business Type	Annual Threshold for Identifying Small Business	Small Business	Typical Business	Total
Processors	< $200,000 Refund Value	12	119	131
Beverage Manufacturers	< $15,000 Processing Fees	66	21	87
Distributors	< $75,0000 Redemption Payments	99	61	160
Totals	**n/a**	**177**	**201**	**378**

4-6. CalRecycle does not anticipate that new businesses will be created nor eliminated due to these proposed regulations, nor does CalRecycle anticipate a change in the number of people employed at jobs. Bags in boxes, multi-layer pouches, and paperboard cartons comprise only 0.2% of sales and 0.1% of returns based on estimated sales and returns of bags in boxes, multi-layer pouches, and paperboard cartons shown in Table 1 as a proportion of the sales and returns of all other types of beverage containers reported in 2023.[10] Moreover, the additional burden of handling, reporting minimum content, and reporting and paying processing fees or redemption payments for bags in boxes, paperboard cartons, and multi-layer pouches is not anticipated to carry a significant impact in changes in the number of businesses or overall employment.

Some processors could choose to avoid handling bags in boxes, paperboard cartons, or multi-layer pouches to reduce handling and cancellation costs by discontinuing the acceptance and handling of plastic beverage containers. PET #1 plastic is the most common beverage container material type collected for recycling with about 9.4 billion PET #1 plastic beverage containers recycled statewide in 2023[11] as compared to 6.3 million bags in boxes, paperboard cartons, and multi-layer pouches estimated to be collected for recycling annually as shown in Table 1. Therefore, CalRecycle does not anticipate that any processor would exit the large market of plastic beverage containers to avoid handling a relatively small volume of bags in boxes, paperboard cartons, or multi-layer pouches.

B. Estimated Costs

[10] Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates, May 2, 2024, CalRecycle: (https://www2.calrecycle.ca.gov/Docs/Web/119868)
[11] Ibid

1. The lifetime horizon of these proposed regulations is three years to cover the initial scenario occurring over years one and two and the ongoing scenario beginning in year three. CalRecycle assumed three years in the calculations for lifetime costs to account for sufficient time for the full implementation of the regulations. The annual cost of the ongoing year three scenario can be carried forward indefinitely each year. Based on the total costs of all activities shown in Table 6, “Estimated Costs by Industry”, the total cost of this regulation over its three-year lifetime is **$14,881,113**.

For processing fees paid by beverage manufacturers selling wine and distilled spirit coolers in bags in boxes, paperboard cartons, and multi-layer pouches, costs in the initial scenario over years one and two are lower than costs in the ongoing scenario beginning in year three. In the initial scenario, processing fees for bags in boxes, paperboard cartons, and multi-layer pouches are based on the processing fee applying to HDPE #2 plastic, a material type with a recycling rate of 56 percent. The processing fees for material types with recycling rates of 30 percent or more are reduced below the amount needed to cover processing payments, so the difference is covered by a processing fee offset which is funded from unredeemed CRV. The estimated recycling rate for bags in boxes, paperboard cartons, and multi-layer pouches is 17 percent, which is based on the recycling rate of #3-#7 plastic. Processing fees for material types with recycling rates under 30 percent are substantially higher and are paid at a rate that is in excess of what is needed to cover processing payments for those material types as specified in PRC section 14575(e) because, while only 65 percent of the processing payment is paid into the appropriate processing fee account in the California Beverage Container Recycling Fund (Fund) for each container sold, the processing payment is only paid out from the Fund for containers that are redeemed. In the initial scenario, the estimated average annual processing fee paid by beverage manufacturers is $1,310 ($113,955 ÷ 87 businesses), and in the ongoing scenario, the estimated average annual processing fee paid by beverage manufacturers is $8,008 ($696,735 ÷ 87 businesses). Costs for both scenarios are shown in Table 6 and described in section A.2.

Payment of redemption payments by distributors carries a relatively large impact that varies by sales volume, so separate average cost impacts were determined for both small business and typical distributors based on average sales of all material types reported by the 160 distributors identified as selling wine, distilled spirits, or wine and distilled spirt coolers in bag in boxes, paperboard cartons, and multi-layer pouches. Based on the redemption payments paid in 2024, the average redemption payments paid by each of the 99 small business distributors is $9,358 annually, and the average redemption payments paid by each of the 61 typical distributors is $3,114,606 annually. Based on annual average redemption payments, an estimated 0.3 percent of redemption payments will be paid by small business distributors, and an estimated 99.7 percent of redemption payments will be paid by typical distributors. For redemption payments of wine and distilled spirit coolers sold in bags in boxes, paperboard cartons, and multi-layer pouches, the estimated annual average redemption payment paid by small business distributors is $130 ($4,290,719 * 0.3 percent ÷ 99 small businesses), and the estimated annual average redemption payment paid by typical distributors is

$70,129 ($4,290,719 * 99.7 percent ÷ 61 typical businesses), as described above in section A.2.

Other ongoing costs that remain constant for each year over the three-year scenario consist of processor handling costs, averaging about $2,011 per processor ($263,455 ÷ 131 businesses), as described above in section A.2, and beverage manufacturer reporting costs of the usage of PCR and virgin plastic, estimated at $1,126 per manufacturer, as calculated above in section A.2.

Table 5: Estimated Costs per Each Small and Typical Businesses

Scenario	Activity	Cost Small Business	Cost Typical Business
Year 1 Initial	**Handle containers including disposal**	$2,011	$2,011
Year 1 Initial	**Report plastic minimum content**	$1,126	$1,126
Year 1 Initial	**Pay processing fee**	$1,310	$1,310
Year 1 Initial	**Pay redemption payment**	$130	$70,129
Year 2 Initial	**Handle containers including disposal**	$2,011	$2,011
Year 2 Initial	**Report plastic minimum content**	$1,126	$1,126
Year 2 Initial	**Pay processing fee**	$1,310	$1,310
Year 2 Initial	**Pay redemption payment**	$130	$70,129
Total Initial Costs	**N/A**	**$9,154**	**$149,152**
Year 3 and Ongoing	**Handle containers including disposal**	$2,011	$2,011
Year 3 and Ongoing	**Report plastic minimum content**	$1,126	$1,126
Year 3 and Ongoing	**Pay processing fee**	$8,008	$8,008
Year 3 and Ongoing	**Pay redemption payment**	$130	$70,129
Total Annual Ongoing Costs	**N/A**	**$11,275**	**$81,274**

2. Table 6 below details the estimated three-year lifetime costs by impacted industries consisting of processors, beverage manufacturers, and distributors. The total estimated

three-year lifetime share of costs by industry are $790,365 for processors, $1,218,591 for beverage manufacturers, and $12,872,157 for distributors. Costs for year three can be carried forward indefinitely each year based on currently available information. The figures in this table are calculated above in section A.2.

Table 6: Estimated Costs by Industry

Industry	Activity	Year 1 Initial	Year 2 Initial	Year 3 Ongoing	Total
Processors	**Handle containers including disposal**	$263,455	$263,455	$263,455	**$790,365**
Beverage Manufacturer	**Report minimum content**	$97,962	$97,962	$97,962	**$293,886**
Beverage Manufacturer	**Pay processing fee**	$113,955	$113,955	$696,735	**$924,705**
Distributor	**Pay redemption payment**	$4,290,719	$4,290,719	$4,290,719	**$12,872,157**
Totals	**N/A**	**$4,766,091**	**$4,766,091**	**$5,348,981**	**$14,881,113**

C. Estimated Benefits

1-3. These proposed regulations will implement, interpret, and make specific SB 1013 by integrating the new types of beverage containers and beverages into the regulatory framework of the BCRP. The value of this benefit is not included in this analysis because it is intangible and unquantifiable.

These proposed regulations specify that wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, plastic #1-7 pouches, and paperboard cartons will have a refund value of 25 cents. The benefits consist of a set of BCRP payments that facilitate the collection and handling of wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons. This increases clean streams of recyclable materials to support a circular economy and reduces environmental litter and the associated negative effects on health and society. Littered beverage containers can attract pests and spread disease, while beverage containers littered as pollution into natural spaces and waterways can leach chemicals and microplastics that are harmful to human health into the groundwater that supplies society's drinking water. By adding new container types to the BCRP, this increases the rate at which those containers will be redeemed at a recycling center for the return of the CRV deposit rather than littered. Taken as a whole, these regulations will benefit the health and safety of residents of California and the state's environment by ensuring that these beverage containers are recovered instead of littered.

The associated program payments providing a benefit consist of the following: administrative fees, paid to processors and recyclers for administrative costs; handling fees, a subsidy paid to certain recyclers such as recycling centers operating at supermarket sites in convenience zones generally designated within one mile of supermarkets; and processing payments, a payment paid to recycling centers and other recyclers for handling material types having a scrap value less than the cost of recycling.

The estimated annual payment of administrative fees, handling fees, and processing payments is based on the estimated number of wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons returned for recycling, calculated as 17,424,238, from Table 3 “Annual Processing Fees and Redemption Payments Applying to Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons”, multiplied by the estimated recycling rate of 17 percent, from Table 1 “Processor Handling Costs”, equaling 2,962,120 containers returned. The estimated annual administrative fee is $18,513 ($740,530 refund value * 2.5 percent administrative fee as specified in PRC section 14573(a)(2)) or $55,539 over the three-year lifetime of this regulation. The estimated annual handling fee is $16,609 (2,962,120 containers * $0.01158 handling fee per container[12] * 48.42 percent of bags in boxes, multi-layer pouches, and paperboard cartons returned for recycling redeemed at recycling centers receiving handling fees[13]) or $49,824 over the three-year lifetime of this regulation.

For processing payments, the initial scenario for each of years 1 and 2 is based on the rates applying to HDPE #2 plastic, equaling $149,129 annually (2,962,120 containers * $0.42290 processing payment/lb.[14] ÷ 8.4 containers/lb.[15]) or $298,258 for both years. For the ongoing scenario for years 3 and beyond, the processing payment is based on the same rates applying to HDPE #2 plastic except that the scrap value is assumed to be $0, equaling $182,246 annually (2,962,120 containers * $1,033.63 cost of recycling/ton[16] ÷ (2,000 lbs./ton * 8.4 containers/lb.[17])). The total processing payment over the three-year lifetime of this regulation is $480,504 ($149,129 * 2 +182,246). CalRecycle assumed three years in the calculations for lifetime benefits to account for sufficient time for the full implementation of the regulations.

The total statewide benefits from this regulation over its lifetime is **$2,807,457** as summarized in Table 7 below.

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[12] Handling Fee Revised, Effective July 1, 2024, July 8, 2024, CalRecycle: https://www2.calrecycle.ca.gov/Docs/Web/128208

[13] Participant Shares Analysis 2024, March 18, 2025, CalRecycle: (see documents relied upon). The Participant Shares Analysis is the proportion of received, redemption, and postfilled (non-CRV) weights handled by material type and program type consisting of recycling centers (RC), curbside programs (CS), dropoff and collection programs (CP), and community service (SP) programs.

[14] 2025 Processing Fees for Beverage Manufacturers (Table 1), CalRecycle: https://www2.calrecycle.ca.gov/Docs/Web/129486

[15] Ibid

[16] Ibid

[17] Ibid

Table 7: Benefits of This Regulation Over its Three-Year Lifetime

Benefit	Amount
Administrative Fees	$55,539
Handling Fees	$49,824
Processing Payments (initial two-year scenario total)	$298,258
Processing Payments (ongoing one-year scenario)	$182,246
total	**$585,867**

A portion of the estimated benefits shown in Table 7 are funded from unredeemed CRV and pose a cost to the state. State costs consist of administrative fees of $55,539, handling fees of $49,824, and the processing fee offset which is the difference between the processing payment in the initial scenario of $298,258 and the processing fees in the initial scenario of $227,910 ($113,955 from Table 3 * 2 years), equaling $70,348 ($298,258 – $227,910). The total costs to the state are $175,711 ($55,539 administrative fees + 49,824 handling fees + $70,348 processing fee offset) over the three-year lifetime of the regulation. In the current fiscal year (FY 2025-26), state costs total $52,708 ($55,539 administrative fees ÷ 3 + $49,824 handling fees ÷ 3 + $70,348 processing fee offset ÷ 4) The amount of the processing fee offset covers two years over the life of the regulation, so the amount is divided by four to reflect being in effect for the six-months of the 2025 portion of FY 2025-26.

Total combined industry and state costs over the lifetime of this regulation equal **$15,056,824** ($14,881,113 industry costs from Table 8 + $175,711 state costs).

D. Alternatives to the Regulation

1. Alternatives Considered.

Regulation as Proposed: Specify that boxes, bladders, pouches and similar containers include bags in boxes, multi-layer pouches, and paperboard cartons. Specify that wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons are redeemable beverage containers with a 25-cent CRV. Require processors handling plastic beverage containers to accept bags in boxes, multi-layer pouches, and paperboard cartons from certified recyclers. Require reporting on the usage of PCR and virgin plastic for plastic parts affixed to bags in boxes, multi-layer pouches, and paperboard cartons and specify the time frame for plastic minimum PCR content standards.

Reason for Accepting the Regulation as Proposed: The regulations are necessary for specifying the form and manner of handling bags in boxes, multi-layer pouches, and paperboard cartons by activities undertaken by beverage manufacturers, beverage distributors, and processors. Most of the activities outlined in these proposed regulations would continue to be required under statute necessitating guidelines adopted through regulations. Several informal workshops have been held on the regulation as proposed, and public comment from industry participants and interested parties has been incorporated by revising the regulation as proposed, ensuring that the regulations are designed in the best way possible to effectuate the mandates of SB 1013. Additionally, the cost-effectiveness ratio for the regulation as proposed is lower than alternative 1 and alternative 2. Therefore, the regulation as proposed is more cost effective than both alternatives.

<u>Alternative 1:</u> Exclude paperboard cartons.

Reason for Rejecting Alternative 1: A paperboard carton has similar physical properties to and can be considered a type of box. Both bags in boxes and paperboard cartons consist of about 75 percent paperboard by weight. For wine, paperboard cartons are sold alongside bags in boxes in stores. Because of the frequency in which both paperboard cartons and bags in boxes are used to sell wine, it is the most logical approach to include both types of containers in these proposed regulations as the exclusion of paperboard cartons is difficult to justify due to their prominence and similarity. Subjecting paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers to CRV promotes the purposes of the Act by incentivizing consumers to redeem those containers to be refunded the deposit that they paid on the containers at the point of sale. Specifically, subjecting paperboard cartons containing wine, distilled spirits, or wine and distilled spirit coolers to CRV reduces environmental litter and the associated negative effects on health and society, which has an unquantifiable yet profound value.

<u>Alternative 2:</u> Exempt processors accepting plastic beverage containers from accepting bags in boxes, multi-layer pouches, and paperboard cartons.

Reason for Rejecting Alternative 2: Processors would likely not opt to handle bags in boxes, multi-layer pouches, and paperboard cartons due to limited end user markets at present and low scrap value for those containers. Statute requires recycling centers to redeem all types of beverage containers (PRC section 14572(a)(1)). If processors do not accept bags in boxes, multi-layer pouches, and paperboard cartons from recycling centers, recycling centers would not receive reimbursement for CRV paid to customers or receive administrative fees and processing payments for redeeming and handling these containers. This would hinder the intent of the Act for empty beverage containers to be recycled and undermine the established flow of payments and containers between program participants in the BCRP. While processors would likely not opt to handle these containers in the absence of this regulation, processors will receive administrative fees from CalRecycle for doing so, which reduces the financial burden on processors.

2. Summary of Statewide Costs and Benefits.

For the proposed regulation, estimated benefits including benefits that pose costs to the state amount to $585,867 as outlined in Table 7 “Benefits of This Regulation Over its Three-Year Lifetime”. The costs to industry, outlined in Table 6 “Estimated Costs by Industry” amount to $14,881,113 over the lifetime of the regulation.

For alternative 1, the impact of removing paperboard cartons would decrease both benefits and costs based on a three-year lifespan, with costs for year three carried forward indefinitely each year. From Table 1 “Processor Handling and Disposal Costs”, by removing paperboard cartons, the total annual tonnage of bag in boxes and multi-layer pouches handled by processors is 660.6 resulting in a total cost of $661,109 over the three-year life of the regulation (660.6 tons * $333.59 handling and disposal costs/ton * 3 years). There are an estimated 44 beverage manufacturers selling wine, distilled spirits, and wine and distilled spirit coolers in bags in boxes or multi-layer pouches, and the estimated annual cost of reporting minimum plastic minimum from Table 2 "Beverage Manufacturer Cost of Completing Plastic Beverage Container Virgin and Postconsumer Resin Report" is $1,126 per beverage manufacturer resulting in a total cost of $148,632 over the three-year life of the regulation ($1,126 * 44 beverage manufacturers * 3 years). The number of wine and distilled spirit coolers sold in bags in boxes and multi-layer pouches annually is 1,282,554 containers from Table 3 "Annual Processing Fees and Redemption Payments Applying to Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons". Based on containers sold, redemption payments total $947,486 over the three-year life of the regulation (1,282,554 containers sold * $0.25 CRV * 98.5% net of administrative fees * 3 years). For the initial two-year scenario, processing fees total $16,776 (1,282,554 containers sold * $0.00654 processing fee/container * 2 years), and for the ongoing one-year scenario, processing fees total $51,289 (1,282,554 containers sold * $0.03999 processing fee/container); the processing fee per container is detailed in section A, Estimated Private Sector Cost Impacts. Alternative 1 costs are summarized in Table 8 below.

For benefits of alternative 1, the estimated number of wine and distilled spirit coolers sold in bags in boxes and multi-layer pouches returned for recycling annually is 218,034 containers (1,282,554 containers * 17 percent estimated recycling rate). The administrative fees paid to processors and certified recyclers over the three-year life of the regulation is $12,264, (218,034 containers * $0.25 refund value/container * 2.5 percent administrative fee rate * 3 years). Handling fees paid over the three-year life of the regulation are $3,668 (218,034 containers * $0.01158 handling fee per container * 48.42 percent of bags in boxes, multi-layer pouches, and paperboard cartons returned for recycling redeemed at recycling centers receiving handling fees * 3 years). For the initial two-year scenario, processing payments total $21,954 (218,034 containers * $0.42290 processing payment/lb. ÷ 8.4 containers/lb. * 2 years), and for the ongoing one-year scenario, processing payments total $13,415 (218,034 containers * $1,033.63 cost of recycling/ton ÷ (2,000 lbs./ton * 8.4 containers/lb.)). Handling fee and processing payment information is detailed in section C, Estimated Benefits. Alternative 1 benefits are summarized in Table 9 below.

A portion of the estimated benefits shown in Table 9 are funded from unredeemed CRV and pose a cost to the state, which are included in Table 8. State costs consist of administrative fees of $12,264, handling fees of $3,668, and the processing fee offset which is the difference between the processing payment in the initial scenario of $21,954 and the processing fees in the initial scenario of $16,776 from table 8, equaling $5,178 ($21,954 – $16,776). The total costs to the state are $21,110 ($12,264 administrative fees + $3,668 handling fees + $5,178 processing fee offset) over the three-year lifetime of the regulation.

Table 8: Lifetime (three-year) Costs of Excluding Paperboard Cartons (Alternative 1)

Description	Amount
Processor Handling Containers	$661,109
Minimum Content Reporting	$148,632
Redemption Payments	$947,486
Processing Fees (initial two-year scenario total)	$16,776
Processing Fees (ongoing one-year scenario)	$51,289
State Costs	$12,934
total	**$1,846,402**

Table 9: Lifetime (three-year) Benefits of Excluding Paperboard Cartons (Alternative 1)

Description	Amount
Administrative Fees	$4,088
Handing Fees	$3,668
Processing Payments (initial two-year scenario total)	$21,954
Processing Payments (ongoing one-year scenario)	$13,415
total	**$43,125**

For alternative 2, since processors would not be accepting bags in boxes, multi-layer pouches, and paperboard cartons, it is assumed that a different mechanism exists to reimburse recycling centers for refund value, administrative fees, and processing payments for the redemption and handling of those containers that does not involve processors. In addition, it is anticipated that recycling center costs of redeeming and handling bags in boxes, multi-layer pouches, and paperboard cartons would be higher because they would be completing additional activities that are normally completed by processors. Furthermore, recycling center costs incurred by these activities would generally be allowable for the determination of processing fees and processing payments under 14 CCR section 2960(b).

For the initial scenario covering 2024 and 2025, processing fees and processing payments will not change since the cost of recycling, scrap value, and recycling rate are fixed to HDPE #2 plastic. However, for the ongoing scenario covering 2026 and beyond, assuming all processor handling costs of wine, distilled spirits, and wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, and paperboard cartons shift to recycling centers, the cost of recycling will increase by $333.57 per ton ($263,455 ÷ 789.8 tons) based on processor handling and disposal costs and the tonnage of bags in boxes, multi-layer pouches, and paperboard cartons collected for recycling as shown in Table 1 “Processor Handling and Disposal Costs”.

For alternative 2 costs and benefits, the cost of processing fees for the ongoing scenario covering 2026 and beyond is generally based on the same assumptions as the processing fee per container detailed in section A, Estimated Private Sector Cost Impacts. The estimated recycling rate is 17 percent; the scrap value is $0 per ton; and the cost of recycling is $1,367.20 ($1,033.63/ton for HDPE #2 plastic + $333.57/ton for processor handling costs). The estimated processing fee per container is $0.0529 ($1,367.20 cost of recycling per ton ÷ (2,000 lbs./ton * 8.4 containers/lb.) * 65 percent manufacturer paid portion of the processing payment). The processing fee cost for alternative 2 totals $1,973,951 ($0.0529 processing fee/container * 37,314,768 containers sold from Table 1). The processing payment benefit for alternative two is $516,241 (6,343,511 containers returned for recycling * $1,367.20 cost of recycling/ton ÷ (2,000 lbs./ton * 8.4 containers/lb.)). The complete set of alternative 2 costs are summarized in Table 10 below, including unchanged costs from Table 6 “Estimated Costs by Industry”. The complete set of alternative 2 benefits are summarized in Table 11 below, including unchanged benefits from Table 7 “Benefits of This Regulation Over its Three-Year Lifetime”.

A portion of the estimated benefits shown in Table 11 are funded from unredeemed CRV and pose a cost to the state, which are included in Table 10. State costs consist of administrative fees of $55,539, handling fees of $49,824, and the processing fee offset which is the difference between the processing payment in the initial scenario of $298,258 and the processing fees in the initial scenario of $227,910 from Table 10, equaling $70,348 ($298,258 – $227,910). The total costs to the state are $175,711 ($55,539 administrative fees + $49,824 handling fees + $70,348 processing fee offset) over the three-year lifetime of the regulation. The state costs for alternative 2 are the same as the state cost for the proposed regulation because the total benefits differ only by the ongoing scenario for processing payments which carries no state cost.

Table 10: Lifetime (three-year) Costs Absent Processor Acceptance of Bag in Boxes, Multi-layer Pouches, and Paperboard Cartons (Alternative 2)

Description	Amount
Processor Handling Containers	$0
Minimum Content Reporting	$293,886
Redemption Payments	$12,872,157
Processing Fees (initial two-year scenario total)	$227,910
Processing Fees (ongoing one-year scenario)	$1,973,951
State Costs	$175,711
total	**$15,543,615**

Table 11: Lifetime (three-year) Benefits Absent Processor Acceptance of Bag in Boxes, Multi-layer Pouches and Paperboard Cartons (Alternative 2)

Description	Amount
Administrative Fees	$55,539

Handing Fees	$49,824
Processing Payments (initial two-year scenario total)	$298,258
Processing Payments (ongoing one-year scenario)	$516,241
total	**$919,862**

E. Major Regulations

Table 12 “Cost-effectiveness Ratio Expressed in Cost per Container Returned” below outlines the methodology used to determine the cost-effectiveness ratio. The environmental benefit is based on the number of wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, or paperboard cartons collected or returned for recycling. The cost-effectiveness ratio is expressed as the cost per container returned and is equal to the lifetime three-year cost ÷ the number of wine and distilled spirit coolers sold in bags in boxes, multi-layer pouches, or paperboard cartons returned for recycling over the three-year lifetime of the regulation. For the proposed regulation, the lifetime three-year cost is based on the combined industry and state costs and is detailed in Section C, “Estimated Benefits”, and estimated annual containers returned is based on the number of containers sold from Table 3 “Annual Processing Fees and Redemption Payments Applying to Wine and Distilled Spirit Coolers Sold in Bags in Boxes, Multi-layer Pouches, and Paperboard Cartons” multiplied by the estimated recycling rate of 17 percent or 6,343,511 containers returned (37,314,768 containers sold * 17 percent). For alternatives 1 and 2, the lifetime three-year combined industry and state costs and estimated annual containers returned is detailed in Section D, “Alternatives to the Regulation”, Item 2 and displayed in the corresponding section and item in the STD. 399 form. The cost-effectiveness ratio for the regulation as proposed is lower than alternative 1 and alternative 2. Therefore, the regulation as proposed is more cost effective than both alternatives.

Table 12: Cost-effectiveness Ratio Expressed in Cost per Container Returned

Alternative	Lifetime Cost	Containers Returned (annual)	Containers Returned (three-year lifetime)	Cost per Container Returned (cost-effectiveness ratio)
Proposed regulation	$15,056,824	6,343,511	19,030,533	$0.79
Alternative 1 (Exclude paperboard cartons)	$1,846,402	218,034	654,102	$2.82
Alternative 2 (Exempt plastic processors)	$15,543,615	6,343,511	19,030,533	$0.82

Methodologies for Individual Answers – Fiscal Impact Statement

A. Fiscal Effects on Local Governments

The fiscal effect on local governments over the current and two subsequent fiscal years is estimated to equal $12,066. CalRecycle identified two processors owned by local government entities that will incur an annual cost of $2,011 each, as shown in Table 5 "Estimated Costs per Each Small and Typical Businesses", totaling $4,022 annually for both or $12,066 over three fiscal years.

This cost to local government is not reimbursable because it results from an action undertaken at the option of a local government and is not unique to local government, e.g., affects both the private sector and the public sector (State Administrative Manual Section 6606). This is because the two local governments that own processors do so at their own choosing, and because all processors, whether owned by public or private entities, are subject to the same requirements under the proposed regulations.

B. Fiscal Effects on State Government

Table 13 "State Costs by Fiscal Year" shows state costs for the current and two subsequent fiscal years as detailed in section C, Estimated Benefits.

Table 13: State Costs by Fiscal Year

Fiscal Year	Processing Fee Offset	Administrative Fees	Handling Fees	Total
2025-26	$17,587	$18,513	$16,608	**$52,708**
2026-27	$0	$18,513	$16,608	**$35,121**
2027-28	$0	$18,513	$16,608	**$35,121**

C. Fiscal Effects on Federal Funding of State Programs

These regulations have no impact on federal funding of state programs.