

Partially Recirculated Draft Program Environmental Impact Report

Proposed Regulations for the Plastic Pollution Prevention and Packaging Responsibility Act

SCH # 2024070487
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STATE OF CALIFORNIA

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The Program EIR assesses potential environmental effects that may result from the implementation of the CalRecycle's proposed regulations on Plastic Pollution Prevention and Packaging Producer Responsibility Act (Senate Bill 54). The Program EIR evaluates and describes, on a statewide, program-level basis, the potential environmental impacts associated with the implementation of the regulations, including the expected construction and operation of collection, sortation, and processing facilities, identifies those impacts that could be significant, and presents mitigation measures, which, if adopted by CalRecycle or other responsible agencies, could avoid or minimize these impacts.

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SECTION 1 Introduction

The Department of Resources Recycling and Recovery (CalRecycle) has prepared this Partially Recirculated Draft Program Environmental Impact Report (PEIR) to provide the public, responsible agencies, and trustee agencies with additional information regarding the potential environmental effects of its proposed regulations to implement the Plastic Pollution Prevention and Packaging Producer Responsibility Act (the Act), Senate Bill (SB) 54 (Allen, Chapter 75, Statutes of 2022). CalRecycle proposes to add to the California Code of Regulations, Title 14, Division 7, Chapter 11.1 (commencing with section 18980.1) and Chapter 11.5 (commencing with section 18981) regulations to implement, interpret, and make specific the requirements of the Act and establish various elements of CalRecycle's oversight and enforcement responsibilities under the Act. The Act facilitates shifting the burden of managing covered material from local governments to the producers ("Proposed Program"). The Draft Implementing Regulations and Reasonably Foreseeable Compliance Responses were described in Section 2 (Program Description) of the Draft PEIR.

Although this document is entitled *Partially Recirculated Draft PEIR*, no provision of CEQA that mandates recirculation is present here. The changes made to the Draft PEIR that are recirculated here include minor changes made to reflect changes in the Proposed Program, all of which demonstrate that the new proposed regulations in fact have fewer impacts than previously anticipated, and changes made in response to comments on the Draft PEIR to make more specific, and clarify certain mitigation measures. As explained below, the information added to the Draft PEIR does not meet the requirements for recirculation pursuant to Section 15088.5 of the State California Environmental Quality Act (CEQA) Guidelines. CalRecycle has prepared this Partially Recirculated Draft PEIR in an abundance of caution and transparency for the Proposed Program, and circulates the changes to the text of the Draft PEIR for public comment.

1.1 SB 54 Implementing Regulations CEQA Status and History

The Department of Resources Recycling and Recovery (CalRecycle) conducted an environmental analysis compliant with the California Environmental Quality Act (CEQA) for the Proposed Regulations for the Plastic Pollution Prevention and Packaging Producer Responsibility Act (Draft Program Environmental Impact Report (PEIR); SCH #2024070487) to evaluate the potential environmental impacts that could result from implementation of the Draft Implementing Regulations.

CalRecycle published the Notice of Preparation on July 12, 2024, initiating a 45-day public scoping period to August 26, 2024. In total, 11 comments were received during the public scoping period. The Notice of Availability and Notice of Completion and Draft PEIR were published on November 4, 2024, initiating a 45-day public comment period until December 19, 2024. In total, 24 comments were received during the public comment period. CalRecycle has developed responses to each comment, which will be included in the Final PEIR. In some instances, minor clarifications were made in the text of the Draft PEIR in response to comments.

On March 7, 2025, prior to certification of the Final PEIR, Governor Newsom directed CalRecycle to defer adoption of the regulations, and to revise them with the stated goal to reduce costs on businesses and

consumers while still achieving statutory mandates. Thereafter, CalRecycle initiated a new informal rulemaking process, and reissued revised draft regulations for public review and comment from May 16, 2025 through June 3, 2025. CalRecycle held an informal public workshop on May 27, 2025, and attended the May 30, 2025, Packaging Producer Responsibility Advisory Board meeting, to solicit feedback from the public, the regulated community, and other interested persons on the proposed changes to the Implementing Regulations compared to the December 2024 draft regulations released in the first formal rulemaking. Corresponding with the revised regulations, CalRecycle also completed a revised Standardized Regulatory Impact Assessment (SRIA) in June 2025 that was submitted to the Department of Finance. On August 22, 2025, CalRecycle initiated the formal rulemaking process, following the publication of the Notice of Proposed Action by the Office of Administrative Law.

1.2 Recirculation of the Draft PEIR

CalRecycle has reviewed the June 2025 Implementing Regulations and the information in the 2025 SRIA compared to the analysis provided in the published Draft PEIR. The criteria in CEQA Guidelines Section 15088.5 (a) and (b) set the criteria for whether recirculation of a new Draft EIR is required:

“(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term “information” can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation include, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

(b) Recirculation is not required where the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR. The lead agency’s decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.”

As described below in Sections 1.2.1 and 1.2.2, recirculation is not required.

1.2.1 Summary of Changes to SB 54 Implementing Regulations and Baseline Data

As compared to the 2024 proposed regulations from the previous rulemaking evaluated in the Draft PEIR, the August 2025 proposed regulations primarily introduce procedural and definitional refinements rather than substantive policy shifts. These changes aim to clarify implementation logistics, improve regulatory certainty, and enhance coordination among responsible parties.

Additionally, the revisions expand and refine the definitions section. Notably, they clarify terms such as “covered material,” “covered material category,” and “producer,” while aligning regulatory text with the statutory definitions in Public Resources Code Section 42041. The revisions also provide greater clarity about end market identification and any proposals by the PRO related to new recycling technologies in Section 18980.4.1. Finally, several conforming edits were made throughout the regulatory text to improve internal consistency, clarify cross-references, and ensure enforceability. A complete summary of changes to the Implementing Regulations is provided in the revised text of the Draft PEIR included in Section 3 in the Program Overview beginning on page ES-5 as well as Section 2.2.1 beginning on page 19.

The updates in the June 2025 SRIA reflect the revised regulatory requirements and more accurate baseline data. Specifically, the changes to the SRIA are a result of using updated input data regarding the amount of plastic covered material that constitutes “baseline.”

CalRecycle published a Source Reduction Baseline study in 2024, which provides more precisely estimated values for plastic covered material and total plastic components. As a result, calculations that are dependent on these values have been updated in the Direct Impacts Model (DIM), which informs the SRIA. CalRecycle incorporated the plastic weight and component data from the Source Reduction Baseline into the DIM. The Source Reduction Baseline plastic weight estimate is considerably lower than CalRecycle’s previous plastic weight estimate, which was based on data from the 2021 Waste Characterization Study and the Recycling and Disposal Reporting System. Estimates for source reduction of plastic material, switching hard-to-recycle plastics to more easily recyclable materials, and collection, sortation, and processing infrastructure are all calculated based on the amount of plastic covered material and have decreased from previous estimates reported in the 2024 SRIA as a result of the new Source Reduction Baseline data. CalRecycle also utilized a more accurate method for estimating benefits, calculating the accumulated amount of plastic avoided from plastic source reduction and increased recycling. Benefits from the proposed regulations are higher than the previous estimate reported in the 2024 SRIA.

1.2.2 Finding: Recirculation of New Draft PEIR Not Required

The finding of the analysis was that recirculation of a new Draft PEIR was not required by the changes to the proposed Implementing Regulations. The changes to the proposed Implementing Regulations do not change the PEIR in such a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that CalRecycle has declined to implement. There are no changes that lead to a new substantial adverse environmental effect: the changes lead to either no new or more severe effect or to beneficial effects.

The analysis in this document shows that, compared to the analysis in the Draft PEIR, the proposed changes to the Implementing Regulations would have no new significant environmental impact; no

substantial increase in the severity of an environmental impact; no new feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; and based on the comments received the Draft PEIR is not so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. Furthermore, recirculation is not required because the new information added to the PEIR merely clarifies, amplifies, or makes insignificant modifications in an adequate PEIR.

The Partially Recirculated Draft PEIR reflects the changes to the Implementing Regulations and updates the information in the environmental analysis to be consistent with the changes. The Partially Recirculated Draft PEIR also includes all changes made to the Draft PEIR made in response to comments during the 2024 public comment period on the Draft PEIR. As noted above, these latter changes were largely clarifying and did not themselves trigger recirculation mandates.

Nevertheless, in the interest of full transparency and engagement, CalRecycle committed to recirculate the changes to the document for public comment as explained in Section 1.3.

1.3 Scope of Partially Recirculated Draft PEIR

Although CEQA does not require recirculation of this document, CalRecycle is providing this targeted recirculation in the interest of transparency. This Partially Recirculated Draft PEIR includes only the pages from the Draft PEIR that have been revised, either in response to comments received during the original public comment period on the Draft PEIR or to reflect the minor changes made due to changes in the regulatory text. The revisions do not change the overall conclusions of the environmental analysis. **CalRecycle is accepting comments on only the revised text contained in the Partially Recirculated Draft PEIR (the text that is either underlined or struck) during a 45-day review period** (CEQA Guidelines, § 15088.5(f)(2).) CalRecycle will respond to comments on the revised text and is not required to respond to comments on text that remains unchanged and that was previously subject to public review. This approach ensures transparency while maintaining a focused review process.

1.4 Review Period and Comment Process for Partially Recirculated Draft PEIR

Public notice and circulation of a Recirculated Draft EIR is subject to the same notice and consultation requirements that applied to the original Draft PEIR under CEQA Guidelines Sections 15086 and 15087. CalRecycle has issued a Notice of Availability to provide agencies and the public with formal notification that the Partially Recirculated Draft PEIR is available for review and comment. In addition, notice of the Partially Recirculated Draft PEIR, with required content, was sent directly to each commenter that commented on the Draft PEIR as provided in CEQA Guidelines Section 15088.5(f)(3). The Notice of Availability, Partially Recirculated Draft PEIR, and select appendices are available at the following website: <https://ceqanet.lci.ca.gov/Project/2024070487>

The documents can also be reviewed in person on any business day between 8:00 a.m. and 4:00 p.m. at CalRecycle's offices at 1001 I Street in Sacramento. Please contact Fidan Aghayarova by email at Packaging@CalRecycle.ca.gov if you would like to schedule review of the documents in person.

CalRecycle is circulating this Partially Recirculated Draft PEIR for a 45-day public review and comment period. The purpose of public circulation is to provide agencies, stakeholders, and interested individuals

with opportunities to comment on the contents of the Partially Recirculated Draft PEIR. Pursuant to Section 15088.5(f)(2) of the CEQA Guidelines, CalRecycle directs that reviewers of this Partially Recirculated Draft PEIR limit their comments to those that relate to the sections of the Partially Recirculated Draft PEIR that have been revised and recirculated, and in particular to the changes in strikethrough and underline.

SUBMITTAL OF WRITTEN COMMENTS: CalRecycle requests that written comments be provided at the earliest possible date, but no later than 5:00 p.m. on October 10, 2025.

Comments may be submitted via the following:

Electronically to: CalRecycle encourages use of its electronic commenting system. To submit comments electronically, visit the e-commenting page at:

<https://calrecycle.commentinput.com?id=JQCVbSREg>

Or E-mail to: Packaging@CalRecycle.ca.gov

Or Mail to: Department of Resources Recycling and Recovery (CalRecycle) 13th Floor - Fidan Aghayarova P.O. Box 4025 Sacramento, CA 95812-4025

CalRecycle will respond to written comments received during the public review period that raise significant environmental issues related to the contents of this Partially Recirculated Draft PEIR in the Final EIR. The Final PEIR will consist of the Draft PEIR, responses to comments on the Draft PEIR, the Partially Recirculated Draft PEIR, response to comments on the Partially Recirculated Draft PEIR, and any revisions to the Draft PEIR and Partially Recirculated Draft PEIR.

Prior to any decision on the Project, CalRecycle will review the Final PEIR and consider certifying the document as complying with CEQA. Upon certification of the Final PEIR, CalRecycle may proceed with Program approval (i.e., approval and adoption of the regulations). Approval of the Program would be preceded by written findings for each significant adverse environmental effect identified in the PEIR (CEQA Guidelines Section 15091), and a statement of overriding considerations (CEQA Guidelines Section 15093). At the time that CEQA findings are adopted, CalRecycle would also adopt a mitigation monitoring and reporting program.

1.5 Contents of Partially Recirculated Draft PEIR

This Partially Recirculated Draft PEIR contains the following components. Section 2 contains a summary of the changes and the nature of the changes. Section 3 contains the changes to the Draft PEIR text made by this Partially Recirculated Draft PEIR. Changes are shown in underline (new text added) and strikeout (deleted text). Only changed text is recirculated. Readers who wish to reference the original Draft PEIR may find it at <https://ceqanet.lci.ca.gov/2024070487/2>. CalRecycle will not accept or respond to comments on the original Draft PEIR, as the comment period for that document has closed; this reference is provided for convenience.

SECTION 2 Summary of PEIR Changes to Environmental Analysis Review Period and Comment Process for Partially Recirculated Draft PEIR

The pages of the 2024 Draft PEIR with changes are provided in Section 3 of this document. The changes include those that were made in response to comments on the draft, and those that were made in response to changes in the proposed Implementing Regulations. As explained above in Section 1.3, CalRecycle is only accepting comments on text in the Draft PEIR that was changed.

Table 1 provides a summary of the 2024 Draft PEIR impact determinations before and after mitigation, and identifies whether there are any changes to the analysis in the Final 2025 PEIR, if there would be any new impact, or if there would be an increase in the severity of impacts based on the 2025 Implementing Regulations and Reasonably Foreseeable Compliance Responses.

Based on the analysis in this document and revisions to the PEIR, CalRecycle has determined the following, based on the substantial evidence presented in the administrative record are true:

1. A new significant environmental impact would not result from the 2025 Implementing Regulations and Reasonably Foreseeable Compliance Responses or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would not result from the 2025 Implementing Regulations and Reasonably Foreseeable Compliance Responses unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. There are no feasible project alternatives or mitigation measures considerably different from those previously analyzed in the Draft 2024 PEIR that would clearly lessen the environmental impacts of the 2025 Implementing Regulations and Reasonably Foreseeable Compliance Responses, but CalRecycle declines to adopt them.
4. The 2024 Draft PEIR was not so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

As such, the finding of the analysis is that recirculation of a new Draft PEIR is not required by the changes to the proposed Implementing Regulations. The changes to the proposed Implementing Regulations do not change the PEIR in such a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that CalRecycle has declined to implement. There are no changes that lead to a new substantial adverse environmental effect: the changes lead to either to no new or more severe effect or to beneficial effects.

However, as described more fully in Section 1.3, although CEQA does not require recirculation of this document, CalRecycle is providing this targeted recirculation in the interest of transparency.

Table 1. Summary of changes in Partially Recirculated Draft PEIR as compared to 2024 Draft PEIR.

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
Aesthetics						
a) Have a substantial adverse effect on a scenic vista?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AES-1: Construction Aesthetic Resource Protection Measures MM AES-2: Operation Aesthetic Resource Protection Measures	Potentially Significant and Unavoidable	Yes, reduced the estimated number of sortation and processing facilities that could have a substantial adverse effect on a scenic vista.	No	No
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AES-1: Construction Aesthetic Resource Protection Measures MM AES-2: Operation Aesthetic Resource Protection Measures	Potentially Significant and Unavoidable	Yes, reduced the estimated number of sortation and processing facilities that could substantially damage scenic resources.	No	No
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be	MM AES-1: Construction Aesthetic Resource Protection Measures	Potentially Significant and Unavoidable	Yes, reduced the estimated number of sortation and processing facilities that could substantially degrade the existing visual character of views.	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	associated with significant impacts, Collection, Sortation, and Processing would be)	MM AES-2: Operation Aesthetic Resource Protection Measures				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AES-3: Develop and Submit Lighting Plan	Potentially Significant and Unavoidable	Yes, minor clarifying details added to the mitigation measures in response to comments on the initial Draft PEIR.	No	No
Agricultural Resources						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on	Potentially Significant (While Source Reduction and Refill/Reuse activities	MM AG-1: Agricultural Resource Protection	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	would not be associated with significant impacts, Collection, Sortation, and Processing would be)					
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AG-1: Agricultural Resource Protection	Potentially Significant and Unavoidable	No	No	No
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AG-2: Forestry Resource Protection	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AG-2: Forestry Resource Protection	Potentially Significant and Unavoidable	No	No	No
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact	None	No Impact	No	No	No
Air Quality						
a) Conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation,	MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques	Potentially Significant and Unavoidable	Yes, revised Baseline data resulted in a change in vehicle trips and off-road equipment for material processing. Associated emissions for individual processing facilities did not substantially change from previous estimates. Reduced estimated number of sortation and processing facilities resulted in	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
	and Processing would be)	MM AQ-2: Implement All Feasible On- and Off-Site Mitigation Measures to Reduce Operation-Related Air Pollutants to Below a Lead Agency–Approved Threshold of Significance		fewer overall operational emissions regionally, resulting in a lower potential to conflict with or obstruct implementation of the applicable air quality plan than previously estimated.		
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques MM AQ-2: Implement All Feasible On- and Off-Site Mitigation Measures to Reduce Operation-Related Air Pollutants to Below a Lead Agency–Approved	Potentially Significant and Unavoidable	Yes, revised Baseline data resulted in a change in vehicle trips and off-road equipment for material processing. Associated on-road emissions for individual processing facilities did not substantially change from previous estimates. Reduced estimated number of sortation and processing facilities resulted in fewer overall operational emissions regionally, resulting in a reduction in the net increase of any criteria pollutant from previous estimates.	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
		Threshold of Significance				
c) Expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AQ-3: Conduct a Health Risk Assessment and Implement On-Site TAC- Reducing Mitigation Measures	Potentially Significant and Unavoidable	Yes, revised Baseline data resulted in a change in vehicle trips and off- road equipment for material processing. Associated on-road and off-road emissions for individual processing facilities did not substantially change from previous estimates. Reduced estimated number of sortation and processing facilities resulted in fewer overall operational emissions regionally, resulting in a reduction in the potential to expose sensitive receptors to substantial pollutant concentrations from previous estimates.	No	No
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AQ-4: Prepare an Odor Impact Minimization Plan or Odor Management Plan	Potentially Significant and Unavoidable	Yes, revised Baseline data resulted in a change in vehicle trips and off- road equipment for material processing. Associated on-road and off-road emissions for individual processing facilities did not substantially change from previous estimates. Reduced estimated number of sortation and processing facilities resulted in fewer overall operational emissions regionally, resulting in a reduction in the	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
				potential to result in other emissions (such as those leading to odors) from previous estimates.		
Biological Resources						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-3: Conduct Biological Monitoring MM BIO-4: Implement a Workers Environmental Awareness Program MM NOI-1: Implement Noise-Reduction Measures during Project Construction	Potentially Significant and Unavoidable	Yes, minor clarifying details added to the mitigation measures in response to comments on the initial Draft PEIR.	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
		MM NOI-2: Implement Noise- Reduction Measures during Project Operation MM AES-3: Develop and Submit Lighting Plan				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop reviews and biological surveys MM BIO-5: Sensitive Community Mitigation MM BIO-4: Implement a Workers Environmental Awareness Program	Potentially Significant and Unavoidable	No	No	No
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.)	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with	MM BIO-1: Desktop reviews and biological surveys MM BIO-4: Implement a	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
through direct removal, filling, hydrological interruption, or other means?	significant impacts, Collection, Sortation, and Processing would be)	Workers Environmental Awareness Program				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-4: Implement a Workers Environmental Awareness Program MM BIO-6: Conduct Pre-construction Bat Surveys MM AES-3: Develop and Submit Lighting Plan	Potentially Significant and Unavoidable	Yes, minor clarifying details added to the mitigation measures in response to comments on the initial Draft PEIR.	No	No
e) Conflict with any local policies or ordinances protecting biological	Less than Significant	None	Less than Significant	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
resources, such as a tree preservation policy or ordinance?						
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less than Significant	None	Less than Significant	No	No	No
Cultural Resources						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources MM CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources MM CUL-3: Implement Measures to	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
		Protect Archaeological Resources during Project Construction or Operation				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources MM CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources MM CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation	Potentially Significant and Unavoidable	No	No	No
c) Disturb any human remains, including those	Less than Significant	None	Less than Significant	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
interred outside of dedicated cemeteries?						
Energy						
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	None	Less than Significant	Yes, corrected error in fuel consumption calculations and recalculated fuel consumption based on reduced estimated number of sortation and processing facilities, which resulted in statewide decrease in construction and operational fuel and energy consumption from previous estimates.	No	No
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	None	Less than Significant	No	No	No
Geology and Soils						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most	Less than Significant	None	Less than Significant	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
<p>recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</p> <p>ii) Strong seismic ground shaking?</p> <p>iii) Seismic-related ground failure, including liquefaction?</p> <p>iv) Landslides?</p>						
b) Result in substantial soil erosion or the loss of topsoil?	Less than Significant	None	Less than Significant	No	No	No
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant	None	Less than Significant	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant	None	Less than Significant	No	No	No
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Less than Significant	None	Less than Significant	No	No	No
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM GEO-1: Paleontological Resources Protection Measures	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
Greenhouse Gas Emissions						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	None	Less than Significant	Yes, revised SRIA reports a greater reduction in greenhouse gas as a result of plastic reduction measures, resulting in an increased benefit related to greenhouse gas and the environment than previously estimated.	No	No
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	None	Less than Significant	Yes, reduced estimated number of sortation and processing facilities resulted in overall decrease in construction and operational greenhouse gas emissions from previous estimates. In addition, the revised SRIA reports a greater reduction in greenhouse gas as a result of plastic reduction measures, resulting in an increase in the offset potential for greenhouse gas generated as a result of construction and operation of sortation and processing facilities.	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
Hazards and Hazardous Materials						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-1: Waste Management Plan MM HAZ-2: Worker Environmental Awareness Training	Potentially Significant and Unavoidable	Yes, added additional information regarding revised Implementing Regulations with respect to recycling technologies.	No	No
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-1: Waste Management Plan MM HAZ-2: Worker Environmental Awareness Training	Potentially Significant and Unavoidable	Yes, added additional information regarding revised Implementing Regulations with respect to recycling technologies.	No	No
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with	MM HAZ-1: Waste Management Plan MM HAZ-2: Worker Environmental	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
of an existing or proposed school?	significant impacts, Collection, Sortation, and Processing would be)	Awareness Training				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-3: Phase I/II Environmental Site Assessment MM HAZ-4: Remediation Action Plan/Soil Management Plan	Potentially Significant and Unavoidable	No	No	No
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-5: Airport Safety Hazard Assessment MM TR-5: Project-Specific Traffic Impact Report	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR 1: Construction Transportation and Management Plan MM TR-2: Restrict Lane Closures and Maintain Access MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project-Specific Traffic Impact Report	Potentially Significant and Unavoidable	No	No	No
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR 1: Construction Transportation and Management Plan MM TR-5: Project-Specific Traffic Impact Report MM HAZ 6: Emergency Access MM HAZ 7: Construction	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
		Staging and Parking Plan				
Hydrology and Water Quality						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant	None	Less than Significant	No	No	No
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HWQ-1: Hydrology Study	Potentially Significant and Unavoidable	No	No	No
c) Substantially alter the existing drainage pattern of the site or area, including through the	Potentially Significant (While Source Reduction and Refill/Reuse activities	MM HWQ-1: Hydrology Study	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?	would not be associated with significant impacts, Collection, Sortation, and Processing would be)					
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants	Less than Significant	None	Less than Significant	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
due to project inundation?						
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	None	Less than Significant	No	No	No
Land Use and Planning						
a) Physically divide an established community?	Less than Significant	None	Less than Significant	No	No	No
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant	None	Less than Significant	No	No	No
Mineral Resources						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts,	MM MIN-1: Minimize Potential Impacts from Loss of a Known Mineral Resource	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
	Collection, Sortation, and Processing would be)					
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM MIN-1: Minimize Potential Impacts from Loss of a Known Mineral Resource	Potentially Significant and Unavoidable	No	No	No
Noise						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM NOI-1: Implement Noise- Reduction Measures during Project Construction MM NOI-2: Implement Noise- Reduction Measures during Project Operation	Potentially Significant and Unavoidable	No	No	No
b) Generation of excessive groundborne	Potentially Significant (While Source Reduction and	MM NOI-1: Implement Noise- Reduction	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
vibration or groundborne noise levels?	Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	Measures during Project Construction MM NOI-2: Implement Noise-Reduction Measures during Project Operation				
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less than Significant	None	Less than Significant	No	No	No
Population and Housing						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or	No Impact	None	No Impact	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
indirectly (for example, through extension of roads or other infrastructure)?						
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	None	No Impact	No	No	No
Public Services						
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public	No Impact	None	No Impact	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
services: Fire protection? Police protection? Schools? Parks? Other public facilities?						
Recreation						
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact	None	No Impact	No	No	No
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact	None	No Impact	No	No	No
Transportation						
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit,	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be	MM TR-1: Construction Transportation Management Plan	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
roadway, bicycle and pedestrian facilities?	associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-2: Restrict Lane Closures and Maintain Access MM TR-3: Closure Notification and Detours MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project-Specific Traffic Impact Report				
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	None	Potentially Significant and Unavoidable	Yes, reduced estimated number of sortation and processing facilities resulted in overall decrease in total statewide construction and operational VMT from previous estimates. Overall relative impact is less than previously analyzed.	No	No
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections)	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be	MM TR-1: Construction Transportation Management Plan	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
or incompatible uses (e.g., farm equipment)?	associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-5: Project- Specific Traffic Impact Report				
d) Result in inadequate emergency access?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-1: Construction Transportation Management Plan MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project- Specific Traffic Impact Report	Potentially Significant and Unavoidable	No	No	No
Tribal Cultural Resources						
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources MM CUL-3: Implement Measures to Protect Archaeological	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
<p>with cultural value to a California Native American Tribe, and that is:</p> <p>i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p> <p>ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.</p>		Resources during Project Construction or Operation				

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
Utilities and Services Systems						
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than Significant	None	Less than Significant	Yes, reduced the estimated number of sortation and processing facilities that could potentially require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Relative impact is less than previously analyzed.	No	No
b) Have sufficient water supplies available to serve the project and	Less than Significant	None	Less than Significant	Yes, reduced the estimated number of sortation and processing facilities that could potentially	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
reasonably foreseeable future development during normal, dry and multiple dry years?				require water. Relative impact is less than previously analyzed.		
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	None	Less than Significant	Yes, reduced the estimated number of sortation and processing facilities that could potentially generate wastewater. Relative impact is less than previously analyzed.	No	No
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact	None	No Impact	Yes, revised baseline data provided in SRIA results in a decrease in the amount plastic covered material diverted from disposal each year, resulting in a decrease in total estimated sortation and processing facilities. The source reduction and refill/reuse reasonably foreseeable means of compliance would remain supportive of state and local activities required to comply with waste reduction programs.	No	No
e) Comply with federal, state, and local	No Impact	None	No Impact	Yes, revised baseline data provided in SRIA results in a decrease in the	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
management and reduction statutes and regulations related to solid waste?				amount plastic covered material diverted from disposal each year, although the Program remains supportive of state and local activities required to comply with waste reduction programs.		
Wildfire						
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-1: Construction Transportation and Management Plan MM TR-2: Restrict Lane Closures and Maintain Access MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project Specific Traffic Impact Report MM HAZ-6: Emergency Access MM HAZ-7: Construction Staging and Parking Plan	Potentially Significant and Unavoidable	No	No	No

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-6: Emergency Access MM HAZ-7: Construction Staging and Parking Plan	Potentially Significant and Unavoidable	No	No	No
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM HAZ-6: Emergency Access MM HAZ-7: Construction Staging and Parking Plan	Potentially Significant and Unavoidable	No	No	No
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts,	MM HAZ-6: Emergency Access MM HAZ-7: Construction Staging and Parking Plan	Potentially Significant and Unavoidable	No	No	No

Partially Recirculated Draft PEIR on SB 54 Implementing Regulations

Would the Program?	2024 Draft PEIR Significance Before Mitigation	2024 Draft PEIR Mitigation Measures	2024 Draft PEIR Significance After Mitigation	Any revisions to analysis in 2025 Final PEIR?	2025 Draft PEIR Significant New Impact	2025 Draft PEIR Increase in Severity of Impact
instability, or drainage changes?	Collection, Sortation, and Processing would be)					

As described in Section 1.2.1 of this report and in more specificity in Table 1 above, the Partially Recirculated Draft PEIR addresses several changes in the Proposed Program as well as minor changes made in response to comments on the initial Draft PEIR. Minor revisions have also been made to update the reader on the procedural status of the PEIR. Revisions are limited to the following modified sections of the Draft PEIR:

- Executive Summary: Updates on status of EIR, updates on programmatic description related to revisions to the regulatory text, and changes made in response to comments.
- Section 1, Introduction: Updates on status of EIR, updates on programmatic description related to revisions to the regulatory text, and changes made in response to comments. Minor corrections were also made.
- Section 2, Program Description: Updates on programmatic description related to revisions to the regulatory text and changes made in response to comments. Minor corrections were also made.
- Section 3.1, Environmental Impacts of the Implementing Regulations: Updates on programmatic description related to revisions to the regulatory text and based on the updated analysis set out in the 2024 Source Reduction Baseline Study. Minor corrections were also made.
- Section 3.4, Aesthetics: Minor updates on programmatic description related to revisions to the regulatory text and clarifying details added to the mitigation made in responses to comments on the original Draft PEIR.
- Section 3.6, Air Quality: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024.
- Section 3.7, Biological Resources: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024. Additionally, clarifying details added to the mitigation made in responses to comments on the original Draft PEIR.
- Section 3.9, Energy: Minor updates on programmatic description related to revisions to the regulatory text, an identified minor calculation error, and updated information from the 2024 Source Reduction Baseline study in 2024.
- Section 3.11, Greenhouse Gas Emissions: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024.
- Section 3.17, Population and Housing: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024.
- Section 3.20, Transportation: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024. Additionally, clarifying details added to the mitigation made in responses to comments on the original Draft PEIR.

- Section 3.22, Utilities and Service Systems: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024.
- Section 5.3, Identification of Alternatives Considered, Screening, and Analysis: Minor updates on programmatic description related to revisions to the regulatory text and updated information from the 2024 Source Reduction Baseline study in 2024.

CalRecycle has prepared this Partially Recirculated Draft PEIR to provide the public, responsible agencies, and trustee agencies with additional information regarding the potential environmental effects of its proposed regulations to implement

SECTION 3 Revised Draft PEIR Text

Executive Summary

Introduction

As required by [the California Environmental Quality Act \(CEQA\)](#) Guidelines Section 15123, this executive summary provides a brief description of the proposed Program, areas of known controversy, and unresolved issues. The executive summary also identifies which environmental impacts associated with the proposed Program are significant, what specific mitigation measures and alternatives have been identified to reduce or avoid each significant impact, and the level of significance of the impact after mitigation. This executive summary is intended as an overview and should be used in conjunction with a thorough reading of the [Draft Program Environmental Impact Report \(PEIR\)](#). The text of this [Draft PEIR](#), including figures, tables, and appendices serve as the basis for this executive summary.

[The Department of Resources Recycling and Recovery \(CalRecycle\)](#) is proposing permanent regulations to implement the Plastic Pollution Prevention and Packaging Producer Responsibility Act (Senate Bill 54, Allen, Chapter 75, Statutes of 2022) (hereinafter “SB 54” or the Act). SB 54 imposes minimum content requirements for single-use packaging and plastic food service ware, to be achieved through an extended producer responsibility (EPR) program.

The legislation shifts the plastic pollution burden from local jurisdictions and ratepayers to producers, typically the companies that create or package their products in single-use packaging and plastic food service ware (i.e., covered material). [In addition to paying EPR fees, Producers of covered materials](#) must pay [an additional](#) \$5 billion over 10 years, with \$500 million per year beginning in 2027, to:

- Address the environmental impacts of plastic pollution, and
- Aid affected environmental justice communities most impacted by the damaging effects of single-use plastic waste.

The law requires producers to ensure that by 2032:

- 100% of single-use packaging and plastic food service ware sold in the state is recyclable or eligible for being labeled “compostable”;
- 65% of single-use plastic packaging and food service ware is recycled; and
- 25% less single-use plastic packaging and food service ware is sold (i.e., source reduced).

SB 54 and its proposed Implementing Regulations (i.e., the Proposed Program) are consistent with the California Environmental Protection Agency (CalEPA) and United States Environmental Protection Agency (USEPA) waste management hierarchy, both of which prioritize source reduction as the environmentally preferred method of managing waste. Public Resources Code (PRC) Section 40051(a) directs CalRecycle and local agencies to do the following:

“(a) Promote the following waste management practices in order of priority: (1) Source reduction. (2) Recycling and compos. ng. (3) Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

(b) Maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot feasibly be reduced at their source, recycled, or composted, the local agency may use environmentally safe transformation or environmentally safe land disposal, or both of those practices.”

SB 54 also requires producers to establish and join a Producer Responsibility Organization (PRO) for the purpose of developing and implementing a producer responsibility plan to comply with the Act. SB 54 also requires that local jurisdictions and recycling service providers include all covered material deemed by CalRecycle as recyclable and compostable in their collection and recycling programs, except as specified.

[In addition, on March 7, 2025, prior to certification of the Final PEIR, Governor Newsom directed CalRecycle to defer adoption of the regulations, and to revise them with the stated goal to reduce costs on businesses and consumers while still achieving statutory mandates. Thereafter, CalRecycle initiated a new informal rulemaking process and released the revised draft regulations for public comment from May 16, 2025 through June 3, 2025, and submitted a new Standardized Regulatory Impact Assessment \(SRIA\) to the Department of Finance in June 2025. Additionally, CalRecycle initiated a formal rulemaking process on August 22, 2025, following the publication of the Notice of Proposed Action by the Office of Administrative Law. The 45-day public comment period takes place from August 22, 2025 through October 7, 2025. This Partially Recirculated PEIR has been revised to be consistent with the changes and the associated analysis in the SRIA. The changes to the proposed Implementing Regulations do not lead to a new substantial adverse environmental effect: the changes lead to either no new or more severe effect or to beneficial effects.](#)

Program Location

Implementation of the Program would occur throughout the State of California (Figure ES-1).

Program Objectives

CEQA Guidelines Section 15124(b) requires the project description to include a statement of objectives for the proposed project, including the underlying purpose of the proposed project. The underlying purpose of the Program is to meet the requirements of SB 54 to ensure that it achieves its goals of source reduction of plastic covered material, elimination of covered material that is not recyclable or compostable, and significant improvements in recycling rates for plastic covered material. The proposed regulations also serve the objective of improving the integrity of product labeling by implementing requirements, in accordance with Assembly Bill 1201 (Ting, Chapter 504, Statutes of 2021) (hereinafter “AB 1201”), for when products can lawfully be labeled “compostable.”

Key Program Objectives include the following:

1. Reducing the effects of plastic pollution and litter on human health and ecosystems
2. Reducing greenhouse gas (GHG) emissions from production of virgin plastic material and landfill disposal
3. Improving consumers’ ability to recycle and reuse packaging material and reduce burdens on local governments’ solid resources handling
4. Investing in communities disproportionately impacted by the effects of plastic pollution
- 4.5. Avoiding or minimizing negative environmental or public health impacts on disadvantaged or low-income communities or rural areas.
- 5.6. Supporting a stable circular economy.
- 6.7. Meeting SB 54’s statutory targets, including performance standards and recycling rates for recycling rates and source reduction as follows:
 - a. All covered material to be recyclable or eligible to be labeled “compostable” by 2032.
 - b. Minimum recycling rates for plastic covered material:
 - i. 30% by 2028
 - ii. 40% by 2030
 - iii. 65% by 2032
 - c. Minimum source reduction of plastic covered material:
 - i. 10% by 2027
 - ii. 20% by 2030
 - iii. 25% by 2032
 - d. Minimum recycling rates for expanded polystyrene (EPS) food service ware:
 - i. 25% by 2025
 - ii. 30% by 2028
 - iii. 50% by 2030
 - iv. 65% by 2032

Program Overview

SB 54 provides measures to reduce the amount of plastic created and used, as well as increase recycling rates in California. The performance standards and recycling requirements are as noted above in Project Objectives (6) as well as PRC Sections 42050(c) and 42057(a), (l).

SB 54 also requires the establishment of a PRO, which is a 501(c)(3) nonprofit organization tasked with ensuring the statutory targets are met and that producers are otherwise compliant with the statute and regulations. On January 5, 2024, CalRecycle appointed Circular Action Alliance to serve as the initial PRO. [In addition to paying EPR fees, the PRO and producers of covered materials](#) must pay [an additional](#) \$5 billion into a fund between 2027 and 2037 that would be used to mitigate the effects of plastic pollution on the environment and human health, with significant investments directed to benefit disadvantaged communities, low-income communities or rural areas.

SB 54 Implementing Regulations

The SB 54 Implementing Regulations interpret, implement, and make specific the requirements of SB 54. By interpreting, making specific, and implementing SB 54, the Implementing Regulations establish the various substantive and procedural requirements applicable to the EPR program that SB 54 requires producers of single-use packaging and plastic single-use food service ware (covered materials) to administer. The Implementing Regulations also establish how CalRecycle will exercise its oversight and enforcement responsibilities.

Consistent with SB 54, these Implementing Regulations will require producers to maintain records that demonstrate their compliance with those overall requirements and to report data related to such compliance to CalRecycle. Producers will also be required to reduce the overall amount of plastic covered materials that they create.

The Implementing Regulations will require producers to comply with their obligations under SB 54 by participating in a program operated by an organization acting on their behalf pursuant to a plan approved by CalRecycle. Alternatively, producers can create their own plan, [if they meet certain criteria and are approved to implement the requirements of SB 54 independently outside of a PRO](#). Producers, either through such an organization or individually, will be required to prepare and submit plans addressing all requirements stated in SB 54, submit annual budgets and reports concerning their plans, and maintain records documenting their compliance with SB 54.

The Implementing Regulations will also impose compliance requirements on businesses that assert they are not “producers” of covered material because some other entity is the producer or because the packaging or plastic food service ware at issue is reusable or refillable. Such businesses may be required to support their claim that they are not the producer, such as by demonstrating that such items satisfy the criteria in the regulations to be considered not “single use” or they do not meet the definition of producer, pursuant to PRC Section 42041(w).

Consistent with SB 54, the Implementing Regulations will also implement the AB 1201 requirement that certain covered material must be certified by third parties to meet a technical standard established under PRC Sections 42355-42358.5 for compostability.

The Implementing Regulations are proposed to be added to Title 14, Division 7 of the CCR, Chapter 11.1 - Plastic Pollution Prevention and Packaging Producer Responsibility and Chapter 11.5 - Environmental Marketing and Labeling. The full Draft Implementing Regulations are attached as Appendix A. A summary of the Implementing Regulations is provided below.

Chapter 11.1 - Plastic Pollution Prevention and Packaging Producer Responsibility

ARTICLE 1 – DEFINITIONS

Article 1 contains references to existing definitions and new definitions necessary to govern the provisions of the regulations. Important new definitions include those for “derivative material”, “brand or trademark”, “distribution and distribute”, “food service ware”, “intermediate supply chain entity”, “product”, “recycled organic product”, and “reporting entity”. Additionally, Article 1 includes a section that provides additional specificity with respect to producer identification.

ARTICLE 2 – COVERED MATERIALS AND COVERED MATERIAL CATEGORIES

Article 2 explains the processes for updating the existing covered material lists, if needed, and identifies materials that are excluded from the definition of covered material, including packaging for use by a food or agricultural commodity if it is not reasonably possible to use other packaging or packaging components to comply with regulations, rules, or guidelines issued by the United States Department of Agriculture or the United States Food and Drug Administration; used for medical products and drugs; materials that meet the definition of “reusable” or “refillable” and provides metrics for determining if packaging is meets the criteria for “reused or refilled by a producer” , “reused or refilled by a consumer,” and if there is “infrastructure to ensure the packaging or food service ware can be conveniently and safely reused or refilled for multiple cycles” and “infrastructure for bulk or large format packaging that may be refilled” is adequate and convenient; and long-term storage material (i.e., a lifespan of not less than typically used for at least five years); and packaging of a de minimis weight or volume. It also outlines the processes by which the PRO or independent producers can apply for a particular covered material to be deemed exempt.

ARTICLE 3 – EVALUATIONS ~~FOR OF~~ COVERED MATERIAL AND COVERED MATERIAL CATEGORIES

Article 3 defines the mechanisms and standards by which a covered material and covered material category can be considered recyclable, including how CalRecycle may make a preliminary identification of new covered material categories. It also provides the methodology by which the recycling rate of covered material categories shall be calculated, including acceptable data sources, calculation based on weight (not volume or number), and how to calculate rates for a covered material with multiple components.

Article 3 defines the standards by which a covered material is considered compostable, including criteria to befor what is considered that are designed to be associated with the recovery of desirable organic wastes collected for composting. In addition, Article 3 includes a requirement for third-party certification of compostability, and an exemptions from that requirementfor third-party certification. It also provides the criteria that must be met by an entity to be approved as an independent third party for purposes of validating postconsumer recycled content. Additionally, it defines what constitutes disposal of a covered material. Lastly, it includes a process to evaluate technologies and determine if they produce significant amounts of hazardous waste.

ARTICLE 4 – RESPONSIBLE END MARKETS

Article 4 provides the criteria an entity must meet to be considered a responsible end market, including ~~compliance~~, transparency, ~~and~~ achieving recycling ~~yields~~, and ~~composting rates ensuring adequate biological decomposition~~. It specifies which types of entities can be considered end markets for glass, metal, paper or fiber, plastic, and compostable covered materials. It also includes provisions for PRO ~~or Independent Producer~~ identification ~~of end markets, including any recycling technology that was not a type of mechanical recycling technology in use within the State as of the effective date of the Act as well as the requirement that such recycling technology does not produce significant amounts of hazardous waste. It also includes provisions for PRO or Independent Producer~~ verification, and ~~viability confirmation~~ ~~development~~ of end markets, including audits.

ARTICLE 5 – REQUIREMENTS FOR PRODUCERS

Article 5 stipulates that a producer must either join an approved PRO; provide an application, the contents of which are described in the article, for individual compliance to CalRecycle; or provide an application for exemption to CalRecycle as a small producer. Each producer must register with CalRecycle ~~within 30 days of the effective date of the regulations. Entities that become producers after 30 days after the effective date of regulation but before January 1, 2027, shall apply within 30 days of becoming a producer. Entities that become producers on or after January 1, 2027, shall, within six months of becoming a producer, register with the Department and either apply to become a participant of the PRO or apply to become an Independent Producer within 30 days of the effective date of the regulations. Producers that apply with the PRO are also required to submit specific data to the PRO on or before July 1, 2025. Entities that become producers after July 1, 2025, are required to register within 30 days of becoming a producer.~~

ARTICLE 6 – REQUIREMENTS FOR THE PRODUCER RESPONSIBILITY ORGANIZATION

Article 6 identifies the information that the PRO must provide CalRecycle, including instances of producer non-compliance and identification of a producer that is no longer participating in the PRO; a producer responsibility plan and subsequent updates or amendments to the plan; and annual reports and budgets. The Article also describes the fees that must be charged to producers, and how the fees are to be determined, prior to approval of the producer responsibility plan. Per the article, the PRO must keep records, delineated by each producer for metrics such as total weight of covered material sold, distributed, or imported into the state; total number of plastic components, by covered material category sold, distributed, or imported into the state; total weight of covered material, by covered material category recycled; and total number of plastic components, by covered material category recycled.

ARTICLE 7 – REQUIREMENTS FOR INDEPENDENT PRODUCERS

Article 7 requires that independent producers submit a producer responsibility plan to CalRecycle within six months following application approval and provides requirements for subsequent updates or amendments to the plan and annual reports and budgets. The Article also describes the fees that independent producers must pay and how the fees are to be determined. Per the article, independent producers must keep records similar to those required by the PRO, as described in Article 6.

ARTICLE 8 – PRODUCER RESPONSIBILITY PLAN REQUIREMENTS

Article 8 describes the requirements of a producer responsibility plan as outlined in PRC Section 42051.1 and provides further specificity to PRC Section 42051.1(b)(3) for each technology that will be utilized to achieve recycling requirements, including requirements to evaluate the efficiency of the technology in achieving recycling rates, demonstrate that the means and technologies meet the conditions specified in the definition of “recycle” or “recycling” pursuant to PRC Section 42041(aa), a list of overall inputs (including chemicals), and an account of end products (including quantities of by-products or residuals produced by the technology, along with their disposition), ~~etc.~~ The plan must also include education and outreach measures, a process for determining and ~~paying covered costs~~~~reimbursing costs~~ that will be incurred by local jurisdictions, recycling service providers, alternative collection systems, and others, and a dispute resolution process concerning costs incurred by local jurisdictions and recycling service providers.

The PRO plan must also describe a closure and transfer plan, fee schedule for producers, and criteria and methodology that producers must use to demonstrate that items considered reusable or refillable by the producers meet the requirements of the regulations. The Article describes the required components of the closure and transfer plan. ~~It also provides requirements for source reduction adjustments and methods the PRO may use to account for fluctuations in economic conditions and the increase or decrease in the number of producers participating in the PRO plan for determining whether the PRO has met its source reduction obligation.~~

ARTICLE 9 – SOURCE REDUCTION BASELINE REPORT, ANNUAL REPORT, AND PROGRAM BUDGET

Article 9 provides the requirements for the information to be included in the PRO or independent producers source reduction baseline reporting, and annual reports.

ARTICLE 10 – REGISTRATION AND DATA REPORTING REQUIREMENTS

Article 10 establishes the procedures for electronic registration with CalRecycle for data reporting, deadlines for data reporting, and required contents of data reports.

ARTICLE 11– REQUIREMENTS, EXEMPTIONS, AND EXTENSIONS FOR LOCAL JURISDICTIONS AND RECYCLING SERVICE PROVIDERS

Article 11 outlines the requirement that local jurisdictions collect covered material and transfer covered material ~~to directly to responsible end markets or~~ intermediate supply chain entities so that those materials are available to be recycled at a responsible end market no later than the date that CalRecycle approves a PRO’s plan. In addition, Article 11 includes procedures by which a local jurisdiction or recycling service provider may apply for an exemption ~~from the requirements of PRC Section 42060.5(a) (or a delay in the effectiveness of the requirements) for a specific covered materials category or covered material categories or extension from the requirements of PRC Section 42060.5(a).~~ Rural jurisdictions may submit an exemption ~~request if they have adopted a resolution based on its adoption of a resolution, as described in~~ request if they have adopted a resolution based on its adoption of a resolution, as described in PRC Section 42060.5(c).

ARTICLE 12 – REQUIREMENTS FOR THE ADVISORY BOARD

Article 12 describes membership terms and appointments to the advisory board.

ARTICLE 13 – ENFORCEMENT OVERSIGHT BY THE DEPARTMENT AND ADMINISTRATIVE CIVIL PENALTIES

Article 13 describes how CalRecycle can investigate [entities subject to SB 54, including review of their and review records](#), to determine compliance with SB 54 and the regulations. It describes how CalRecycle may assess violations and penalties and take disciplinary actions against a PRO or independent producer. It allows CalRecycle to permit a PRO or producer to propose a corrective action plan in response to a notice of violation and describes the requirements of such a plan.

ARTICLE 14 – PUBLIC RECORDS

Article 14 stipulates that all records submitted to CalRecycle pursuant to SB 54 are subject to mandatory disclosure under the Public Records Act, but that CalRecycle shall not disclose information that constitutes a trade secret or is exempt from mandatory disclosure under the Public Records Act.

~~ARTICLE 15 – ADDITIONAL PRODUCER RESPONSIBILITY ORGANIZATIONS~~

~~Article 15 describes a process for appointing additional PROs in the event approval of an existing PRO is revoked, or CalRecycle determines that an additional PRO would be beneficial in satisfying the requirements of SB 54, pursuant to PRC Section 42061.5(b).~~

Chapter 11.5: Environmental Marketing and Labeling

ARTICLE 1 – APPROVAL OF CERTIFICATION ENTITIES

Article 1 describes the criteria that a third-party certification entity must meet for approval by CalRecycle, such as required accreditation, independence, and impartiality, including not holding a financial interest in the producers or products requiring certification. It also outlines the process by which a third-party certification entity shall request approval or renewal of approval.

Compliance with the Implementing Regulations will require that producers reduce the overall amount of plastic covered materials that they create and to ensure that plastic covered materials that are created meet recyclability or compostability requirements and are actually recycled at statutorily established rates. These regulations will require producers to comply with their obligations under the Act by participating in a program operated by an organization acting on their behalf pursuant to a plan approved by CalRecycle. Alternatively, producers can create their own plan, [if they meet certain criteria, and are approved to implement the requirements of SB 54 independently outside of a PRO](#). Local jurisdictions, such as cities, counties, or waste districts, as well as solid waste enterprises and recycling service providers that provide solid waste handling services on behalf of a local jurisdiction, will also be affected because the Act may require them to add certain types of materials to their collection and recycling programs. The Act requires that local jurisdictions be compensated by the PRO(s) for these mandates.

Consistent with the Act, the Implementing Regulations would also implement the AB 1201 requirement that certain covered material, must be certified by third parties to meet a technical standard established under PRC Sections 42355-42358.5 for compostability.

Reasonably Foreseeable Compliance Responses

At the time of the drafting of this ~~Draft~~ PEIR, the most likely reasonably foreseeable compliance responses include source reduction of covered materials, transition to alternative materials, expanded

Would the Program?	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	Collection, Sortation, and Processing would be)		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM AQ-4: Prepare an Odor Impact Minimization Plan or Odor Management Plan	Potentially Significant and Unavoidable
Biological Resources			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-3: Conduct Biological Monitoring MM BIO-4: Implement a Workers Environmental Awareness Program MM NOI-1: Implement Noise-Reduction Measures during Project Construction MM NOI-2: Implement Noise-Reduction Measures during Project Operation MM AES-3: Develop and Submit Lighting Plan	Potentially Significant and Unavoidable

Would the Program?	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop reviews and biological surveys MM BIO-5: Sensitive Community Mitigation MM BIO-4: Implement a Workers Environmental Awareness Program	Potentially Significant and Unavoidable
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop reviews and biological surveys MM BIO-4: Implement a Workers Environmental Awareness Program	Potentially Significant and Unavoidable
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-4: Implement a Workers Environmental Awareness Program MM BIO-6: Conduct Pre-construction Bat Surveys MM AES-3: Develop and Submit Lighting Plan	Potentially Significant and Unavoidable
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant	None	Less than Significant
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community	Less than Significant	None	Less than Significant

Would the Program?	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Transportation			
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-1: Construction Transportation Management Plan MM TR-2: Restrict Lane Closures and Maintain Access MM TR-3: Closure Notification and Detours MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project-Specific Traffic Impact Report	Potentially Significant and Unavoidable
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	None	Potentially Significant and Unavoidable
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts, Collection, Sortation, and Processing would be)	MM TR-1: Construction Transportation Management Plan MM TR-5: Project-Specific Traffic Impact Report	Potentially Significant and Unavoidable
d) Result in inadequate emergency access?	Potentially Significant (While Source Reduction and Refill/Reuse activities would not be associated with significant impacts,	MM TR-1: Construction Transportation Management Plan MM TR-4: Notify Emergency Personnel of Road Closures	Potentially Significant and Unavoidable

materials and would not be subject to source reduction or meeting the plastic recycling rate requirement. These materials would still need to be recyclable by the January 1, 2032, statutory deadline, but they would not be categorized as plastic.

This alternative would result in approximately ~~1.8 million~~1,138 tons less material categorized as plastic covered material compared to the categorization under the proposed Program. Accordingly, the amount of material subject to the source reduction and recycling rate requirements would be reduced, which would lower the burden to comply and the associated cost. Consequently, a smaller volume of plastic covered material would need to be recycled, and fewer new collection, sortation, and processing facilities would need to be constructed to responsibly manage the material. While fewer overall facilities would be required, the construction of any new facilities could result in significant impacts as described for the Program, depending on the location of the facilities. Therefore, selection of this alternative would not necessarily avoid or minimize many of the significant impacts related to collection, sortation, and processing facilities identified for the Program, although the direct impacts associated with construction and operation of new and expanded collection, sortation, and processing facilities may be minimized on aggregate throughout California. In addition, Alternative 2 may result in relatively fewer overall vehicle miles travelled (VMT) and vehicle-related emissions (i.e., criteria pollutants and GHGs) as compared to the Program. It is important to note that depending on the development of future collection, sortation, and processing infrastructure, a reduced number of facilities as compared with the Program also has the potential to increase VMT and associated emissions because the array of options for management of covered materials would be limited and could increase the likelihood that material would need to travel greater distances to be managed by the smaller number of facilities. As such, because the locations of future facilities are not known, it is not clear that Alternative 2 would avoid or minimize all of the potentially significant transportation effects of the Program. While Alternative 2 is expected to reduce the likelihood of significant impacts in the aggregate throughout California, as compared to the proposed Program, it is important to note that it would also result in fewer benefits: for instance, adoption of Alternative 2 would not achieve the same reduction in GHG emissions as the proposed Program. Specifically, Alternative 2 would result in approximately ~~1.4 million~~62,000 MTCO₂e more GHG emissions than the Program because less plastic material would be recycled, and more virgin plastic material would continue to be produced. In addition, Alternative 2 would not decrease the volume of plastic pollution in the environment to the same extent as the Program because fewer materials would be classified as plastic covered materials subject to the source reduction requirement. As such, the benefits of the Program would occur to a lesser degree under Alternative 2.

Environmentally Superior Alternative

The State CEQA Guidelines (Section 15126.6(d)) require that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. The CEQA Guidelines (Section 15126.6(e)(2)) further state, in part, that “If the environmentally superior alternative is the “No Project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives”. Based on the analysis provided in this PEIR, CalRecycle has determined that the No Project alternative is the environmentally superior alternative because it avoids the potentially significant effects of compliance with the Implementing Regulations.

As illustrated in Table ES-2, below, if avoidance of significant impacts is viewed as the compelling criterion, the environmentally superior alternative other than the No Project Alternative would be Alternative 2 because it minimizes the potential for significant impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation, tribal cultural resources, and wildfire, that would occur as a result of the reasonably foreseeable means of compliance with the Implementing Regulations. The substantial [environmental and other](#) benefits of the Program would not be realized under the No Project Alternative and would be realized to a lesser degree for Alternative 2. Alternative 2, the Less Stringent Classification of Plastic Covered Materials Alternative, is anticipated to lead to less construction of new or expanded facilities for sortation and recycling. As such, Alternative 2 could reduce the significant effects of the Program. Therefore, the environmentally superior alternative other than No Project is Alternative 2.

[On December 2, 2024, CalRecycle notified the public it had begun a second 15-day comment period for the SB 54 permanent rulemaking, ending on December 17, 2024.](#)

[On March 7, 2025, Governor Newsom directed CalRecycle to defer adoption of the regulations, and to revise them with the stated goal to reduce costs on businesses and consumers while still achieving statutory mandates. Thereafter, CalRecycle initiated a new informal rulemaking process, and reissued revised draft regulations for public review and comment from May 16, 2025 through June 3, 2025. CalRecycle held an informal workshop on May 27, 2025, and attended the May 30, 2025 Packaging Producer Responsibility Advisory Board meeting to solicit feedback from the public, the regulated community, and other interested persons on the proposed changes to the Implementing Regulations compared to the December 2024 draft regulations released in the first formal rulemaking. Corresponding with the revised regulations, CalRecycle also completed a revised Standardized Regulatory Impact Assessment \(SRIA\) in June 2025 that was submitted to the Department of Finance. On August 22, 2025, CalRecycle initiated the formal rulemaking process, following the publication of the Notice of Proposed Action by the Office of Administrative Law. This PEIR has been revised to be consistent with the changes and the associated analysis in the SRIA. The changes to the proposed Implementing Regulations do not lead to a new substantial adverse environmental effect: the changes lead to either no new or more severe effect or to beneficial effects.](#)

Once approved, the [revised](#) regulations will be submitted to the OAL as required by the Administrative Procedure Act which then verifies that the regulations are clear, necessary, and are authorized by statute. The final regulations will then be filed with the Secretary of State, published in the CCR, and become effective. ~~The statutory deadline for adoption of the regulations was January 1, 2025.~~

CalRecycle's implementation and rulemaking process has included the following:

- Appointed the Advisory Board mandated by PRC Section 42070 to advise on implementation of SB 54 on June 30, 2023
- Held numerous regulatory and non-regulatory informal workshops and sessions pertaining to implementation of the statute throughout 2023 and 2025⁵⁴
- Reported to the legislature and published initial lists of covered material categories that are deemed recyclable and compostable pursuant to PRC Section 42061(c) and (d), including a report to the legislature
- Published the NOPA, ISOR, SRIA, Form 399, and draft regulations for interested party review
- Appointed the Circular Action Alliance to serve as the initial PRO on January 5, 2024.

1.3 Agency Authority

The lead agency is the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment (PRC Section 21067). CalRecycle is the Lead Agency for CEQA purposes because it is charged with developing and deciding on approval of the SB 54-proposed Implementing Regulations, as well as implementing any regulations that are ultimately adopted (see, e.g., PRC Sections 42041, 42057, 42060, 42064, 42084, 41821.5).

1.4 Program Objectives, Purpose and Need

1.4.1 Program Purpose and Need

Single-use plastic products are ubiquitous in modern-day life and their use has increased significantly: half of all plastic ever produced has been made since 2002. Less than 10% of plastic is recycled globally, leading to a huge accumulation of plastic waste, estimated at over 6 billion metric tons, in the earth's environment. In 2010 alone between 4 and 12 million tons of plastic waste ended up in the ocean (Landrigan et al. 2023).

In general, plastics do not biodegrade in the environment and pose a risk to both terrestrial and aquatic life when littered. The social, economic, and environmental costs of plastic use and pollution have been well-documented. Chemicals in plastic have been linked to adverse human health impacts at every stage of the plastic life cycle (Landrigan et al. 2023; Merkl and Charles 2022).

Statewide, product packaging and single-use food service ware made up 30% by weight and 50% by volume of the waste discarded in California in 2021. Approximately [3349%](#) of packaging and food service ware is plastic. Even though some plastics can be easily recycled, most plastics are disposed of, ending up in landfills or as pollution, which leads to persistence in the environment for decades to potentially hundreds of years. In 2021, Californians discarded over 11 million tons of packaging, including nearly 5.5 million tons of plastics. Only 6% of this plastic waste was recycled: the rest was disposed in landfills or littered. Improperly discarded packaging, including plastics, can end up in the environment. Harmful chemicals contained in the plastics can enter natural water systems, potentially causing harm to natural ecosystems and human health. The production, use, and disposal of single-use packaging and food service ware results in numerous impacts on the environment, including GHG emissions and toxic chemical releases that could result in adverse human health effects. Reuse, recycling, and source reduction of plastics reduces the amount of new plastic that is manufactured and reduces the corresponding GHG emissions associated with that manufacturing (CalRecycle 202[54](#)).

The costs and impacts of plastics are borne by all but fall disproportionately on people with the least ability to pay for adaptation (United Nations Environment Program [UNEP] 2023). Historically disadvantaged, low-income, and rural communities are disproportionately affected by climate change and other forms of pollution from plastic manufacturing. As such, measures that reduce GHG emissions will directly benefit these communities (CalRecycle 202[54](#)).

The purpose of SB 54 is to shift the burden for recycling and disposing of single-use packaging and food service ware to those entities that are most able to make design changes that could reduce end-of-life impacts (economic as well as environmental) of their products and packages (CalRecycle 202[54](#)).

California seeks to shift to a circular economy and to hold the producers, rather than local jurisdictions, ratepayers, and consumers, responsible for the management of covered materials. The shift also requires a consistent recycling system and increased access to reuse and refill packaging infrastructure.

1.4.2 Program Objectives

CEQA Guidelines Section 15124(b) requires the project description to include a statement of objectives for the proposed project, including the underlying purpose of the proposed project. The underlying purpose of the proposed regulations is to implement SB 54 to ensure that it achieves its goals: source

reduction of plastic covered material, elimination of covered material that is not recyclable or compostable, and significant improvements in recycling rates for plastic covered material. The proposed regulations also serve the objective of improving the integrity of product labeling by implementing requirements, in accordance with Assembly Bill 1201 (Ting, Chapter 504, Statutes of 2021) (hereinafter “AB 1201”), for when products can lawfully be labeled “compostable.”

This underlying purpose is consistent with the more general policy goals of shifting California to a circular economy and shifting responsibility for end-of-life management of various materials onto the producers of them, thereby lessening the materials’ effects on the environment and public health and easing the burdens on local jurisdictions and consumers.

Key Program objectives include the following:

1. Reducing the effects of plastic pollution and litter on human health and ecosystems
2. Reducing GHG emissions from production of virgin plastic material and landfill disposal
3. Improving consumers’ ability to recycle and reuse packaging material and reduce burdens on local jurisdictions’ solid waste handling resources
4. Investing in communities disproportionately impacted by the effects of plastic pollution
- ~~4-5.~~ Avoiding or minimizing negative environmental or public health impacts on disadvantaged or low-income communities or rural areas.
- ~~5-6.~~ Supporting a stable circular economy-
- ~~6-7.~~ Meeting SB 54’s statutory targets, including performance standards and recycling rates for recycling rates and source reduction as follows:
 - a. All covered material to be recyclable or eligible to be labeled “compostable” by 2032.
 - b. Minimum recycling rates for plastic covered material:
 - i. 30% by 2028
 - ii. 40% by 2030
 - iii. 65% by 2032
 - c. Minimum source reduction of plastic covered material:
 - i. 10% by 2027
 - ii. 20% by 2030
 - iii. 25% by 2032
 - d. Minimum recycling rates for expanded polystyrene (EPS) food service ware:
 - i. 25% by 2025
 - ii. 30% by 2028
 - iii. 50% by 2030
 - iv. 65% by 2032

1.6 Public Outreach

1.6.1 Public Outreach and Input During Rulemaking

CalRecycle conducted a series of publicly noticed informational sessions, nonregulatory workshops, and informal rulemaking workshops on topics related to SB 54 in 2023, ~~and~~ 2024, ~~and~~ 2025. These sessions and workshops were held in-person at CalRecycle in the Byron Sher Auditorium, Coastal Hearing Room, or Sierra Hearing Room at the CalEPA headquarters building in Sacramento, California. The public sessions and workshops were simultaneously webcast, which allowed interested parties and members of the public to either attend in person or participate virtually to provide input and feedback on topics. A notice announcing each workshop was sent out via listserv prior to the scheduled date and posted on the CalRecycle website. Workshop notices distributed via the CalRecycle listserv included discussion documents explaining the proposed regulatory concepts in detail, and presentation slides were made available following each session and workshop.

CalRecycle maintains a webpage on SB 54 that is featured on CalRecycle's home page. The page provides a high-level overview of what the law requires and up-to-date information on SB 54, including related events, a legislative timeline, infographics, and a fact sheet. The webpage also provides links to the following:

- A page on the Advisory Board
- Circular Action Alliance's PRO Applicant Package
- A page on the needs assessment that CalRecycle is required to perform
- Presentation slides and discussion documents for all past and upcoming public meetings and workshops
- ~~Draft~~ Regulatory Text
- Covered Material Categories List and Supplemental Material
- SB 54 Reports to the Legislature (2023 ~~and~~ 2025).

CalRecycle sends out information on SB 54 via multiple listservs, ~~but more specifically, the Packaging Program's listserv totaling 4,100 recipients~~. Additionally, CalRecycle monitors and responds to a Packaging email inbox to which the public can send questions regarding SB 54.

CalRecycle's Office of Public Affairs has developed an informative video to educate interested parties and the public about the new law which it has aired at public meetings and on social media. CalRecycle's Office of Public Affairs has provided media advisories to both industry associations and news media to further draw attention to the SB 54 public workshops held in the spring and summer of 2023 ~~and~~ 2025. All advisories are also posted to CalRecycle's website. CalRecycle also posts SB 54 related content on its multiple social media channels.

The ISOR, initially proposed Implementing Regulations, and documents relied upon were publicly noticed through the NOPA on February 27, 2024. The ISOR contained a description of the rationale for the initially proposed action. The NOPA, ISOR, documents relied upon, and initially proposed regulations were made available to the public on March 8, 2024.

CalRecycle accepted comments on the initially proposed Implementing Regulations in writing from March 8, 2024, through May 8, 2024, and at a public hearing held on April 23, 2024. CalRecycle considered all comments received and updated the initially proposed regulations in response to comments.

CalRecycle notified the public of the updated Implementing Regulations and made the accompanying documents available for public review on October 14, 2024. The notice included a detailed description of each change, the rationale for each change, and an updated economic and fiscal impact statement. CalRecycle accepted comments on the updated proposed Implementing Regulations through November 4, 2024. [On December 2, 2024, CalRecycle notified the public it had begun a second 15-day comment period for the SB 54 permanent rulemaking, ending on December 17, 2024.](#)

[On March 7, 2025, Governor Newsom directed CalRecycle to defer adoption of the regulations, and to revise them with the stated goal to reduce costs on businesses and consumers while still achieving statutory mandates. Thereafter, CalRecycle initiated a new informal rulemaking process, and reissued revised draft regulations for public review and comment from May 16, 2025 through June 3, 2025. CalRecycle held an informal public workshop on May 27, 2025 and attended the May 30, 2025 Packaging Producer Responsibility Advisory Board meeting to solicit feedback from the public, the regulated community, and other interested persons on substantive proposed changes to regulations compared to the December 2024 draft regulations released in the first formal rulemaking. On August 22, 2025, CalRecycle initiated the formal rulemaking process following the publication of a new Notice of Proposed Action by the Office of Administrative Law. Additionally, the Notice of Proposed Action, Initial Statement of Reasons, documents relied upon, and proposed regulations were made available to the public. The proposed regulations were released for public comment from August 22, 2025 through October 7, 2025.](#)

1.6.2 CEQA Noticing and Public Review

1.6.2.1 [Notice of Preparation](#)

CalRecycle released a Notice of Preparation (NOP) pursuant to CEQA Guidelines Section 15082 to agencies, organizations, and the public, including on the Governor's Office of Land Use and Climate Innovation (formerly the Governor's Office of Planning and Research) State CEQA Clearinghouse (SCH # 2024070487). The NOP initiated a 45-day public comment period from July 12 to August 26, 2024, during which members of the public, agencies, municipalities and interested parties were welcome and invited to submit comments on potential effects to resources, alternatives for analysis in the Draft PEIR, and scope of the Draft PEIR.

The NOP informed the public that CalRecycle is preparing a Draft PEIR and provided a brief program description, overview of the CEQA/EIR process, information on the scoping process and the 45-day comment period, and directions on how to submit a comment. CalRecycle provided three options for interested parties to submit scoping comments:

- E-mail address was included in the public scoping notices for interested parties to submit comments: Fidan.Aghayarova@calrecycle.ca.gov.
- Web comment portal: <https://calrecycle.commentinput.com?id=x2S8WhCefZ>

- Information pertaining to or request to analyze impacts of the Program on environmental resources including agricultural resources (Section 3.5), air quality (Section 3.6), biological resources (Section 3.7), geology and soils (Section 3.10), GHGs (Section 3.11), and land use and planning (Section 3.14).

1.6.2.4 AB 52 Consultation on Tribal Cultural Resources

AB 52 directs the lead agency preparing an EIR, negative declaration, or mitigated negative declaration to consult with Native American Tribes before the release of the draft CEQA document. AB 52 was adopted to provide Tribes with traditional and cultural affiliation with the geographic area of a proposed project (here, the Program area is the entire State of California) the opportunity to provide information on the presence and significance of potential tribal cultural resources early in the environmental review process. The purposes of the AB 52 consultations between the Tribes and CalRecycle included 1) collect needed information; 2) build a working relationship between CalRecycle and Tribes; and 3) avoid inadvertent discoveries (Native American Heritage Commission [NAHC] 2017). Any information shared during these consultations is regarded as privileged and confidential but is considered when conducting the resource analyses.

In compliance with AB 52, CalRecycle sent consultation notification letters via certified mail on July 12, 2024, to all Tribes identified by the NAHC in the state. Of the Tribes that were contacted, six requested formal consultation. However, two later withdrew their requests. CalRecycle proceeded with formal consultations for the remaining four Tribes, completing all by October 1, 2024. Pursuant to PRC Section 21080.3.2(b), the AB 52 process is concluded when: (1) “The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource”; or (2) “A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.” Tribal concerns from these consultations were identified and resolved prior to the release of the [eirs](#) Draft PEIR. The Program’s direct and indirect potential effects on Tribal Cultural Resources are discussed in Section 3.21 (Tribal Cultural Resources).

1.6.2.5 Public Review of the Draft PEIR and Partially Recirculated Draft PEIR

To announce the availability of the [eirs](#) Draft PEIR for public review and comment, CalRecycle issued a Notice of Completion (NOC) and Notice of Availability (NOA) on November 4, 2024, which initiated the 45-day public comment period. The NOC and NOA were electronically submitted to the State Clearinghouse and posted on the CalRecycle website.

CalRecycle distributed the NOA to the same stakeholders as the NOP (described above in Section 1.6.2.1 [Notice of Preparation]) as well as additional interested parties that requested addition to the notification list during scoping consistent with the requirements of PRC Section 21092 and CEQA Guidelines Section 15087. The NOA included a brief overview of the proposed Program and its location, the anticipated significant effects of the Implementing Regulations, CEQA process and Draft PEIR, where to access an electronic copy of the PEIR, as well as information on how to submit a comment, and the period during which comments on the Draft PEIR would be received (PRC Section 21092(b); CEQA Guidelines Section 15087(c)).

In addition to posting of the NOC and NOA, a display advertisement indicating the availability of the Draft PEIR as well as public comment meeting times, how to submit public comments, and the duration of the public comment period was posted in The Sacramento Bee, Los Angeles Times, The San Diego

Union-Tribune, and the San Francisco Chronicle on November 4, 2024, and The Bakersfield Californian and San Jose Mercury News on November 5, 2024.

Interested parties ~~may~~could submit a written comment on the Draft PEIR via the following methods:

- E-mail address: Packaging@calrecycle.ca.gov
- Web comment portal: <https://calrecycle.commentinput.com?id=x2S8WhCefZ>
- Mail to: Department of Resources Recycling and Recovery (CalRecycle) 13th Floor – Fidan Aghayarova P.O. Box 4025 Sacramento, CA 95812-4025

CalRecycle encouraged~~s~~ds comments that ~~were~~are substantive in nature and focused~~d~~ed on specific technical issues, the proposed regulations, potential alternatives, analyses of potentially significant environmental effects, and mitigation measures. ~~Comments based on these topics will have a direct impact in developing the Final PEIR. All substantive comments on the Draft PEIR received by the end of the public comment period (December 13, 2024, 45 days after NOC/NOA publication) will be directly addressed and responded to in the Final PEIR. In total, 24 comments were received during the public comment period. CalRecycle has developed responses each comment, which will be included in the Final PEIR. In some instances, minor clarifications were made in the text of the Draft PEIR in response to comments.~~

As discussed above in Section 1.2, this Partially Recirculated PEIR has been revised to be consistent with the changes to the Implementing Regulations and the associated analysis in the SRIA. Accordingly, this Partially Recirculated PEIR includes not only changes made due to changes in the regulatory text but also changes to the text of the Draft PEIR in response to comments received during the original public comment period. Additions to the Draft PEIR are reflected in this Partially Recirculated PEIR in underline text, and deletions are reflected by strikethrough.

To announce the availability of this Partially Recirculated PEIR for public review and comment, CalRecycle issued a NOC and NOA on August 26, 2025, which initiated the 45-day public comment period. The NOC and NOA were electronically submitted to the State Clearinghouse and posted on the CalRecycle website. CalRecycle distributed the NOA to the same stakeholders as the NOP, Draft PEIR, as well as additional interested parties that requested addition to the notification list. The NOA included a brief overview of changes to the Implementing Regulations and Draft PEIR, the anticipated change in significant effects of the Implementing Regulations as compared to the Draft PEIR, CEQA process, where to access an electronic copy of the PEIR, as well as information on how to submit a comment, and the period during which comments on the Partially Recirculated Draft PEIR would be received (PRC Section 21092(b); CEQA Guidelines 15087(c)). In addition to posting the NOC and NOA for the Partially Recirculated Draft PEIR, a display advertisement indicating the availability of the Partially Recirculated Draft PEIR as well as how to submit public comments, and the duration of the public comment period was posted in The Sacramento Bee, Los Angeles Times, The San Diego Union-Tribune, The San Francisco Chronicle, and The Bakersfield Californian, on August 26, 2025 and San Jose Mercury News on August 28, 2025. Interested parties may submit a written comment on the Partially Recirculated Draft PEIR via the methods listed above.

1.6.2.6 Publication of the Final EIR

CalRecycle ~~has~~will evaluated d the comments received during the Draft PEIR public comment period and will evaluate comments received during the Partially Recirculated Draft PEIR public comment period and will prepare a written response to any significant environmental issues in the Final PEIR. When the Final PEIR is complete, CalRecycle will issue public notices announcing the document's availability.

1.6.2.7 Notice of Determination

Following review of the Final PEIR, the Director of CalRecycle will decide whether to certify the PEIR as adequate for their decision-making purposes. The Director, in consideration of the PEIR, comments and testimony received, and further deliberation, may then decide to adopt, amend, or deny approval of the SB 54 Implementing Regulations. If the Director decides to approve the regulations and certify the PEIR, CalRecycle will file a Notice of Determination (NOD) with the State Clearinghouse and post the NOD on the CalRecycle website (PRC Section 21092.2). The NOD notifies the responsible/trustee agencies and the public that the Director has decided to certify and adopt the Final PEIR.

1.7 Organization of the PEIR

The following describes the organization of this PEIR:

- **Executive Summary.** This section summarizes the contents of the ~~Draft~~ PEIR.
- **Section 1: Introduction.** This section discusses the CEQA process, the purpose and need for the Implementing Regulations, the purpose of the PEIR, and public involvement in the CEQA process.
- **Section 2: Program Description.** This section provides a detailed description of the Implementing Regulations, including rationale for the proposed measures included in the Implementing Regulations.
- **Section 3: Environmental Setting, Impacts, and Mitigation Measures.** This section evaluates direct effects of the Implementing Regulations, then describes the reasonably foreseeable means of compliance with the Implementing Regulations, then describes the approach to environmental assessment, and then describes the environmental setting and identifies potential impacts of the Regulations and alternatives for each of the CEQA Appendix G environmental resource areas. If potentially significant adverse effects are identified, then measures to mitigate such impacts are presented.
- **Section 4: Cumulative Impacts.** This section analyzes the potential for the Implementing Regulations to have significant cumulative effects when combined with other past, present, and reasonably foreseeable future projects in each resource area's cumulative geographic scope.
- **Section 5: Alternatives.** This section presents an overview of the alternatives development process and describes the alternatives to the Implementing Regulations that were considered.
- **Section 6: Other CEQA Concerns.** This section identifies areas of the PEIR where significant environmental effects cannot be avoided, if any. It also includes an analysis of growth inducement impacts that could occur due to the Implementing Regulations.

SB 54 also requires the establishment of a statewide PRO, which will be a 501(c)(3) nonprofit organization tasked with ensuring the program objectives are met and that producers are compliant with the statute and regulations. On January 5, 2024, CalRecycle appointed Circular Action Alliance to serve as the initial PRO. [In addition to paying EPR fees, the PRO and producers of covered material](#) must pay [an additional](#) \$5 billion into a fund between 2027 and 2037 that would be used to mitigate the effects of plastic pollution on the environment and human health, primarily in disadvantaged communities, low-income communities or rural areas.

SB 54 does not ban any plastic product or plastic type. All plastic products and plastic types may continue to be manufactured and used in the state, but they must meet the performance standards and recycling requirements of the law.

Local jurisdictions, such as cities, counties, or waste districts, as well as solid waste enterprises and recycling service providers that provide solid waste handling services on behalf of a local jurisdiction, will also be affected because the legislation requires they include the covered material in their collection and recycling services. The goal of this requirement is to reduce the confusion consumers face regarding the recyclability of packaging and food service ware: all single-use packaging and plastic food service ware must be recyclable or eligible for being labeled “compostable”. The requirement that all single-use packaging and plastic food service ware must be recyclable or compostable is also expected to assist local jurisdictions responsible for its collection and recycling. Producers are responsible for ensuring that their covered material is compliant with the law.

CalRecycle has the following statutory duties and authority in implementing SB 54, including promulgating the proposed Implementing Regulations:

1. Develop a Statewide Needs Assessment.
2. Develop a list of covered material categories and identify covered material categories deemed recyclable or compostable.
3. Conduct material characterization studies.
4. Calculate recycling rates based on methodology.
5. Set the source reduction baseline.
6. Select the initial PRO.
7. Establish a process to register producers.
8. Establish a process to collect data from producers/PRO.
9. Review producer responsibility plans, plan amendments, annual reports, and budgets.
10. Conduct oversight, enforcement, and audits of the PRO and producers of covered material.
11. Appoint members to the SB 54 Advisory Board.
12. Develop and submit reports to the legislature.

2.2 SB 54 Implementing Regulations

The SB 54 Implementing Regulations interpret, implement, and make specific the requirements of SB 54. By interpreting, making specific, and implementing SB 54, the Implementing Regulations establish the various substantive and procedural requirements applicable to the EPR program that SB 54 requires producers of single-use packaging and plastic single-use food service ware (covered materials) to administer. The Implementing Regulations also establish how CalRecycle will exercise its oversight and enforcement responsibilities.

Consistent with SB 54, these Implementing Regulations will require producers to maintain records that demonstrate their compliance with those overall requirements and to report data related to such compliance to CalRecycle. Producers will also be required to reduce the overall amount of plastic covered materials that they create.

These Implementing Regulations will require producers to comply with their obligations under SB 54 by participating in a program operated by an organization acting on their behalf pursuant to a plan approved by CalRecycle. Alternatively, producers can create their own plan, [if they meet certain criteria, and are approved to implement the requirements of SB 54 independently outside of a PRO](#). Producers, either through such an organization or individually, will be required to prepare and submit plans addressing all requirements stated in SB 54, submit annual budgets and reports concerning their plans, and maintain records documenting their compliance with SB 54.

These Implementing Regulations will also impose compliance requirements on businesses that assert they are not “producers” of covered material because some other entity is the producer or because the packaging or plastic food service ware at issue is reusable or refillable. Such businesses may be required to support their claim that they are not the producer, such as by demonstrating that such items satisfy the criteria in the regulations to be considered not “single use” or they do not meet the definition of producer, pursuant to PRC Section 42041(w).

Consistent with SB 54, the Implementing Regulations will also implement the AB 1201 requirement that certain covered material, must be certified by third parties to meet a technical standard established under PRC Sections 42355-42358.5 for compostability.

The Implementing Regulations are proposed to be added to Title 14, Division 7 of the CCR, Chapter 11.1 - Plastic Pollution Prevention and Packaging Producer Responsibility and Chapter 11.5 - Environmental Marketing and Labeling. The full Draft Implementing Regulations are attached as Appendix A. A summary of the Implementing Regulations is provided below.

2.2.1 Chapter 11.1 - Plastic Pollution Prevention and Packaging Producer Responsibility

ARTICLE 1 – DEFINITIONS

Article 1 contains references to existing definitions and new definitions necessary to govern the provisions of the regulations. Important new definitions include those for [“derivative material”, “brand or trademark”, “distribution and distribute”, “food service ware”, “intermediate supply chain entity”, “product”, “recycled organic product”, and “reporting entity”](#). [Additionally, Article 1 includes a section that provides additional specificity with respect to producer identification.](#)

ARTICLE 2 – COVERED MATERIALS AND COVERED MATERIAL CATEGORIES

Article 2 explains the processes for updating the existing covered material lists, if needed, and identifies materials that are excluded from the definition of covered material, including packaging used for use by a food or agricultural commodity if it is not reasonably possible to use other packaging or packaging components to comply with regulations, rules, or guidelines issued by the United States Department of Agriculture or the United States Food and Drug Administration; medical products and drugs; materials that meet the definition of “reusable” or “refillable” and provides metrics for determining if packaging is meets the criteria for “reused or refilled by a producer” , “reused or refilled by a consumer,” and if there is “infrastructure to ensure the packaging or food service ware can be conveniently and safely reused or refilled for multiple cycles” and “infrastructure for bulk or large format packaging that may be refilled” is adequate and convenient; ~~and~~ long-term storage material (i.e., a lifespan of not less than typically used for at least five years); and packaging of a de minimis weight or volume. It also outlines the processes by which the PRO or independent producers can apply for a particular covered material to be deemed exempt.

ARTICLE 3 – EVALUATIONS ~~OF FOR~~ COVERED MATERIAL AND COVERED MATERIAL CATEGORIES

Article 3 defines the mechanisms and standards by which a covered material and covered material category can be considered recyclable, including how CalRecycle may make a preliminary identification of new covered material categories. It also provides the methodology by which the recycling rate of covered material categories shall be calculated, including acceptable data sources, calculation based on weight (not volume or number), and how to calculate rates for a covered material with multiple components.

Article 3 defines the standards by which a covered material is considered compostable, including criteria ~~to be for what is considered that are~~ designed to be associated with the recovery of desirable organic wastes collected for composting. In addition, Article 3 includes a requirement for third-party certification of compostability, and an ~~exemptions from that requirement for third-party certification~~. It also provides the criteria that must be met by an entity to be approved as an independent third party for purposes of validating postconsumer recycled content. Additionally, it defines what constitutes disposal of a covered material. ~~Lastly, it includes a process to evaluate technologies and determine if they produce significant amounts of hazardous waste. Technologies that are determined to produce significant amounts of hazardous waste will be excluded from being considered recycling.~~

ARTICLE 4 – RESPONSIBLE END MARKETS

Article 4 provides the criteria an entity must meet to be considered a responsible end market, including compliance, transparency, ~~and~~ achieving recycling yields, and ensuring adequate biological decomposition/composting rates. It specifies which types of entities can be considered end markets for glass, metal, paper or fiber, plastic, and compostable covered materials. It ~~also~~ includes provisions for PRO or Independent Producer ~~identification, of end markets, including any recycling technology that was not a type of mechanical recycling technology in use within the State as of the effective date of the Act as well as the requirement that such recycling technology does not produce significant amounts of hazardous waste. It also includes provisions for PRO or Independent Producer~~ verification, and ~~viability confirmation/development~~ of end markets, including audits.

ARTICLE 5 – REQUIREMENTS FOR PRODUCERS

Article 5 stipulates that a producer must either join an approved PRO; provide an application, the contents of which are described in the article, for individual compliance to CalRecycle; or provide an application for exemption to CalRecycle as a small producer. Each producer must register with CalRecycle within 30 days of the effective date of the regulations~~on or before July 1, 2025~~. Entities that become producers after 30 days after the effective date of regulation but before January 1, 2027, shall apply within 30 days of becoming a producer. Entities that become producers on or after January 1, 2027, shall, within six months of becoming a producer, register with the Department and either apply to become a participant of the PRO or apply to become an Independent Producer within 30 days of the effective date of the regulations. Producers that apply with the PRO are also requirement to submit specific data to the PRO. ~~after July 1, 2025, are required to register within 30 days of becoming a producer.~~

ARTICLE 6 – REQUIREMENTS FOR THE PRODUCER RESPONSIBILITY ORGANIZATION

Article 6 identifies the information that the PRO must provide CalRecycle, including instances of producer non-compliance and identification of a producer that is no longer participating in the PRO; a producer responsibility plan and subsequent updates or amendments to the plan; and annual reports and budgets. The Article also describes the fees that must be charged to producers, and how the fees are to be determined, prior to approval of the producer responsibility plan. Per the article, the PRO must keep records, delineated by each producer for metrics such as total weight of covered material sold, distributed, or imported into the state; total number of plastic components, by covered material category sold, distributed, or imported into the state; total weight of covered material, by covered material category recycled; and total number of plastic components, by covered material category recycled.

ARTICLE 7 – REQUIREMENTS FOR INDEPENDENT PRODUCERS

Article 7 requires that independent producers submit a producer responsibility plan to CalRecycle within six months following application approval and provides requirements for subsequent updates or amendments to the plan and annual reports and budgets. The Article also describes the fees that independent producers must pay and how the fees are to be determined. Per the article, independent producers must keep records similar to those required by the PRO, as described in Article 6.

ARTICLE 8 – PRODUCER RESPONSIBILITY PLAN REQUIREMENTS

Article 8 describes the requirements of a producer responsibility plan as outlined in PRC Section 42051.1 and provides further specificity to PRC Section 42051.1(b)(3) for each technology that will be utilized to achieve recycling requirements, including requirements to evaluate the efficiency of the technology in achieving recycling rates, demonstrate that the means and technologies meet the conditions specified in the definition of “recycle” or “recycling” pursuant to PRC Section 42041(aa), a list of overall inputs (including chemicals), and an account of end products (including quantities of by-products or residuals produced by the technology, along with their disposition), ~~etc.~~ The plan must also include education and outreach measures, a process for determining and paying covered costs~~reimbursing costs~~ that will be incurred by local jurisdictions, recycling service providers, alternative collection systems, and others, and

a dispute resolution process concerning costs incurred by local jurisdictions and recycling service providers.

The PRO plan must also describe a closure and transfer plan, fee schedule for producers, and criteria and methodology that producers must use to demonstrate that items considered reusable or refillable by the producers meet the requirements of the regulations. The Article describes the required components of the closure and transfer plan. ~~It also provides requirements for source reduction adjustments and methods the PRO may use to account for fluctuations in economic conditions and the increase or decrease in the number of producers participating in the PRO plan for determining whether the PRO has met its source reduction obligation.~~

ARTICLE 9 – SOURCE REDUCTION BASELINE REPORT, ANNUAL REPORT, AND PROGRAM BUDGET

Article 9 provides the requirements for the information to be included in the PRO or independent producers source reduction baseline reporting, and annual reports.

ARTICLE 10 – REGISTRATION AND DATA REPORTING REQUIREMENTS

Article 10 establishes the procedures for electronic registration with CalRecycle for data reporting, deadlines for data reporting, and required contents of data reports.

ARTICLE 11– REQUIREMENTS, EXEMPTIONS, AND EXTENSIONS FOR LOCAL JURISDICTIONS AND RECYCLING SERVICE PROVIDERS

Article 11 outlines the requirement that local jurisdictions collect covered material and transfer covered material directly to responsible end markets or to intermediate supply chain entities so that those materials are available to be recycled at a responsible end market no later than the date that CalRecycle approves a PRO's plan. In addition, Article 11 includes procedures by which a local jurisdiction or recycling service provider may apply for an exemption from the requirements of PRC Section 42060.5(a) (or a delay in the effectiveness of the requirements) for ~~a specific covered materials category or covered material categories or extension from the requirements of PRC Section 42060.5(a).~~ Rural jurisdictions may submit an exemption request if they have adopted a resolution based on its adoption of a resolution, as described in pursuant to PRC Section 42060.5(c).

ARTICLE 12 – REQUIREMENTS FOR THE ADVISORY BOARD

Article 12 describes membership terms and appointments to the advisory board.

ARTICLE 13 – ENFORCEMENT OVERSIGHT BY THE DEPARTMENT AND ADMINISTRATIVE CIVIL PENALTIES

Article 13 describes how CalRecycle can investigate entities subject to SB 54, including review of their and review records, to determine compliance with SB 54 and the regulations. It describes how CalRecycle may assess violations and penalties and take disciplinary actions against a PRO or independent producer. It allows CalRecycle to permit a PRO or producer to propose a corrective action plan in response to a notice of violation and describes the requirements of such a plan.

ARTICLE 14 – PUBLIC RECORDS

Article 14 stipulates that all records submitted to CalRecycle pursuant to SB 54 are subject to mandatory disclosure under the Public Records Act, but that CalRecycle shall not disclose information that constitutes a trade secret or is exempt from mandatory disclosure under the Public Records Act.

~~ARTICLE 15 – ADDITIONAL PRODUCER RESPONSIBILITY ORGANIZATIONS~~

~~Article 15 describes a process for appointing additional PROs in the event approval of an existing PRO is revoked, or CalRecycle determines that an additional PRO would be beneficial in satisfying the requirements of SB 54, pursuant to PRC Section 42061.5(b).~~

2.2.2 Chapter 11.5: Environmental Marketing and Labeling

ARTICLE 1 – APPROVAL OF CERTIFICATION ENTITIES

Article 1 describes the criteria that a third-party certification entity must meet for approval by CalRecycle, such as required accreditation, independence, and impartiality, including not holding a financial interest in the producers or products requiring certification. It also outlines the process by which a third-party certification entity shall request approval or renewal of approval.

2.3 Reasonably Foreseeable Compliance Responses

At the time of the drafting of this ~~Draft~~ PEIR, the most likely reasonably foreseeable compliance responses include source reduction of covered materials; transition to alternative materials; expanded reliance on refill and reuse products and associated infrastructure; and expanded and new facilities for collecting, sorting, and processing covered materials and associated operations. These foreseeable compliance responses are discussed in detail in Section 3.2 (Reasonably Foreseeable Methods by Which Compliance with the Proposed Measures Would be Achieved).

2.4 Program Location

Implementation of the Program would occur throughout the State of California (Figure 2.4-1). The general location of existing landfills, local agencies that collect covered materials curbside or otherwise, and material recovery facilities are known within California; however, decisions by future project proponents regarding the choice of compliance options and the precise location of new or modified facilities related to implementation of the proposed Implementing Regulations, including out of the state or the country, cannot be known at this time. Furthermore, due to local planning, political (i.e., the willingness of jurisdictions to address local opposition to the siting of new or expanded facilities), and economic influences, attempting to predict future project approvals about the specific location and design of future collection, sortation, and processing facilities and operations undertaken in response to the Implementing Regulations would be speculative and infeasible at this stage. The analysis of project-specific implementation actions would be subject to future, project-specific analysis.

benefit solid waste handling in the state by requiring producers to address the costs of such management and incentivizing the development of infrastructure, technological and design innovation, and increased usage of reusable and refillable products.

To meet the goals mandated by statute, the PRO and independent producers will need to source-reduce approximately ~~1.38~~1.38716,000 million tons of plastic covered material. The PRO is required to pay \$500 million into the California Plastic Pollution Mitigation Fund, to help mitigate disproportional impacts on communities from plastic pollution and climate change every year beginning on July 1, 2027, and ending on January 1, 2037 to support meeting the Program Purpose and Need.

With respect to direct environmental impacts of the Implementing Regulations, by minimizing single-use plastics, SB 54 helps decrease the amount of plastic waste that can enter waterways. This reduces the risk of harmful pollutants (e.g., microplastics) leaching into water bodies and harming aquatic ecosystems and impacting drinking water quality and human health. Further, reducing single-use plastics leads to less litter on beaches, rivers, and lakes, improving the visual appeal of natural areas. Cleaner water bodies contribute to more inviting recreational spaces for activities such as swimming, fishing, and boating, encouraging community use and enjoyment. By promoting alternatives to single-use plastics, SB 54 helps maintain the natural beauty of California's landscapes, which is vital for tourism and local economies. For these reasons, the impacts of SB 54 and the Implementing Regulations would result in beneficial effects on environmental resources such as aesthetics and water quality. As such, SB 54 and the Implementing Regulations are consistent with CalRecycle's regulatory powers for the purpose of protecting natural resources and the environment.

The remainder of Section 3 analyzes the impacts of reasonably foreseeable methods to comply with SB 54 and the Implementing Regulations. Impacts will be driven by several currently unknowable factors, including decisions by the PRO and producers regarding their compliance pathways, individual consumer decisions, and the locations of potential future facilities. No specific compliance pathway is mandated by the SB 54 Implementing Regulations, although compliance itself is mandated. As such, for the purposes of this analysis, the means of compliance described in Section 3.2 are subsequently analyzed in the remainder of Section 3.

3.2 Reasonably Foreseeable Methods by Which Compliance with the Proposed Measures Would be Achieved

The proposed Implementing Regulations are a regulatory framework that sets performance standards and recycling requirements to be met through an EPR approach implemented by producers and by local agencies. Section 3.1 (Direct Environmental Impacts of the Implementing Regulations) provides a description of the impacts of SB 54 and the Implementing Regulations. Compliance SB 54 and the Implementing Regulations will be achieved by several factors, including decisions by the PRO and producers regarding their compliance pathways, as well as individual consumer decisions that are not regulated by SB 54 or the Implementing Regulations.

The reasonably foreseeable methods to comply with SB 54 and the Implementing Regulations are described in this section as the physical changes to the environment that could result from reasonably foreseeable means of compliance. These physical changes are not required by SB 54 and the Implementing Regulations, but they are reasonably foreseeable methods by which compliance would be



Figure 3.2-1. Stages of a Circular Economy (CalRecycle 2024a)

To estimate the direct costs and impacts of meeting source reduction, reuse and refill, recyclability, and recycling rate requirements, CalRecycle developed the Direct Impacts Model (DIM) to project generation rates for materials in the disposal and recovery streams at various periods of times throughout the implementation of SB 54.

To support development of the DIM, CalRecycle assumed that to meet source reduction and recycling rate requirements, producers will replace a portion of their existing packaging with packaging from other covered material categories such as paper, metal, glass, and compostables. To meet the statutory plastic recycling rate, as compared to the baseline, producers must switch their packaging to materials that are recyclable. For the purposes of this CEQA analysis, the baseline condition is based on estimates of covered material generated based on the *2021 Disposal Facility-Based Waste Characterization Study (WCS)* developed by CalRecycle (2024b), ~~and~~ 2021 Recycling and Disposal Reporting System data in CalRecycle's material reporting database, and 2024 Source Reduction Baseline Study (CalRecycle 2024c). Based on this analysis and data, this PEIR assumes the following breakdown of covered material generated annually as the 20231 baseline condition: 5.52.9 million tons of plastic covered material, 201.4171.4 billion plastic components, and 117.460.8 billion plastic packages.

3.2.1 Source Reduction and Refill/Reuse: Reasonably Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved

Those methods that reduce or reuse plastic types will lead to a likely range of replacement materials for existing plastic packaging and food [service](#) ware. With implementation of SB 54, it is anticipated that use of alternative reusable, compostable, and recyclable materials would increase throughout the State. CalRecycle estimates that compliance with the Implementing Regulations would eliminate ~~1.38~~[16,000](#) million tons of plastic through source reduction over the 10-year period from 2021 through 2031, with an estimated ~~2.91.5~~ million tons of plastic covered material diverted from disposal each year (CalRecycle 2025~~4e~~).

It is reasonably foreseeable that the increased recycling rates for plastic food service ware and packaging would first result in the elimination of certain plastics that are difficult to recycle or contain toxic compounds. These include plastic packaging items, components, and materials where consumption could be avoided through elimination, reuse, or replacement. These items do not commonly enter the recycling and composting systems due to format, composition, or size, or are detrimental to recycling or composting. It is reasonably foreseeable that the performance standards and recycling levels will lead to the phase out of those plastics that are not readily recycled, are toxic, or do not have a market for uptake.

3.2.1.1 [Source Reduction](#)

By January 1, 2032, SB 54 mandates that plastic covered material be source reduced by at least 25% by weight and 25% by the number of plastic components sold, offered for sale, or distributed in the state in calendar year 2023. SB 54 requires that a minimum of 10% of the source reduction requirement must be met by either switching to reusable or refillable packaging or food service ware or through elimination of a plastic component. The remainder shall be achieved through other source reduction options, which include concentration, right-sizing, lightweighting, shifting to bulk or large format packaging, or from shifting plastic covered material to non-plastic covered material. SB 54 also sets interim targets for 2027 and 2030 to be achieved for source reduction (Table 3.2-1).

Table 3.2-1. Statutory Source Reduction and Reuse or Refill Rates

Implementation Date	Minimum Reuse or Refill Rate	Other Source Reduction Options	Total Minimum Source Reduction Rate
January 1, 2027	2%	8%	10%
January 1, 2030	4%	16%	20%
January 1, 2032	10%	15%	25%

Source: CalRecycle 2025~~4e~~

For the purposes of this PEIR, the source reduction requirement was calculated by applying the percent reduction rate to the total weight of plastic covered material in the 2023¹ baseline case in the DIM. The 10% reuse or refill requirement equates to a source reduction of 0.55-29 million tons of plastic as compared to the 2023¹ baseline, and the remaining 15% source reduction requirement equates to 0.4383 million tons or 17.69.1 billion plastic packages. For the purpose of analysis in the DIM, CalRecycle assumes this material would switch from plastic covered material to non-plastic covered material. Further, plastic components are estimated to represent 9.8% of the total weight of packages (CalRecycle 2025⁴). This ratio is applied to the baseline data in the DIM to calculate the weight of plastic components generated in 2023¹, which is then divided by the average weight of a plastic component. A 25% source reduction of the number of plastic components equates to 50.442.9 billion components, or 0.2428 million tons (CalRecycle 2025⁴). Table 3.2-2 provides a summary of the established baseline data and the estimated amount of material reduced to meet each source reduction goal.

Table 3.2-2. Plastic Covered Material Source Reduction Summary

Category	2023 ¹ Baseline (Total)	15% Source Reduction by Weight	10% Reuse or Refill by Weight	25% Source Reduction (Number of Plastic Components)
Plastic Covered Material (tons)	5.52.9 million	0.830.43 million	0.550.29 million	0.280.24 million
Plastic Components (count)	201.4171.4 billion	N/A	N/A	50.442.9 billion
Plastic Packages (count)	117.460.8 billion	17.69.1 billion	11.76.1 billion	N/A

Source: CalRecycle 2025⁴

3.2.1.2 Refill/Reuse Infrastructure

SB 54 requires that a minimum of 10% of the source reduction requirement be met by either switching to a reusable or refillable product or through elimination of a plastic component. The impacts associated with the transition to reusable and refillable alternatives will differ depending on the type of systems implemented and their respective infrastructure. There are various options available to meet reuse and refill requirements, including establishing or expanding systems for not only primary packaging (i.e., the first layer of protection for a product in direct contact with the product) and food service ware, but also secondary (i.e., the outer layer of packaging that surrounds primary packaging to group individual units of a product together) or tertiary packaging (i.e., packaging that protects and groups multiple products together for storage, distribution, and transportation).

¹The 2021 baseline was calculated to facilitate the analysis in this PEIR and is expected to be reasonably representative of the regulatory baseline. It is a reasonable basis upon which to evaluate the potentially significant direct and indirect effects of the implementing regulations and is the most recent data set currently available. Data sets for 2022 and 2023 are still in the process of being received and analyzed, therefore, the actual regulatory baseline for 2023 cannot be calculated until this is completed, which could be a year or more from publication of the PEIR.

Increased access to reuse and refill infrastructure will allow more consumers to make the switch from single-use materials to reusable materials. Packaging and single-use food service ware reused or refilled by the producer are those that are either returned from home or at a drop-off point, sorted, cleaned, repaired if necessary, and refilled at the manufacturer's production line, and redistributed to retail stores. Packaging and single-use food service ware reused or refilled by the consumer are those that the consumer retains, and the producer provides the refill infrastructure for the consumer to access themselves. While secondary and tertiary packaging may be included in California's reuse and refill marketplace, many of these packaging types have already been created to be reusable (Mahmoudi and Parviziomran 2020). Further, CalRecycle assumes the material converted to reuse and refill systems will include reusable plastic, glass, metal, and compostable packaging.

The estimate of refill/reuse infrastructure requirements is based on consumer-level primary packaging data and the industry sectors most likely to experience significant expansion as a result of SB 54 (CalRecycle 20254e). For reuse and refill infrastructure development, three scenarios are considered (fragmented effort, collaborative approach, and system change), each of which includes different scaling for packaging system efficiencies, return rates, and the number of times packaging is returned (reusable packaging use cycles). This PEIR looks at these three scenarios since they represent likely scenarios and provide a basis upon which to evaluate the potential impacts of this method of compliance. The fragmented effort scenario in which producers independently collect, transport, sanitize, and return packaging to shelves or consumers without sharing infrastructure with other producers, is the least efficient and most costly system. It is also the most likely system to be utilized during the early development period (CalRecycle 20254e). The collaborative approach scenario in which producers collaborate to share reuse and refill infrastructure assumes a shared and expandable reuse system and is slightly more efficient compared to the fragmented effort scenario. This scenario represents the start of the evolution of the system to a more cooperative and cohesive system that is likely to represent the middle of the development period. The system change scenario utilizes a fully scaled and standardized effort (e.g., a highly standardized and pooled system with few package designs per application versus a differentiated system where each brand has its own package design) and is the most efficient scenario modeled in the study. This is the fully developed scenario that is expected at full Program maturity. In the SRIA, CalRecycle assumes the fragmented effort scenario to be the primary reuse system from 2024 through 2026, shifting to the collaborative approach scenario for 2027 through 2029, and then shifting to the system change scenario for 2030 through 2031 (CalRecycle 20254e).

In CalRecycle's evaluation of refill/reuse in the DIM (CalRecycle 20254e), the statutorily mandated source reduction rates of 10% (including assumptions related to transition to reuse or refill options) were multiplied by the baseline to calculate the weight and number of plastic packages needing to be converted to a reusable or refillable system, equating to 553,000,286,472 tons or 11.76.1 billion plastic packages. The estimated 6.111.7 billion plastic packages were distributed across the four industry sectors using the distribution of packages estimated in the SRIA. Table 3.2-3 summarizes the distribution of packages across each packaging industry sector. It is assumed that the 6.111.7 billion single-use packages are equivalent to 6.111.7 billion single-use cycles.

Table 3.2-3. Anticipated Conversion of Packages from Single-Use to Reusable

Packaging Industry Sector	Number of Single-Use Packages to be Converted to Reusable (in Millions)
Non-Exempt Beverages	<u>3,770</u> <u>1,953</u>
Personal Care	<u>3,299</u> <u>1,709</u>
Fresh Food	<u>3,770</u> <u>1,953</u>
Food Cupboard	<u>904</u> <u>469</u>
TOTAL	<u>11,743</u><u>6,083</u>

Source: CalRecycle 20254e

3.2.2 Collection, Sortation, and Processing: Reasonably Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved

SB 54 requires California to fundamentally change its approach to managing the production and disposal of plastic packaging. It is designed to address plastic pollution through source reduction and by requiring producers of covered material to verify that their products are recycled. As such, CalRecycle projects a shift to more recyclable materials. The Implementing Regulations require local jurisdictions to include in their collection and recycling programs all covered material contained on the covered material category lists published by CalRecycle. Compliance with the Implementing Regulations will require coordination between the PRO, Independent Producers, and local agencies to provide education and outreach; process and transport of covered materials; perform reporting; mitigate contamination; improve collection, sorting, decontamination, and remanufacturing; expand curbside collection programs; and develop other infrastructure necessary or appropriate to achieve recycling rate target goals. Both curbside and non-curbside collection programs may be varied based on population density, distance to a viable responsible end market, and other relevant factors.

As part of the development of the SRIA for the Implementing Regulations for the Plastic Pollution Prevention and Packaging Producer Responsibility Act, CalRecycle conducted an in-depth analysis of the infrastructure requirements to meet the 65% plastic recycling rate target by 2032. In estimating the infrastructure needs, CalRecycle considered additional covered material which will also see increased tonnages in the recycling and disposal streams due to the Implementing Regulations. Specifically, CalRecycle estimates that 0.3870 million tons per year (tpy) of paper, metal, glass, and organic/compostable covered materials must also be accommodated into existing infrastructure (CalRecycle 20254e). As materials are diverted from landfilling and littering, expanded infrastructure for collection, sortation, and processing of recyclables and refillable/reusable products will be needed to accommodate approximately eight-nine times the current capacity for plastic covered material and approximately two times the total capacity for all covered materials in the existing systems due to the Implementing Regulations (CalRecycle 20254e). As described and calculated in detail in each of the subsections below, the types of future facilities that are anticipated to be constructed by 2032 include roughly 1,181 PRO depots, 816 large MRFs, 46 medium MRFs, and 28 small MRFs, and roughly 133-59 processing facilities for the recycling of glass, paper, plastic, and metal. Further, existing composting

facilities are expected to expand to accommodate the estimated statewide increase of ~~46,000~~^{80,000} tpy of compostable organic covered materials. A summary of recycling rate targets and the amount of difficult-to-recycle plastic material anticipated to switch to recyclable material types is presented in Table 3.2-4.

Table 3.2-4. Summary of Recycling Rate Targets and Material Switching

Implementation Date	Plastic Covered Material Recycling Rate	Plastic Covered Material Switched (tpy) (Running Total)	Plastic Covered Material Packages Switched (Count) (Running Total)
January 1, 2028	30%	1.1 ^{10.56} million	22.5 ^{11.9} billion
January 1, 2030	40%	1.5 ^{0.80} million	32.5 ^{17.0} billion
January 1, 2032	65%	2.7 ^{1.4} million	57.4 ^{30.0} billion

Source: CalRecycle 202~~5~~⁴

3.2.2.1 Collection

The estimate of collection requirements accounts for disposal and recovery data from the *2021 Disposal Facility-Based Waste Characterization Study* developed by CalRecycle (2024b), ~~and~~ 2021 Recycling and Disposal Reporting System (RDRS) database, ~~and~~ [2024 Source Reduction Baseline Study](#) (CalRecycle 2024c), as well as population increases, anticipated increases in recovery tonnage and decreases in disposal tonnages due to the Implementing Regulations. These values were applied to estimate collection infrastructure needed in the recycling and disposal streams for SB 54 implementation.

The Implementing Regulations require local jurisdictions to collect all covered material categories in their collection and recycling programs. Recycling stream collection would increase while disposal stream collection would decrease. Collection methods are assumed to include:

- Commingled collected on-route/curbside and at collection depots;
- Glass collected on-the-side (on-route/curbside);
- PRO Depot – producer-funded depots collecting several materials; and
- On-the-Side (i.e., curbside totes) and PRO Depots – collected on-the-side and/or through producer-funded depots collecting several materials.

Commingled and on-the-side collection (i.e., curbside collection either in comingled recycled material “blue bins” or material-specific totes on the side) are assumed to be collected via existing curbside collection programs as further discussed in Section 3.20 (Transportation). Additional infrastructure is not expected under these scenarios since trucks are already coming to pick up the bins and the change would be the quantity of material in each bin. However, for areas not served by curbside recycling, additional PRO Depots may be required. The types of PRO Depots are categorized as follows:

Table 3.2-5. Estimated Total Number of PRO Depots at Buildout (2031)

Formula	Medium Density
Every county has at least 1 PRO Depot...	1
...plus one additional PRO Depot for every X people, rounded up	X=65,000 (MSA) X=40,000 (others)
Every city with a population over M has at least 1 PRO Depot (this depot also counts toward meeting the county standard)...	M=15,000 (MSA) M=7,500 (others)
...plus one additional PRO Depot for every Y people, rounded up	Y=75,000 (MSA) Y=35,000 (others)
Number of Sites	
Bay Area	236
Coastal	73
Mountain	30
Southern	627
Valley	215

Table 3.2-6 summarizes assumptions for site requirements for PRO Depots based on data developed for Oregon’s Department of Environmental Quality for Oregon’s Plastic Pollution and Recycling Modernization Act (Oregon Department of Environmental Quality et. al. 2023).

Table 3.2-6. Summary PRO Depot Size and Space Type

PRO Depot Type	Size (square feet)	Space Type	Container Notes
Co-collection at Existing Depots	1,200	Industrial	4 cubic-yard dumpster
Return-to-Retail	100	Retail	Set of five 20 cubic-foot containers
Single-material Dropbox	200	Retail	User-friendly 4 cubic-yard dumpster
Multi-material Depot	1,200	Retail	4 cubic-yard dumpster

Source: Oregon Department of Environmental Quality et. al. 2023

3.2.2.2 Sortation

Expanded sortation infrastructure will be needed to sort and recover the increased tonnages of covered material due to implementation of the proposed regulations. CalRecycle assumes materials recovery facilities (MRF) to be the primary infrastructure utilized to recover plastic, paper, glass, and metal materials and composting facilities to be the primary infrastructure utilized to recover compostable and organic materials (CalRecycle 2025^{4e}).

Estimates for the future expansion of infrastructure is provided in the SRIA, which relies on the report “MRF Feasibility Study” conducted by the Iowa Metro Waste Authority (HDR 2018) and by an assessment conducted by Resource Recycling, which quantifies annual throughput averages by 300 MRFs in the U.S. (Powell 2018). The study indicated the distribution of MRFs by throughput capacities. CalRecycle determined large, medium, and small MRF facility size and throughputs based on these findings as summarized in Table 3.2-7. Specifically, large facilities are assumed to have an average throughput of 160,000 tpy, medium facilities are assumed to have an average throughput of 72,000 tpy, and small facilities are assumed to have an average throughput of 20,000 tpy (CalRecycle 2025~~4e~~).

Table 3.2-7. Assumed MRF Size and Throughput

MRF Size	Annual Throughput (tpy)	Daily Throughput (tpd)	Facility Size (sqft)
Small	20,000	55	40,000
Medium	72,000	197	54,000
Large	160,000	438	119,000

Source: CalRecycle 2025~~4e~~

sqft = square feet; tpd = tons per day; tpy = tons per year

CalRecycle used a per capita estimation to determine 2031 infrastructure capacity needs across the five California regions illustrated in Figure 3.2-2 above. Population estimates developed by the California Department of Finance Demographic Research Unit (2022a) were applied to these regions to create a better understanding of covered material generation at the regional scale. The estimated capacity that would be required each year based on the recycling rate targets of 30% by 2028, 40% by 2030, and 65% by 2032 is summarized in Table 3.2-8.

Table 3.2-8. Regional MRF Capacity Needs by Year with Respect to Recycling Rate Requirement Targets

					30% Recycle Rates		40% Recycle Rates	65% Recycle Rates	
Region	2024 (tpy)	2025 (tpy)	2026 (tpy)	2027 (tpy)	2028 (tpy)	2029 (tpy)	2030 (tpy)	2031 (tpy)	TOTAL (tpy)
Bay Area	<u>37,775</u> <u>46,018</u>	<u>37,209</u> <u>46,018</u>	<u>36,643</u> <u>46,018</u>	<u>36,077</u> <u>46,018</u>	<u>35,010</u> <u>30,679</u>	<u>34,514</u> <u>30,679</u>	<u>51,069</u> <u>184,073</u>	<u>50,139</u> <u>184,073</u>	<u>318,434</u> <u>613,577</u>
Coastal	<u>9,286</u> <u>11,204</u>	<u>9,147</u> <u>11,204</u>	<u>9,008</u> <u>11,204</u>	<u>8,869</u> <u>11,204</u>	<u>8,606</u> <u>7,469</u>	<u>8,484</u> <u>7,469</u>	<u>12,554</u> <u>44,814</u>	<u>12,325</u> <u>44,814</u>	<u>78,279</u> <u>149,380</u>
Mountain	<u>2,689</u> <u>3,372</u>	<u>2,649</u> <u>3,372</u>	<u>2,609</u> <u>3,372</u>	<u>2,569</u> <u>3,372</u>	<u>2,493</u> <u>2,248</u>	<u>2,457</u> <u>2,248</u>	<u>3,636</u> <u>13,489</u>	<u>3,570</u> <u>13,489</u>	<u>22,672</u> <u>44,964</u>
Southern	<u>108,059</u> <u>131,895</u>	<u>106,440</u> <u>131,895</u>	<u>104,821</u> <u>131,895</u>	<u>103,202</u> <u>131,895</u>	<u>100,150</u> <u>87,930</u>	<u>98,731</u> <u>87,930</u>	<u>146,088</u> <u>527,582</u>	<u>143,428</u> <u>527,582</u>	<u>910,918</u> <u>1,758,605</u>

Region					30% Recycle Rates		40% Recycle Rates	65% Recycle Rates	
	2024 (tpy)	2025 (tpy)	2026 (tpy)	2027 (tpy)	2028 (tpy)	2029 (tpy)	2030 (tpy)	2031 (tpy)	TOTAL (tpy)
Valley	<u>39,249</u> <u>46,719</u>	<u>38,661</u> <u>46,719</u>	<u>38,072</u> <u>46,719</u>	<u>37,484</u> <u>46,719</u>	<u>36,376</u> <u>31,146</u>	<u>35,861</u> <u>31,146</u>	<u>53,061</u> <u>186,878</u>	<u>52,095</u> <u>186,878</u>	<u>330,858</u> <u>622,926</u>

Source: CalRecycle 20254e

These estimations were used to determine the number of new large, medium, and small MRFs and the scale of expansion per each region. The construction of large facilities is assumed to be the most cost-effective pathway and is prioritized in its contribution to meeting each region's sortation infrastructure needs. Remainder tonnages for new construction are distributed across medium and small facilities. Accordingly, the SRIA provides an estimate that by 2032, new construction of 816 large, 46 medium, and 28 small MRFs and a 37,45253,160 tpy expansion of existing facilities are expected to come online to recover the additional plastic, paper, metal, and glass covered material in the 2031 estimation of 3-21.7 million tpy. Table 3.2-9 summarizes the regional distribution and accommodation of expansion and capacity needs through various MRFs.

Table 3.2-9. Estimated Number of MRFs to be Constructed and Expanded by 2032

Region	2032 Capacity Needs (tpy)	Number of Large Facilities (160,000 tpy)	Number of Medium Facilities (72,000 tpy)	Number of Small Facilities (20,000 tpy)	Expansion of Existing Facilities Needs (tpy)
Bay Area	<u>613,577318,434</u>	<u>31</u>	<u>12</u>	<u>30</u>	<u>1,57714,434</u>
Coastal	<u>149,38078,279</u>	0	<u>21</u>	0	<u>5,3806,279</u>
Mountain	<u>44,96422,672</u>	0	0	<u>21</u>	<u>4,9642,672</u>
Southern	<u>1,758,605910,918</u>	<u>105</u>	<u>21</u>	<u>01</u>	<u>14,60518,918</u>
Valley	<u>622,926330,858</u>	<u>32</u>	<u>10</u>	<u>30</u>	<u>10,92610,858</u>
TOTAL	<u>3,189,4521,661,160</u>	<u>168</u>	<u>64</u>	<u>82</u>	<u>37,45253,160</u>

Source: CalRecycle 20254e

For a conservative analysis, large facilities are assumed to be built in the first five years, with medium and small facilities assumed to be constructed in subsequent years.

Similarly, compostable and organic covered material generation across implementation years was distributed across the five regions. A single composting facility is assumed to be 25 acres with an average throughput of 100,000 tpy (CalRecycle 20254e). To accommodate the statewide 80,00046,000 tpy of compostable organic covered materials determined by the capacity needs assessment performed by CalRecycle (20254e), existing composting facilities are expected to expand. Table 3.2-10 summarizes

the regional capacity needs of composting facilities in response to implementation of the proposed regulations.

Table 3.2-10. Estimated Capacity Needs for Compostable Infrastructure

Region	2032 Capacity Needs (tpy)
Bay Area	15,093 8,412
Coastal	3,895 2,289
Mountain	912 404
Southern	42,743 23,545
Valley	17,538 10,962
TOTAL	80,180 45,612

Source: CalRecycle 2025⁴⁶

3.2.2.3 Processing

As processed commodities leave the MRF, they enter a system of additional processing and manufacturing into new products. At the processing facility, the recyclables are sorted, cleaned of contaminants, and prepared for transport to a milling facility or directly to a manufacturing facility. Some commodities may require more processing for additional sorting and decontamination. For example, glass and plastic are often sent to glass beneficiation plants and plastics reclaimers, respectively, where they are processed into mill-ready forms. Dedicated plastic recycling facilities leverage specialized equipment like granulators and extruders to transform post-consumer plastic waste into pellets or flakes for use in manufacturing new products. Similarly, paper recycling facilities employ pulping machines and de-inking processes to break down and clean recovered paper fibers, readying them for reuse in paper production. Metal recycling facilities utilize shredders, magnets, and eddy current separators to process scrap metal, separating ferrous and non-ferrous metals for smelting and refining into raw materials for manufacturing. After all necessary processing is completed, recyclables are made into new products at recycling plants or other facilities, such as paper mills or bottle manufacturing facilities.

With implementation of the proposed Implementing Regulations, increased infrastructure may be needed to process sorted plastic, paper, metal, and glass covered material into new feedstocks. The conversion system of materials includes, but is not limited to, the following mechanical processes: transportation, cleaning, shredding, melting, crushing, and remolding. SB 54 requires that material be sent to a Responsible End Market (REM) in order to be considered recycled. This means that recycling and recovery of materials or the disposal of contaminants must be conducted in a way that benefits the environment and minimizes risks to public health and worker health and safety. Furthermore, AB 1857 (Garcia, Chapter 342, Statutes of 2022) (herein after “AB 1857”) went into effect on January 1, 2024. AB 1857 repealed statutory authorization for waste diversion credits required under California’s Waste Management Act of 1989 for “transformation”, which includes incineration, pyrolysis, distillation, or

biological conversion of material other than composting. “Transformation” does not include composting, gasification, or biomass conversion.

Table 3.2-11 summarizes the anticipated increase in material that will need to be processed.

Table 3.2-11. Anticipated Increase in Materials to be Processed

Material Type	2032 Anticipated Increase (tpy)
Plastic	<u>2,565,542</u> <u>1,325,163</u>
Paper	<u>93,236</u> <u>57,265</u>
Metal	<u>93,252</u> <u>50,570</u>
Glass	<u>437,422</u> <u>228,163</u>

Source: CalRecycle 202546

The recycling infrastructure in California is large and complex: recyclable materials often travel through multiple facilities once they are collected and sorted. Facilities may specialize in one type of recyclable material, such as a plastic reclaimer, or they may diversify. With specific exceptions for recycling programs that are tied to financial payments, there is no mandatory reporting requirement for recycling facilities. Instead, facilities are asked to voluntarily report annual throughput and capacity for various materials to CalRecycle. As a result, it is extremely challenging to gauge the number of recycling facilities in California, their current throughput, their actual capacity, or their ability to accommodate a growing in-state recycling market. The most recent available data for recycling processing facilities compiled by CalRecycle is presented in their 2016 *State of Recycling in California* report (CalRecycle 2016). Table 3.2-12 shows a summary of recycling and processing facilities relevant to the Implementing Regulations and estimated required additional capacity based on the anticipated increase in materials to be processed presented in Table 3.2-11 above.

Table 3.2-12. Recycling Processing Facility Assumptions

Processing Facility Type	Statewide Active Facilities ¹	Total Capacity (tpy) ¹	Current Throughput (tpy) ¹	Available Capacity (tpy) ¹	Estimated Required Additional Capacity ² (tpy)	Estimated Required Additional Processing Facilities by 2032 ³
Beneficiation (Glass)	9	1,290,000	1,040,000	250,000	<u>187,422</u> <u>0</u>	<u>1</u> <u>0</u>
Paper Stock Processing	65	7,020,000	4,830,000	2,190,000	0	0
Plastic Reclaimers	98	331,000	297,000	34,000	<u>1,702,594</u> <u>867,111</u>	<u>78</u> <u>40</u>
Plastic Shredding and Grinding	87	158,000	145,000	13,000	<u>815,948</u> <u>411,052</u>	<u>37</u> <u>19</u>
Scrap Metal Processing	144	155,000	80,000	75,000	<u>18,252</u> <u>0</u>	<u>1</u> <u>70</u>

Notes:

¹ Source: CalRecycle 2016

² Estimated required capacity based on anticipated increase in materials to be processed (see Table 3.2-11 above) minus the available capacity (e.g., anticipated increase in glass material to be processed by 2032 is [437,422,228,163](#) tpy – 250,000 tpy available capacity = [187,422](#) tpy required additional capacity. [Also see Note 3 below](#)). Note that export of recyclable materials for processing elsewhere is not factored for a conservative analysis. For Plastic Reclaimers and Plastic Shredding and Grinding, the anticipated increase in plastics was distributed based on the relative ratio of the Current Throughput (i.e., 68% of anticipated tpy of plastics is assumed to be sent to Plastic Reclaimers while 32% is assumed to be sent to Plastic Shredding and Grinding).

³ ~~An-The estimated required additional capacity for glass and metal processing is within the current available capacity of existing facilities. average capacity of 236,800 tpy is assumed for beneficiation plants based on an average of the reported capacity of California secondary glass processing plants (CalRecycle 2024c).~~ An industry average capacity of 22,000 tpy is assumed for mechanical plastic plants (Leardini 2022). The average capacity for scrap metal processing facilities is estimated by dividing the total capacity for Scrap Metal Processing by the number of active facilities to arrive at an average facility capacity (Average Facility Capacity = 155,000 tpy/144 Active Facilities = 1,077 tpy). An estimate of the total number of facilities is then calculated by dividing the estimated required additional capacity by the average facility capacity (Estimated Required Additional Processing Facilities = Estimated Required Additional Capacity/Average Facility Capacity).

3.2.2.4 Transportation

The change in transportation requirements that would occur as a result of the Implementing Regulations considers consumer transport to PRO Depot Collection sites in private vehicles, first transport after collection (e.g., truck trips from collection sites to MRFs), and transfer for additional processing or residue disposal. Specifically, transportation requirements will shift for the different collection streams, including comingled, source-separated materials, garbage, PRO Depots, transfer to MRF, and sorted materials to processors or disposal. The types and locations of collection points offered by PRO Depots, MRFs, or processing facilities is not currently known. Estimates rely on data developed by CalRecycle in the SRIA (CalRecycle 20254c) and for Oregon's Department of Environmental Quality for Oregon's Plastic Pollution and Recycling Modernization Act (Oregon Department of Environmental Quality et. al. 2023). Table 3.2-13 summarizes assumptions for trips generated at PRO Depots, while Table 3.2-14 summarizes assumptions made for trip generation rates associated with MRFs and composting facilities. Finally, Table 3.2-15 summarizes trips associated with processing facilities that may be required to process the increase in covered materials that results from compliance with the Implementing Regulations.

Table 3.2-13. Regional PRO Depot Trip Generation Analysis

Region	Facility Size Assumption	Collection Assumptions Incoming Material (tpd) ¹	Trips per Day Incoming Material (Self-Haul Trips) ³	Collection Assumptions Outgoing Material (tpd)	Typical Truck Capacity for Facility Type Outgoing Material (tons) ²	Trucks per Day Outgoing Material ⁴	Truck Trips per Day ⁵	Employees ⁶	Employee Trips Per Day ⁷	Total Regional Trips per Day
Bay Area	Varies	1,988,241	80,136	1,988,241	16	124151	248302	236	472	80,85680,910
Coastal	Varies	470590	19,263	470590	16	2937	5974	73	146	1,946819,483
Mountain	Varies	1,58176	6,090	158176	16	1011	2022	30	60	6,1706,172
Southern	Varies	5,7296,928	230,260	5,7296,928	16	358433	716866	627	1,254	2,32230232,380
Valley	Varies	1,8792,463	78,874	1,8792,463	16	117154	235308	215	430	7,9539158,594
Average PRO Depot ⁸	675 sq. ft.	9.3	308	9.3	16	1	2	1	2	312

Notes:

¹ The assumption of tons per day of incoming material is based on annual regional recovery rates for recycling presented in the SRIA Direct Impact Model for each region (CalRecycle 2025^{4e}) and calculated based on an assumption that PRO Depots would be operational 260 days per year.

² A 16-ton transfer vehicle is assumed for PRO Depots as those materials are bulkier and therefore, less dense (e.g., cans, bottles, paper, reusables).

³ The number of self-haul trips to all PRO Depots regionally is estimated based on the assumption of 2.88 persons per household (California Department of Finance, Demographic Research Unit 2022b) and assuming that each participating household is 90% efficient. The number of households for each region was calculated by dividing the projected population for 2031 by 2.88. To meet the 65% recycling rate, a participation rate of 58.5% is assumed (i.e., assuming a participation rate of 90%, a minimum of 58.5% of households would need to participate in order to reach a capture rate of 65% of covered materials at PRO Depots). The number of trips to a PRO Depot per year assumed to be 13.4 trips per year per household based on an average of data collected for Oregon Department of Environmental Quality (Oregon Department of Environmental Quality et. al. 2023). Daily regional trips were calculated based on an assumption that PRO Depots would be operational 260 days per year.

⁴ The number of trucks per day is estimated based on the estimate recovery rates presented in the SRIA Direct Impact Model for each region (CalRecycle 2025^{4e}), divided by 16 tons per truck load.

⁵ The number of truck trips is calculated by multiplying the number of trucks by 2.

⁶ The number of employees for PRO Depots is calculated based on an average of one employee per PRO Depot (note that return-to-retail PRO Depots may not require additional employees, while larger multi-material PRO Depots may require up to 2 employees [Oregon Department of Environmental Quality et. al. 2023]).

⁷ The number of employee trips is calculated by multiplying the number of employees by 2.

⁸ Average PRO Depot daily incoming/outgoing material calculated by taking the average of the incoming material for each region divided by the estimated number of PRO Depot sites. The Average PRO Depot Self-Haul trips is calculated by taking the average of the number of self-haul trips for each region divided by the estimated number of PRO Depot sites.

Table 3.2-15. [New](#) Processing Facility Trip Generation Analysis

Processing Facility Type	Facility Annual Capacity Assumption (tpy) ¹	Process Assumptions Incoming Material (tpd) ¹	Typical Truck Capacity for Facility Type Incoming Material (tons) ²	Process Assumptions Outgoing Material (tpd) ³	Typical Truck Capacity for Facility Type Outgoing Material (tons) ⁴	Trucks per Day Incoming Material ² / Outgoing Material	Truck Trips per Day ⁵	Employees ⁶	Employee Trips Per day	Total Trips per Day per Facility
Beneficiation (Glass)	236,000	625	NA	625	18	0/35	70	24	48	118
Plastic Reclaimers	22,000	75	NA	75	16	0 / 5	10	12	24	34
Plastic Shredding and Grinding	22,000	75	NA	75	16	0 / 5	10	12	24	34
Scrap Metal Processing	1,077	3.6	NA	3.6	16	0/1	2	6	12	14

Notes:

¹ An average capacity of 236,800 tpy is assumed for beneficiation plants based on an average of the reported capacity of California secondary glass processing plants (CalRecycle 2025^{4e}). [The Implementing Regulations are not anticipated to result in an increase in glass or metal materials to be processed in excess of the estimated existing available capacity of glass processing facilities \(see Table 3.2-12\).](#) with the daily throughput as a result of the Implementing Regulations assumed to be 187,422 tpy (i.e., 625 tpd calculated based on an assumption that the beneficiation plant would be operational 300 days per year). An industry average capacity of 22,000 tpy is assumed for mechanical plastic plants (Leardini 2022) with daily throughput calculated based on an assumption that plastic plants would operate 300 days per year (i.e., 22,000 tpy/300 days/year = 74 tpd). [The average capacity for scrap metal processing facilities is estimated by dividing the total capacity for Scrap Metal Processing by the number of active facilities to arrive at an average facility capacity \(Average Facility Capacity = 155,000 tpy/144 Active Facilities = 1,077 tpy\) with daily throughput calculated based on an assumption that scrap metal plants would operate 300 days per year \(i.e., 1,077 tpy/300 days/year = 3.6 tpd\).](#)

² NA = Not Applicable as incoming material to processing facilities is considered as “Outgoing Material” from Sorting Facilities and are not included here to avoid double-counting.

³ Outgoing material is assumed to be the same as incoming.

⁴ A 16-ton transfer vehicle is assumed for plastic and scrap metal materials as those materials are bulkier and therefore, less dense (e.g., plastic bottles, ~~aluminum cans~~, etc.).

⁵ Calculated by adding daily incoming and outgoing trucks and multiplying by 2.

⁶ The number of employees for processing facilities assumes highly-mechanized future facilities with lower staffing requirements. Two shifts per day are assumed.

⁷ The number of employees for MRFs is calculated based on industry averages based on daily throughput (Powell 2018).

3.4.3.2.2 Collection, Sortation, and Processing

Impact Criterion a) Would the Program have a substantial adverse effect on a scenic vista?

Impact Criterion b) Would the Program substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Criterion c) In Nonurbanized areas, would the Program substantially degrade the existing visual character or quality of public views of the site and its surroundings? If in an urbanized area, would the Program conflict with applicable zoning and other regulations governing scenic quality?

CONSTRUCTION

Construction and operation of new collection, sortation, and processing facilities is a reasonably foreseeable outcome of the Implementing Regulations. The types of future facilities that are anticipated to be constructed by 2032 include roughly 1,181 PRO depots, ~~16~~8 large MRFs, ~~6~~4 medium MRFs, and ~~8~~2 small MRFs, and roughly ~~133~~59 processing facilities for the recycling of glass, paper, plastic, and metal. Existing composting facilities are expected to expand to accommodate the estimated statewide increase of ~~80,000~~46,000 tpy of compostable organic covered materials. These facilities could be located anywhere in the state, although, for the purposes of analysis, this PEIR assumes that they would be sited in either areas zoned for such facilities or where these facilities would be a permitted use. Construction activities could require the presence of heavy-duty equipment, vegetation removal, and grading. Although there is uncertainty regarding the location of these facilities, construction of future collection, sortation, and processing infrastructure could introduce or increase the presence of visible artificial elements in areas of scenic importance, such as areas visible from State scenic highways. These activities could result in varying degrees of temporary degradation of public views. Implementation of **MM AES-1** would entail coordination with local agencies and implementing best management practices (BMPs) to minimize short-term adverse impacts to aesthetics during construction activity.

SIGNIFICANCE AFTER MITIGATION

Adoption and implementation of **MM AES-1** is beyond the authority of CalRecycle and LEAs. The authority to review site-specific, project-level impacts and require project-level mitigation lies primarily with local land use and/or permitting agencies for individual projects. Consequently, although it is reasonable to expect that impacts would be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. Therefore, this PEIR discloses, for CEQA purposes, that impacts during construction could be ***significant and unavoidable***.

OPERATION

Long-term effects on aesthetics could occur from operation of new or modified facilities constructed in response to the Implementing Regulations. New facilities that are located in agricultural or other areas not previously developed for such uses could degrade public views from a scenic vista, degrade the visual character or quality of public views of the site, or disrupt views from a State scenic highway. The long-term operational impacts on scenic vistas, visual character, or quality of public views or on scenic resources in a State scenic highway associated with operation of facilities in response to the Implementing Regulations would be potentially significant. Implementation of **MM AES-2** would avoid and/or reduce potential visual impacts of newly construction facilities by either re-siting the location to an area outside of a scenic viewshed or designing the facility to be as minimally intrusive visually as possible.

- Use only what fixtures are needed, and the warmest color temperature possible to provide safety and egress. [Use LEDs or bulbs that emit or produce light at or under 2700 Kelvin, which results in the output of a warm white color spectrum.](#)
- Use down-lighting or shielding to direct light only to the area necessary and minimize light and glare off-site.
- Do not over-light or make lights unnecessarily bright.
- Provide fixtures and controls capable of dimming or shutting off lighting when occupancy loads are low (example: dimmable driver and occupancy sensor).
- [Color rendering should be at least 80 CRI.](#)
- [Use signs and road striping with high retroreflectivity to reduce the need for electrical lighting.](#)
- Avoid light bollards where possible.
- Use as few fixtures as possible. Fixtures should be low-level lighting. Avoid tall poles where possible. [Install poles with appropriate shielding to avoid light pollution into natural landscapes or aquatic habitat within the Project area in coordination with the California Department of Fish and Wildlife \(CDFW\). In addition, the light pole arm length and mast heights shall be modified to site-specific conditions to reduce light spillage into natural landscapes or aquatic habitat within the Project area. In areas with sensitive natural landscapes or aquatic habitat the lead agency should also analyze and determine if placing the light poles at nonstandard intervals has the ability to further reduce the potential for light pollution by decreasing the number of light output sources in sensitive areas.](#)
- Provide fixtures and controls capable of shutting off lighting on a timer or motion sensor, to limit the duration of lighting to the absolute minimum period possible.

3.6.3 Impacts Assessment

3.6.3.1 Significance Criteria

For the purposes of this PEIR, CalRecycle applies the questions set out in Appendix G of the CEQA Guidelines as thresholds to determine significant impacts, and thus considers that the program would result in significant impacts to air quality if the Program would:

- a) Conflict with or obstruct implementation of the applicable air quality plan.
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- c) Expose sensitive receptors to substantial pollutant concentrations.
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As shown in Table 3.6-4 above, many local air districts provide mass emission thresholds for determining whether the emissions of criteria air pollutants and precursors for a given project would be significant under CEQA. A project with daily emission rates below these thresholds is considered to have a less than significant effect on regional air quality.

3.6.3.2 Methodology

Emissions associated with construction and operation activities of collection, sortation, and processing facilities were forecasted using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.26, the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant emissions associated with both construction and operations of land use projects under CEQA. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The mobile source emission factors used in the model, published by CARB, include the Pavley standards and Low Carbon Fuel standards. The model also identifies project design features, regulatory measures, and control measures to reduce criteria pollutant emissions along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the CAPCOA in collaboration with many local air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory) were provided by the various California air districts to account for local requirements and conditions. As the official assessment methodology for land use projects in California, CalEEMod is relied upon herein for construction and operational emissions quantification, which forms the basis for the impact analysis of collection, sortation, and processing facilities.

3.6.3.2.1 Facility Size Assumptions

CalRecycle developed the SRIA for the Implementing Regulations for the Plastic Pollution Prevention and Packaging Producer Responsibility Act, which includes an in-depth analysis of the infrastructure requirements to meet the requirements of the Implementing Regulations, and through numerical modeling and facility analysis, projected the likely range and size of new facilities that may be required (CalRecycle 2025⁴). Land use data and assumptions for building size and project lot size are summarized in Table 3.6-5, and are the values inputted into the CalEEMod model. Note that the analysis assumes that collection infrastructure (i.e., PRO Depots) would be installed in existing depots or retail facilities and would require little to no modification of

Construction Phase	Equipment Type	Fuel Type	Engine Tier ¹	Number per Day	Hours per Day
Grading	Graders	Diesel	Average	1	8
	Excavators	Diesel	Average	2	8
	Tractors/Loaders/Backhoes	Diesel	Average	2	8
	Rubber Tired Dozers	Diesel	Average	1	8
	Scrapers	Diesel	Average	2	
Building Construction	Forklifts	Diesel	Average	3	8
	Generator Sets	Diesel	Average	1	8
	Cranes	Diesel	Average	1	7
	Welders	Diesel	Average	1	8
	Tractors/Loaders/Backhoes	Diesel	Average	3	7
Paving	Pavers	Diesel	Average	2	8
	Paving Equipment	Diesel	Average	2	8
	Rollers	Diesel	Average	2	8
Architectural Coating	Air Compressors	Diesel	Average	1	6

Notes:

¹ The average engine tier is the fleetwide average engine tier statewide for the specified calendar year.

As described in Section 3.2.2 (Collection, Sortation, and Processing: Reasonably Foreseeable Methods by which Compliance with the Rule or Regulation may be Achieved), the analysis assumes that a maximum of 712 MRFs would be constructed in any given region of the state (i.e., 712 total MRFs are estimated to be required in the Southern region). To conservatively calculate operational emissions, the analysis assumes that large facilities would be built in the first five years, and medium and small facilities would be constructed in subsequent years. Accordingly, the analysis calculates emissions of construction of two large MRFs in any given air district, in any given year to provide a reasonable worst-case analysis. Construction of medium MRFs, small MRFs, composting facilities, and/or expansion of existing facilities would be completed in subsequent years. Specifically, the analysis assumes that one of these types of smaller sortation facilities would be constructed following the first five years, in any given air district, in any given year.

3.6.3.2.3 Operations Assumptions

Table 3.6-8 summarizes the assumptions for the types of off-road and stationary equipment used during MRF operation. This estimate of emissions associated with operations assumes that the number of operational equipment at each MRF is scaled based on the average between the incoming and outgoing material predicted for each facility with one set of operational off-road equipment for facilities that process less than 300 tons per day (tpd), two sets of equipment for facilities that process between 301 and 600 tpd, and three sets of equipment for facilities that process more than 600 tpd of material.

material extraction or manufacturing processes is proposed as part of the Implementing Regulations (i.e., emissions associated with production and distribution of products are addressed by comprehensive regulatory programs focused on the stationary sources of those emissions). In addition, production of goods is usually too far removed from use to attribute responsibility for upstream emissions to an individual project, and the supply chain for each of the thousands of products consumed is often complex and can vary with time. Therefore, these upstream processes are not analyzed further herein.

A transition to alternative materials in response to the Implementing Regulations could result in an increase in the weight and volume of products, potentially requiring more shipment trips and higher mobile source emissions. The shifts or split in composition between alternative products in response to the Implementing Regulations may vary annually, influenced by factors such as price changes, product availability, and new products entering the market. For a comparative analysis of transportation needs for alternative packaging materials, this analysis considers half-gallon milk packaging as an example of a reasonable worst-case scenario with respect to additional truck trips associated with heavier packaging materials, inclusive of transport of empty containers to the filler, filled products from filler to retailer, transport of filled products from retailer to consumer, and transport of empty/consumed products to drop-off locations, MRFs, or landfills. For milk jugs that are manufactured off-site (which is the case for glass bottles or for dairies who purchase fabricated plastic jugs or alternative container materials), the number of trips required to transport alternative containers to the filler for all options other than glass jugs are assumed to be less than or comparable to trips required for plastic milk jugs. This is attributable to the relative low density of empty containers, leading to volume-limited shipments (i.e., the volume capacity of a vehicle is filled before the maximum weight limit of the vehicle is reached). More collapsible containers, like cartons or pouches, can be shipped in a single truck load as compared to empty plastic beverage bottles or PET preforms that take up much more cargo space.

The transport requirements for empty high-density polyethylene (HDPE) milk jugs as compared to alternative materials is provided in Section 3.20 (Transportation) for a comparative analysis of relative change in transport logistics trips that may occur in response to the Implementing Regulations. Specifically, the analysis provided in Section 3.20 (Transportation) compares transport logistics of milk in half-gallon glass jugs versus half-gallon HDPE jugs. Glass jugs are the heaviest of the single-use beverage bottles and would result in approximately 1.4 more truck trips compared to plastic bottles. Numerous factors contribute to total VMT including trip length and percentage of backhaul trips (i.e., full return loads) versus empty return loads. As detailed in Section 3.20 (Transportation), replacing 25% of plastic half-gallon milk jugs with glass beverage bottles would result in an estimated 65,338 additional trips annually. Further, if all trips are assumed to be 100 miles, the increase in trips associated with a transition to glass milk jugs would represent 6,533,783 additional miles per year (17,901 miles per day) or 0.0004 miles per day per capita (using California population projection for 2032 of 39,626,155 [California Department of Finance, Demographic Research Unit 2022]; $6,533,783 \text{ miles/year} \div 365 \text{ days/year} = 17,901 \text{ miles/day}$ $\div 39,626,155 \text{ California Population in 2032} = 0.0004 \text{ miles per capita per day}$).

More broadly, the source reduction requirements of the Implementing Regulations include consideration of a transition to refillable and reusable options. CalRecycle estimates the total weight of covered material under the 2023³¹ baseline conditions at 8,595,542~~11,325,953~~ tons, with the estimated weight of new packaging under the 2031 scenario at 8,765,439~~11,654,774~~ tons (inclusive of material switching and source reduction estimates) (CalRecycle 202⁵⁴). Using various broad assumptions including disregarding the density of packaged materials that are being transported, packaging dimensions, volume capacity limitations of truckloads, and using a truck capacity of 48,000 lbs, the increase in the weight of covered material could result in roughly a 3% increase in truck trips associated with transport logistics. It is not possible to estimate VMT associated with the changes in

be identified during a project's local review process. A proposed project would be approved by a local government and potentially another permitting agency that can apply conditions of approval. To avoid and minimize potential air quality impacts, implementation of **MM AQ-1** can and should be required by agencies with project approval authority. Depending on the size and number of facility sites with active construction activities on the same day (or same year) within the same air basin, the potential remains that levels of criteria air pollutants and precursors emitted by construction activities could still exceed the mass emissions thresholds recommended by local air districts, thereby resulting in, or contributing to, exceedances of the NAAQS and CAAQS in air basins. In addition, while implementation of **MM AQ-1** would reduce emissions during construction activities, the potential remains that localized exceedances of the NAAQS and CAAQS could occur. Therefore, this PEIR discloses, for CEQA purposes, that this impact could remain potentially **significant and unavoidable**.

OPERATION

Operation of collection, sortation, and processing facilities in response to the Implementing Regulations would result in reductions of ROG, NO_x, PM₁₀, and PM_{2.5} associated with the diversion of plastic materials from landfills to facilities with the capacity to implement strategies to reduce such emissions. However, collection, sortation, and processing facilities would also generate air pollution from the on- and off-road mobile sector. On-road vehicles (e.g., refuse and other collection trucks, commute-related automobiles) accessing collection, sortation, and processing facilities would generate emissions of criteria air pollutants and precursors. New emissions could occur at collection, sortation, and processing facilities from stationary equipment such as diesel engine grinders, materials recycling processes, or both. To reasonably predict the scale of emissions that may be associated with collection, sorting, and processing operations, the rates of operational emissions associated with each facility are estimated on a per-day and annual basis using assumptions about facility size and type provided in Table 3.6-5. The assumptions for equipment that would be used for operation of collection, sortation, and processing facilities are summarized in Tables 3.6-8. Table 3.6-11 summarizes the estimated operational emission rates for each facility type (see Appendix B for detailed input parameters and assumptions). These rates provide a reasonable upper bound approximation (i.e., estimate of the maximum) of the daily emissions such activities would generate.

Table 3.6-11. Facility Operations Unmitigated Emissions Summary

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Sortation						
MRF - Small	1.88 [0.27]	6.49 [0.81]	10.1 [1.25]	0.02 [<0.005]	0.59 [0.08]	0.31 [0.04]
MRF - Medium	2.41 [0.36]	10.7 [1.46]	12.5 [1.61]	0.05 [0.01]	1.36 [0.20]	0.55 [0.07]
MRF – Large	4.7 [0.71]	16.1 [2.24]	25.7 [3.31]	0.09 [0.01]	2.39 [0.35]	0.88 [0.12]
Composting	0.95 [0.08]	8.64 [1.07]	12.5 [1.49]	0.05 [0.01]	1.57 [0.22]	0.55 [0.07]

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Processing Facilities						
Material Processing Facility	<u>2.95</u> <u>2.75</u> [<u>0.40</u> <u>0.42</u>]	<u>5.46</u> <u>4.16</u> [<u>0.50</u> <u>0.47</u>]	<u>24.41</u> <u>2.32</u> [<u>2.99</u> <u>1.60</u>]	<u>0.03</u> <u>0.02</u> [<u><0.00</u> <u>50.00</u> <u>5</u>]	<u>0.25</u> <u>0.47</u> [<u>0.03</u> <u>0.09</u>]	0.24 [<u>0.03</u> <u>0.06</u>]

Source: CalEEMod Emissions Summary Reports in Appendix B

Notes:

¹ Mass daily emissions are winter or summer max for planned land use

² Total PM₁₀ / PM_{2.5} comprise fugitive dust plus engine exhaust.

For the analysis of a reasonable worst-case scenario, the SRIA provides an estimate that by 2032, there will be new construction of 168 large, 46 medium, and 28 small MRFs and a 37,45253,160 tpy expansion of existing facilities. All of these facilities are expected to come online to recover the additional plastic, paper, metal, and glass covered material in the 2031 estimation of 3.217 million tpy. Similarly, existing composting facilities are expected to expand to accommodate the statewide 80,00046,000 tpy of organic covered materials determined by the capacity needs assessment performed by CalRecycle (20254). Further, as a result of the reasonably foreseeable means of compliance with the Implementing Regulations, increased infrastructure may be needed to process sorted plastic, paper, metal, and glass covered material into new feedstocks. The conversion system of materials includes, but is not limited to, the following mechanical processes: transportation, cleaning, shredding, melting, crushing, and remolding. SB 54 requires that material be sent to an REM in order to be considered recycled. This means that recycling and recovery of materials or the disposal of contaminants must be conducted in a way that benefits the environment and minimizes risks to public health and worker health and safety and benefits the environment. Furthermore, AB 1857, which went into effect on January 1, 2024, repeals statutory authorization for waste diversion credits required under California's Waste Management Act of 1989 to be partially met through "transformation" techniques, which includes incineration, pyrolysis, distillation, or biological conversion other than composting. "Transformation" does not include composting, gasification, or biomass conversion. Table 3.2-12, provided in Section 3.2.2 (Collection, Sortation, and Processing: Reasonably Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved) provides an estimate of required additional processing facilities to accommodate the requirements of the Implementing Regulations. As detailed in Section 3.6.3.2.1 (Facility Size Assumptions), a large processing facility (of any material type) is assumed with an average capacity of 236,8000 tpy. Table 3.6-12 summarizes the calculated total regional emissions that would be associated with operation of MRFs estimated to be developed in each region by 2032.

Table 3.6-12. Total Regional Emissions – MRF Operations

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Bay Area (<u>13</u> Large, <u>24</u> Medium, <u>03</u> Small MRFs)	<u>22.15</u> <u>9.52</u> [<u>3.31</u> <u>4.3</u>]	<u>78.47</u> <u>37.5</u> [<u>10.61</u> <u>5.16</u>]	<u>119.95</u> <u>0.7</u> [<u>15.29</u> <u>6.53</u>]	<u>0.38</u> <u>0.19</u> [<u>0.55</u> <u>0.03</u>]	<u>10.35</u> <u>1.11</u> [<u>1.49</u> <u>0.75</u>]	<u>4.12</u> <u>1.98</u> [<u>0.55</u> <u>0.26</u>]

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Coastal (0 Large, <u>12</u> Medium, 0 Small MRFs)	<u>4.822.41</u> [<u>0.720.36</u>]	<u>21.410.7</u> [<u>2.921.46</u>]	<u>2512.5</u> [<u>3.221.61</u>]	<u>0.10.05</u> [<u>0.020.01</u>]	<u>2.721.36</u> [<u>0.40.2</u>]	<u>1.10.55</u> [<u>0.140.07</u>]
Mountain (0 Large, 0 Medium, <u>12</u> Small MRFs)	<u>3.761.88</u> [<u>0.540.27</u>]	<u>12.986.49</u> [<u>1.620.81</u>]	<u>20.210.1</u> [<u>2.51.25</u>]	<u>0.040.02</u> [<u>0.010.01</u>]	<u>1.180.59</u> [<u>0.160.08</u>]	<u>0.620.31</u> [<u>0.080.04</u>]
Southern (<u>510</u> Large, <u>02</u> Medium, <u>03</u> Small MRFs)	<u>51.8213.69</u> [<u>7.822.05</u>]	<u>182.449.39</u> [<u>25.326.75</u>]	<u>28274</u> [<u>36.329.48</u>]	<u>1.00.25</u> [<u>0.120.04</u>]	<u>26.626.73</u> [<u>3.90.98</u>]	<u>9.92.62</u> [<u>1.340.35</u>]
Valley (<u>23</u> Large, <u>01</u> Medium, <u>03</u> Small MRFs)	<u>22.159.4</u> [<u>3.31.42</u>]	<u>78.4732.2</u> [<u>10.614.48</u>]	<u>119.951.4</u> [<u>15.296.62</u>]	<u>0.380.18</u> [<u>0.0550.02</u>]	<u>10.34.78</u> [<u>1.490.7</u>]	<u>4.121.76</u> [<u>0.550.24</u>]

Source: CalEEMod Emissions Summary Reports in Appendix B

Notes:

¹ Mass daily emissions are winter or summer max for planned land use

² Total PM₁₀ / PM_{2.5} comprise fugitive dust plus engine exhaust.

The estimated total number of processing facilities required to meet the recycling requirements of the Implementing Regulations by 2032 are summarized in Table 3.2-12 provided in Section 3.2.2 (Collection, Sortation, and Processing: Reasonably Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved). For the analysis of a reasonably worst-case scenario, all processing facilities are assumed to be large and distributed throughout the state relative to the projected 2031 population for each region. Table 3.6-13 summarizes the estimated operations-related emissions for a total of 133-59 large processing facilities distributed across the five regions.

Table 3.6-13. Total Regional Emissions – Processing Facilities

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Bay Area (<u>1226</u> Processing Facilities)	<u>76.730.25</u> [<u>10.44.62</u>]	<u>141.9645.76</u> [<u>13.05.17</u>]	<u>634.4135.52</u> [<u>54.3417.6</u>]	<u>0.780.26</u> [<u>0.130.055</u>]	<u>6.55.17</u> [<u>0.781.05</u>]	<u>6.242.64</u> [<u>0.780.66</u>]
Coastal (<u>36</u> Processing Facilities)	<u>17.78.25</u> [<u>2.41.26</u>]	<u>32.7612.48</u> [<u>3.01.41</u>]	<u>146.436.96</u> [<u>12.544.8</u>]	<u>0.180.072</u> [<u>0.030.02</u>]	<u>1.51.41</u> [<u>0.180.29</u>]	<u>1.440.72</u> [<u>0.18</u>]
Mountain (<u>12</u> Processing Facilities)	<u>5.92.75</u> [<u>0.80.42</u>]	<u>10.924.16</u> [<u>1.00.47</u>]	<u>48.812.32</u> [<u>4.181.6</u>]	<u>0.060.024</u> [<u>0.010.005</u>]	<u>0.50.47</u> [<u>0.060.096</u>]	<u>0.480.24</u> [<u>0.06</u>]
Southern (<u>3374</u> Processing Facilities)	<u>218.390.75</u> [<u>19.613.86</u>]	<u>404.04137.28</u> [<u>37.015.51</u>]	<u>1805.6406.56</u> [<u>154.6652.8</u>]	<u>2.220.79</u> [<u>0.370.17</u>]	<u>18.515.51</u> [<u>2.223.16</u>]	<u>17.767.92</u> [<u>2.221.98</u>]

Facility Type	ROG (VOC) (lb/day) [tpy]	NO _x (lb/day) [tpy]	CO (lb/day) [tpy]	SO _x (lb/day) [tpy]	Total PM ₁₀ (lb/day) [tpy] ^{1,2}	Total PM _{2.5} (lb/day) [tpy] ^{1,2}
Valley (1125 Processing Facilities)	73.7530.25 [10.04.62]	136.545.76 [12.55.17]	610135.52 [52.2517.6]	0.750.26 [0.130.06]	6.255.17 [0.751.05]	6.02.64 [0.750.66]

Source: CalEEMod Emissions Summary Reports in Appendix B

Notes:

¹ Mass daily emissions are winter or summer max for planned land use

² Total PM₁₀ / PM_{2.5} comprises fugitive dust plus engine exhaust.

The total emissions associated with MRFs and processing facilities both individually and cumulatively could surpass the applicable thresholds of significance of a local air district (see Table 3.6-4). Therefore, operation-related air quality impacts would be potentially significant. Implementation of **MM AQ-2** would reduce the mass emissions of criteria air pollutants and precursors generated during operation activities.

SIGNIFICANCE AFTER MITIGATION

CalRecycle and LEAs do not have authority to require implementation of mitigation measures that would reduce air quality impacts. Mitigation measures to reduce potential air quality impacts can and should be implemented by local jurisdictions with land use authority. Site-specific, project impacts and mitigation would be identified during a project's local review process. A proposed project would be approved by a local government and potentially another permitting agency that can apply conditions of approval. To avoid and minimize potential air quality impacts, implementation of **MM AQ-2** can and should be required by agencies with project approval authority. However, depending on the size and number of facility sites operating within the same air basin, the potential remains that levels of criteria air pollutants and precursors emitted by construction activities could still exceed the mass emissions thresholds recommended by local air districts, thereby resulting in, or contributing to, exceedances of the NAAQS and CAAQS in air basins. In addition, while implementation of **MM AQ-2** would reduce emissions, the potential remains that localized exceedances of the NAAQS and CAAQS could occur. Therefore, this PEIR discloses, for CEQA purposes, that this impact could remain potentially *significant and unavoidable*.

Impact Criterion b) Would the Program result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

CONSTRUCTION AND OPERATION

As discussed under Impact Criterion (a), construction of collection, sortation, and processing facilities would result in emissions of criteria air pollutants. If a new facility were to be constructed in a county that is in non-attainment for a criteria air pollutant, construction-related emissions could result in, or contribute to, the non-attainment status with respect to the NAAQS and CAAQS. In addition, construction-related emissions generated by construction activities have the potential to exceed mass emission thresholds established by individual air districts and, therefore, could result in or contribute to localized exceedances of NAAQS and CAAQS for criteria pollutants, which would be a potentially significant impact. Implementation of **MM AQ-1** would reduce the mass emissions of criteria air pollutants and precursors generated by the use of on-road vehicles and off-road equipment during construction activities, while implementation of **MM AQ-2** would reduce the mass emissions of criteria pollutants and precursors generated during operation activities.

3.7 Biological Resources

This section describes the biological resources of the state; identifies applicable federal and state regulations; and analyzes potential impacts of the Program on biological resources. The analysis also identifies mitigation measures for those impacts determined to be significant. Table 3.7-1 summarizes the impacts on biological resources that would result from implementation of the Program.

Table 3.7-1. Summary of Biological Resources Impacts

Would the Program:	Source Reduction and Refill/Reuse	Collection, Sortation, and Processing	Mitigation Measure(s)
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than significant	Potentially Significant and Unavoidable	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-3: Conduct Biological Monitoring MM BIO-4: Implement a Workers Environmental Awareness Program MM NOI-1: Implement Noise-Reduction Measures during Project Construction MM NOI-2: Implement Noise-Reduction Measures during Project Operation MM AES-3: Develop and Submit Lighting Plan
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	No impact	Potentially Significant and Unavoidable	MM BIO-1: Desktop reviews and biological surveys MM BIO-4: Implement a Workers Environmental Awareness Program MM BIO-5: Sensitive Community Mitigation
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No impact	Potentially Significant and Unavoidable	MM BIO-1: Desktop reviews and biological surveys MM BIO-4: Implement a Workers Environmental Awareness Program
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No impact	Potentially Significant and Unavoidable	MM BIO-1: Desktop Reviews and Biological Surveys MM BIO-2: Pre-construction Nesting Bird Survey and Buffers MM BIO-4: Implement a Workers Environmental Awareness Program

Would the Program:	Source Reduction and Refill/Reuse	Collection, Sortation, and Processing	Mitigation Measure(s)
			MM BIO-6: Conduct Pre-construction Bat Surveys MM AES-3: Develop and Submit Lighting Plan
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No impact	Less than significant	None
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No impact	Less than significant	None

3.7.1 Existing Conditions

California has a diversity of habitats that support a wide variety of both plant and animal species. California supports more native species than any other state, and has the highest number of endemic species, those species which occur nowhere else in the world (California Department of Fish and Wildlife [CDFW] 2015). California's biodiversity is due to the variation in landscape features, latitudinal range, geological substrates and soils, and varied climate, which have resulted in a wide range of ecosystems. Some of these ecosystems include the following: alpine meadows, desert scrub, oak woodlands, diverse grasslands, vernal pool complexes, redwood forests, spring-fed lakes; freshwater streams, rivers, and marshes; coastal wetlands, beaches, dunes, and bluffs; and giant marine kelp beds (CDFW 2015).

Uncommon geologic features, like the Transverse Ranges, which run east to west in southern California, contain a wide variety of vegetation types ranging from desert to subalpine, supporting high levels of biodiversity. Unique soil types in California, like serpentine and carbonite soils, which are uncommon outside the state, support many endemic plant species (CDFG 2003 as cited in CDFW 2015).

Many parts of California experience a Mediterranean climate, characterized by cool, wet winters and hot, dry summers; however, six major climate types exist in the state: Desert, Marine, Cool Interior, Highland, Steppe, and Mediterranean (CDFW 2015). Distinct local climates range from high rainfall in the northwestern mountains to the driest place in North America: Death Valley. Summer rain caused by the western margin of the North American monsoon is characteristic of eastern mountains and deserts. Abundant rain and ocean air along the northern coast of California produce foggy, moist conditions. The high mountains have cooler weather conditions, with a deep winter snowpack in normal climate years, and desert conditions exist in the rain shadow of the mountain ranges (CDFW 2015).

CONSTRUCTION AND OPERATION

Construction of new facilities and operations and maintenance of those facilities as a reasonably foreseeable means of compliance with the Program could involve ground disturbing activities, such as grading and vegetation removal, which have the potential to impact special status species and their habitat, if present. Within California, there are 177 animal taxa and 289 plant taxa that are state or federally listed (CNDDDB 2024a, 2024b). Additionally, critical habitat is designated or proposed designated for 64 plant species, 56 terrestrial and freshwater animal species, and 11 marine and anadromous animal species within the 13 ecoregions of California, as described in Sections 3.7.1.4 (Special Status Species). However, because the locations of Collection, Sortation, and Processing facilities have yet to be determined, it is not known whether construction and operation of these facilities would affect any special status species or their habitat. Accordingly, construction and operation of these facilities that would result in ground-disturbing activities could have a potentially significant impact on a special status plant or wildlife species if the species are present at or near the future site.

Direct impacts, including removal of suitable habitat and direct injury or mortality could occur from grading, excavation, stockpiling, vegetation or tree trimming or removal. Direct impacts on special status birds, raptors, and migratory birds from construction activity could include disturbances to nesting birds; injury and/or mortality (which includes nest loss or failure) from unplanned damage due to construction equipment or planned vegetation or tree trimming/removal; and noise and vibration disturbances on nesting or foraging birds. Soil compaction and soil stockpiling could impact species that live underground and/or use burrows for refuge and habitat. Wildlife can also become entrapped in open, excavated areas or construction pipes/equipment if they are not covered properly or do not have escape ramps installed, which could result in injury or mortality. Indirect impacts from construction may include dust, erosion, chemical spills, trash and debris, as well as increased ambient noise levels. Construction equipment, vehicles, and imported materials used during construction have the potential to introduce and spread invasive non-native plant species into the work area. Non-native plant species can often colonize areas and outcompete special status plant species, if present, and may degrade the suitability of native habitats to support other special status species. Additionally, any nighttime construction that requires artificial light sources may impact special status species that are active at night.

Implementation of desktop reviews as part of **MM BIO-1** would inform the project proponent if there is the potential for special status species to be present onsite or impacted by the Collection, Sortation, and Processing facility. **MM BIO-1** would ensure that habitat assessments and any required biological surveys are conducted to minimize potential impacts to special status species and their habitat. Additionally, a pre-construction nesting bird survey (**MM BIO-2**) would identify any active nests requiring protection. If special status species or habitat which supports these species is present within the vicinity of a proposed facility, **MM BIO-3** would minimize impacts by having a biological monitor present who has the authority to stop work. Implementation of **MM BIO-4** would aid workers in recognizing special status resources that may occur in the project area. To address noise impacts of construction and operation of proposed facilities on wildlife species, **MM NOI-1** and **MM NOI-2** would reduce construction- and operation-related vibration noise through implementation of best practices at facility sites to minimize these effects. [MM AES-3 would reduce impacts to wildlife from artificial light during construction and operation.](#)

SIGNIFICANCE AFTER MITIGATION

CalRecycle and LEAs do not have authority to require implementation of mitigation measures that would reduce impacts on biological resources. Mitigation measures to reduce potential impacts on biological resources can and should be implemented by local jurisdictions with land use authority. Site-specific, project impacts and mitigation would be identified during a project's local review process. A proposed project would be approved by a local government and potentially another permitting agency that can apply conditions of approval. To avoid and minimize potential impacts to special status species, implementation of **MM BIO-1**, **MM BIO-2**, **MM BIO-3**, **MM BIO-4**, **MM AES-3**, **MM NOI-1**, and **MM NOI-2** can and should be required by agencies with project approval authority. Although it is reasonable to expect that impacts would be reduced to a less than significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. In addition, there may be rare instances in which even with adherence to these mitigation measures, construction activities may result in a significant impact on special status plant and wildlife species and their habitat. Therefore, this PEIR discloses, for CEQA purposes, that the impacts may be potentially *significant and unavoidable*.

Impact Criterion b) Would the Program have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

CONSTRUCTION AND OPERATION

Various sensitive communities occur throughout the state, including riparian habitat. There are a total of 85 natural communities identified as sensitive by CDFW that are mapped as occurring within California (CDFW 2024a). Construction and operation of any new facilities developed in response with the Implementing Regulations would involve ground disturbance (e.g., excavation, grading, drilling) and vegetation removal or trimming. However, the exact details, including precise locations, of any such construction activities have yet to be determined. Although it is likely that new facilities would be constructed in already developed commercial or industrial zoned areas, the potential exists for parcels in these zones to be currently undeveloped or adjacent to undeveloped parcels with vegetation present or adjacent to riparian areas or other sensitive natural communities.

If riparian habitat or other sensitive natural communities are present onsite or in the vicinity and potentially impacted by the Collection, Sortation, and Processing facility, the desktop review under **MM BIO-1** would identify the need for pre-construction biological surveys to identify and protect sensitive communities, including riparian habitat. If removal or destruction of sensitive communities cannot be avoided, implementation of **MM BIO-5** would ensure that the project proponent provides compensatory mitigation. A Worker Environmental Awareness Program (**MM BIO-4**) would aid workers in recognizing and avoiding riparian habitat or other sensitive communities that may occur in the project area or vicinity.

SIGNIFICANCE AFTER MITIGATION

CalRecycle and LEAs do not have authority to require implementation of mitigation measures that would reduce impacts on biological resources. Mitigation measures to reduce potential impacts on biological resources can and should be implemented by local jurisdictions with land use authority. Site-specific, project impacts and mitigation would be identified during a project's local review process. A proposed project would be approved by a local government and potentially another permitting agency that can apply conditions of approval. To avoid and minimize this potential impact to sensitive natural communities, implementation of

construction activities may result in a significant impact on wetlands or associated waters, which are present throughout the state. Therefore, this PEIR discloses, for CEQA purposes, that the impacts may be potentially **significant and unavoidable**.

Impact Criterion d) Would the Program interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

CONSTRUCTION AND OPERATION

Construction of Collection, Sortation, and Processing facilities and operations and maintenance of these facilities as a reasonably foreseeable means of compliance with the Program could involve ground disturbing activities, such as grading and vegetation removal/trimming, which have the potential to result in damage or removal of existing habitat which serves as nursery sites for native species. Undeveloped areas with native plant communities and vegetation along waterways provides higher quality habitat connectivity than non-vegetated areas for various species, including fish, bats, and resident and migratory birds. These areas support important habitat for the movement, migration, and breeding of fish and wildlife species that use them. Additionally, existing infrastructure within developed areas, including buildings, bridges and culverts, may also provide habitat features which support nesting or roosting for bird and bat species (e.g., ledges and crevices). If construction of a new facility required demolition of any infrastructure which supports nesting or roosting species, this could result in potentially significant impacts on a nursery site. Direct effects to the movement of fish species are not anticipated as construction would not occur within waterways. However, indirect effects of construction activities may include increased noise, vibration, dust, human encroachment on habitat areas, spills of fuel or other pollutants, and introduction of non-native plant species. If construction occurs in or adjacent to habitat areas which provide connectivity for native species, these effects may degrade habitat which currently supports the movement and reproduction of fish and wildlife.

Implementation of desktop review as part of **MM BIO-1**, ~~and~~ pre-construction nesting bird surveys (**MM BIO-2**) and bat surveys (**MM BIO-6**), ~~and a lighting plan (MM AES-3)~~ as necessary, would minimize the potential impacts on native wildlife nursery sites. Implementation of a Worker Environmental Awareness Program (**MM BIO-4**) would aid workers in recognizing and avoiding impacts to wildlife corridors or nursery sites that may occur in the project area.

SIGNIFICANCE AFTER MITIGATION

CalRecycle and LEAs do not have authority to require implementation of mitigation measures that would reduce impacts on biological resources. Mitigation measures to reduce potential impacts on biological resources can and should be implemented by local jurisdictions with land use authority. Site-specific, project impacts and mitigation would be identified during a project's local review process. A proposed project would be approved by a local government and potentially another permitting agency that can apply conditions of approval. To avoid and minimize this potential impact to migratory corridors and wildlife nursery sites, implementation of [MM AES-3](#), **MM BIO-1**, **MM BIO-2**, **MM BIO-4**, and **MM BIO-6**, can and should be required by agencies with project approval authority. Although it is reasonable to expect that impacts would be reduced to a less than significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. In addition, there may be rare instances in which even with adherence to these mitigation measures, construction and operation activities may result in a significant impact. Therefore, this PEIR discloses, for CEQA purposes, that the impacts may be potentially **significant and unavoidable**.

Impact Criterion e) Would the Program conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

CONSTRUCTION AND OPERATION

Construction of Collection, Sortation, and Processing facilities and operations and maintenance of those facilities as a reasonably foreseeable means of compliance with the Program could involve ground disturbing activities, such as grading and vegetation removal, which have the potential to impact biological resources protected by local policies or ordinances, like protected tree species or biological communities/significant ecological areas, if present. Most counties and cities in California have general plans and/or local policies in place that protect both native and landscape trees in urban landscapes, as well as in unincorporated county lands. The definitions of protected trees under these plans and policies vary by species and size (minimum diameter at breast height) and in the requirements for ordinance or policy compliance. Construction of new facilities could result in removal of trees that are protected by local policies or ordinances. However, construction of new facilities by project proponents would be required to follow city and county development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protecting biological resources. Project-level planning, environmental analysis, and compliance with existing local regulations and policies would identify potentially significant tree removal or other potential conflicts with local policies protecting biological resources; avoid or minimize impacts through the design, siting, and permitting process; and implement mitigation measures for any significant effects on biological resources as a condition of project approval and permitting. Therefore, this impact would be ***less than significant***.

Impact Criterion f) Would the Program conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP?

CONSTRUCTION AND OPERATION

Construction of Collection, Sortation, and Processing facilities and operations and maintenance of those facilities as a reasonably foreseeable means of compliance with the Program could involve ground disturbing activities, such as grading and vegetation removal. However, because the exact details, including precise locations, of any such facilities have yet to be determined, it is not known whether construction and operation of these facilities would be located within the planning areas for any of the 17 existing HCP/NCCPs in California and have the potential for effects on covered species of those plans. All future development of Collection, Sortation, and Processing facilities would be required to follow city and county development requirements, including compliance with adopted HCP/NCCPs. Therefore, construction and operation of these facilities that overlap the plan area of an HCP/NCCP would require consistency with the provisions of that adopted HCP, NCCP, or other approved local, regional, or state HCP. Project-level planning would identify potential conflicts with adopted HCP/NCCPs and avoid those conflicts or provide mitigation as required by compliance with the provisions of the conservation plan protecting special status species. Therefore, the impacts are considered ***less than significant***.

MITIGATION MEASURE(S)

[MM AES-3: Develop and Submit Lighting Plan. See Section 3.4 \(Aesthetics\).](#)

MM NOI-1: Implement Noise-Reduction Measures during Project Construction. See Section 3.16 (Noise).

MM NOI-2: Implement Noise-Reduction Measures during Project Operation. See Section 3.16 (Noise).

MM BIO-1: Desktop Review and Biological Surveys. Project proponents shall conduct a desktop review for the potential of sensitive species, critical habitat, or jurisdictional wetlands or associated waters (i.e., areas that fall under the regulatory authority of federal, state, or local agencies due to their ecological significance) to be present in the proposed location for a new or expanded collection, sortation, or processing facility. The desktop review shall include review of the CNDDDB (and other relevant CDFW Biogeographic Information and Observation System datasets), USFWS iPAC database, USFWS National Wetlands Inventory, and aerial photographs and topographic maps of the project site. If the desktop review indicates that sensitive species (including for instance bumble bees) or natural communities may occur in or adjacent to the U.S. Geological Survey 7.5' topographic quad of the project area or any of the quads that are directly adjacent to the project's quad the proposed location for a facility, the project proponent shall contact the CDFW region where the project is located to consult on recommendations for surveys, mitigation measures, and permits or authorizations to comply with Fish and Game Code, if necessary. If the desktop review and/or consultation with CDFW indicate that sensitive species, critical habitat, or jurisdictional wetlands or associated waters may be present, the lead agency shall, to the extent feasible, adopt survey methods and mitigation measures that are recommended by CDFW. The project proponent shall either assume presence and mitigate accordingly, or a qualified biologist shall conduct a habitat assessment and species-specific biological and/or botanical field surveys to confirm the presence and extent of sensitive species and/or sensitive natural communities prior to starting work. In the absence of a CDFW recommendation, protocol-level species-specific surveys shall be consistent with CDFW approved surveys available at <https://wildlife.ca.gov/Conservation/Survey-Protocols>. Botanical surveys shall be conducted at various times throughout the year and over multiple years to ensure that all plant species present are detected, including annual plants, and short-lived perennial plants that may only be present as living seeds in the soil seed bank. Surveys shall be timed to ensure that plants that are evident and identifiable at different times throughout the year are detected, including early, and late blooming plants. Surveys should be conducted to ensure 100% visual coverage of the project site for all areas with potential to support rare, threatened, or endangered species.

If sensitive species or their sign (e.g., scat, burrows) are observed, the project proponent shall develop a plan to avoid impacts that are specific to each species. If impacts cannot be avoided, the project proponent shall consult with CDFW to obtain an Incidental-incidental Take-take Permit permit under Fish and Game Code Section 2081 and/or engage in Section 7 or 10 consultation with USFWS and/or NOAA Fisheries as required based on the species. If an Incidental-incidental Take-take Permit permit cannot be obtained for the site, for example due to the presence of a California fully protected species, then the facility shall not be built or modified at that location. If the desktop review indicates the potential presence of jurisdictional wetlands or associated waters of the U.S. or state, an aquatic resource delineation shall be conducted to determine presence and extent of jurisdictional wetlands and waters. The project proponent shall either redesign the facility to avoid impacts to jurisdictional wetlands and waters or obtain appropriate permits in accordance with Sections 404 and 401 of the CWA and Section 1600 of California Fish and Game Code.

MM BIO-2: Pre-construction Nesting Bird Survey and Buffers. Regardless of the time of year if construction activities occur during the breeding season (February 1 through August 31), a qualified biologist familiar with the identification of avian species known to occur in the proposed location of a new or expanded collection, sortation, or processing facility, shall conduct a pre-construction nesting bird survey no more than within 3 days prior to initiation of any disturbance of the site, including but not limited to diskings, vegetation grubbing, and grading. If surveys were warranted and construction activities cease for more than 14 consecutive days, an additional survey shall be conducted within 3three days prior to the continuation of construction

~~activities, ground disturbance activities.~~ If nests are found, an avoidance ~~buffer plan~~ (dependent upon the species, the activity, and existing disturbances associated with land uses outside of the site and coordination with CDFW) shall be developed and shall include a no-disturbance buffer determined and demarcated by the biologist with construction fencing, flagging, construction lathe, or other means to demarcate the boundary. The avoidance plan should also include biological monitoring by a biologist familiar with avian nesting behavior. If nesting birds exhibit behaviors indicating stress, as determined by the biologist, no-disturbance buffers shall be increased as needed to protect the nesting birds. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed and the young have fledged, are feeding independently, and are no longer dependent on the nest, or confirmed that the nest is no longer active. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

MM BIO-3: Conduct Biological Monitoring. In sensitive areas or adjacent to special status plants, wildlife, and/or aquatic resources; sensitive habitat; or protected trees, a qualified biological monitor shall be required to monitor construction activities while work is immediately adjacent to these sensitive areas/species, or as deemed necessary by the qualified biologist to ensure that protection measures are in place to avoid incidental disturbance of habitat and special status species. Biological monitoring shall include, but not be limited to, monitoring installation of protective barriers, monitoring of active bird nests, ensuring construction equipment remains within the project footprint and designated staging areas, and ensuring that staging and areas used to refuel are located in upland areas away from riparian habitat and aquatic sites. The qualified biological monitor shall have the authority to stop work to protect biological resources onsite, including special status species, riparian and aquatic resources, and protected trees. If any special status plant or wildlife species are found in a work area, the biological monitor shall have stop work authority to halt construction as necessary to prevent the death or injury to the species until the species leaves of its own accord or the proper consultation with USFWS and/or CDFW can be completed.

MM BIO-4: Implement a Worker Environmental Awareness Training. Prior to construction of Program facilities (including staging and mobilization), all Program personnel shall attend a Workers Environmental Awareness training, conducted by a qualified biologist, to aid workers in recognizing special status resources that may occur in the proposed location for a future facility. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the proposed location for a future facility.

MM BIO-5: Sensitive Community Mitigation. If construction of a new facility would result in removal or adverse impacts to sensitive communities, mitigation shall be provided prior to construction. Mitigation ratios shall be at a minimum of 1:1 for preservation and 1:1 for construction of new sensitive communities. In addition, a Compensatory Mitigation Plan shall be developed that includes the following:

- Descriptions of the sensitive community/wetland types, and their expected functions and values.
- Performance standards and monitoring protocol to ensure the success of the mitigation sensitive communities over a period of 5 to 10 years.

- Engineering plans showing the location, size, and configuration of sensitive communities to be created or restored. An implementation schedule showing that construction of mitigation areas shall commence prior to or concurrently with the initiation of construction.
- A description of legal protection measures for the preserved sensitive communities (i.e., dedication of fee title, conservation easement, and/or an endowment held by an approved conservation organization, government agency, or mitigation bank).

MM BIO-6: Conduct Pre-construction Bat Surveys. Pre-construction bat surveys shall be conducted by a qualified bat biologist ~~within 30 days of~~ no more than 7 days prior to starting construction, if pre-construction reconnaissance surveys (**MM BIO-1**) or consultation with CDFW ~~identify~~ identifies suitable habitat for roosting bats in the project ~~location area and its immediate vicinity~~ or immediately adjacent. The pre-construction survey protocol shall be submitted to CDFW for review prior to implementation and shall include a visual and acoustic survey conducted by the qualified bat biologist within the work-project area and surrounding areas that ~~has~~ have suitable habitat for roosting bats including bridges, abandoned structures or trees with large cavity or dense foliage. If surveys were warranted and construction activities cease for more than 14 consecutive days, an additional survey shall be conducted 7 days prior to the continuation of construction activities.

If bat roost sites are identified and could be disturbed, then bat avoidance and relocation measures will be drafted and submitted to CDFW for review prior to implementation. ~~implemented~~. Prior to any ground-disturbing activity or activities that could disturb bat roost sites, a qualified bat biologist will survey for active bat colonies, such as hibernacula or maternity roosts. If active hibernacula or maternity roosts are identified in the work area or in the buffer area (as defined by the qualified bat biologist, based on site conditions, planned work, ~~and~~ anticipated indirect impacts on bats, and consultation with CDFW), they will be avoided. If avoidance is not feasible, then a qualified bat biologist with experience conducting bat evictions, exclusion, and mitigation will prepare a mitigation plan detailing the eviction, exclusion, and relocation of the bat colony and will provide a construction plan for the ~~for~~ construction of an alternative bat roosting habitat outside of the work area. The mitigation and construction plan shall be provided to CDFW for review prior to initiation of the plan and project activities. Alternative bat habitat may be required to be constructed and installed up to two years prior to any bat eviction and exclusion and must be approved by CDFW.

- Reuse of materials may reduce the need for transporting raw materials and finished goods. Since materials are more often repurposed regionally or locally, the need for truck trips to transport these materials over long distances would be reduced.
- Reuse and refill schemes encourage local production and consumption of goods, which reduced the need for long-distance transportation. By shortening supply chains and promoting the use of local resources, fewer trucks are needed to transport goods over long distances, leading to a reduction in truck trips.
- Reusable food service ware and refillable/reusable packaging is designed for durability and reuse, reducing the frequency with which they need to be purchased and replaced by vendors as compared to single-use items. As a result, there would be less demand for the transportation of single-use products, which decreases the number of truck trips required for delivery.
- Although return logistics associated with take-back programs involves transportation, these programs can often be optimized to consolidate loads and reduce the overall number of truck trips compared to a traditional linear economy.
- By reducing waste of single-use products through source reduction and refill/reuse schemes, a circular economy can reduce the number of truck trips needed for waste disposal. Fewer trips to landfills and recycling centers are necessary when waste is minimized at the source.
- Circular economy principles encourage companies to streamline their supply chains, making them more efficient and reducing unnecessary transportation. This can include consolidating shipments, optimizing delivery routes, and improving inventory management, all of which contribute to fewer truck trips.

Accordingly, any potential increase in VMT associated with the customers making extra trips in order to participate in take-back programs would not be expected to result in an increase in VMT due to offsets in transportation requirements associated with source reduction and transitioning to a circular economy.

In the SRIA, CalRecycle estimates that 10% of source reduction met entirely through refill and reuse would lead to a reduction in [553,073,286,472](#) tons of single-use covered material that would otherwise be manufactured, distributed, and subject to waste management. The energy consumption associated with reusable and refillable systems is directly related to the number of times a product is reused. For instance, a 20-ounce aluminum bottle, used for one year and washed once daily, has an estimated net energy consumption of 2.25 million BTUs per 1,000 gallons. In comparison, an exempt PET single-use water bottle consumes about 9.90 million BTUs per 1,000 gallons. Approximately 82% of the energy demand for the reusable bottle was linked to home washing, which includes the energy required for heating water, treating the water used in the dishwasher, and treating the dishwasher effluent (Franklin 2009). However, this estimate assumes that reusable containers are washed separately from other dishes. It is assumed that in most instances, reusable containers would be more likely washed with regular daily dishwasher loads, which would occur regardless. Even when conservatively including the additional energy associated with dishwashing as analyzed by Franklin Associates, reusable containers would still use approximately 77% less energy than single-use plastic bottles. Therefore, increasing the use of refillable containers could offset the overall rise in life cycle energy consumption associated with single-use containers. Commercial businesses that transition to reusable products (i.e., reusable food service ware) may increase washing of products as compared to single-use products. However, both residential and commercial washing appliances are required to comply with the energy efficiency standards of CCR Title 20, Sections 1601-1608 and Title 24 Building Efficiency Standards to reduce

energy consumption in residences and businesses. These energy efficiency standards would effectively ensure that a transition to refillable and reusable products would not result in the wasteful or inefficient use of energy.

As such, reasonably foreseeable means of compliance with the source reduction requirements of the Implementing Regulations, including a transition to refillable and reusable products, would not result in wasteful, inefficient, or unnecessary consumption of energy resources as compared with use of single-use plastic virgin materials and would not conflict with the energy policies set forth in state or local plans for renewable energy or energy efficiency and impacts would be ***less than significant***.

3.9.3.2.2 Collection, Sortation, and Processing

Impact Criterion a) Would the Program result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

CONSTRUCTION

It is reasonably foreseeable that the means of compliance with the Implementing Regulations would lead to the development of new or expanded collection, sortation, processing facilities and end markets across the state. The types of future facilities that are anticipated to be constructed by 2032 include roughly 1,181 PRO depots, ~~816~~ large MRFs, ~~46~~ medium MRFs, and ~~28~~ small MRFs, and roughly ~~133-59~~ processing facilities for the recycling of glass, paper, plastic, and metal. Existing composting facilities are expected to expand to accommodate the estimated statewide increase of ~~80,000~~46,000 tpy of compostable organic covered materials, although this PEIR assumes that one new composting facility would be constructed somewhere in the state (note that new composting facilities are also anticipated in response to SB 1383). These facilities might be added to existing solid waste facilities or developed as standalone projects at new locations. A variety of equipment powered by liquid fuel combustion may be used during the construction of these new or expanded facilities. Typical off-road equipment includes dozers, tractors, scrapers, and pavers. These machines are usually powered by internal combustion engines running on diesel or gasoline, with power outputs generally ranging from 5 to 750 horsepower. Diesel engines of 25 horsepower or larger used in off-road equipment are regulated by the CARB to reduce emissions (13 CCR Section 2449). These regulations require operators to minimize idling and upgrade older equipment with modern engines, which also contributes to reduced fuel consumption. Construction of new or expanded facilities would typically span several months and proceed in phases, with different types of equipment being used during each phase.

The transportation of workers and materials to and from construction sites would also require the consumption of diesel and gasoline. Medium- and heavy-duty trucks and vans, with Gross Vehicle Weight Ratings between 8,500 and 33,000 pounds, would typically be used. According to CARB's Truck and Bus Regulations, vehicles with a Gross Vehicle Weight Ratings greater than 14,000 pounds must have diesel engines built to 2010 standards by 2023 (CARB 2018).

Off-road equipment fuel usage during the construction activities were calculated using the assumptions/default values obtained from CalEEMod, and the fuel usage calculations provided in the 2017 Off-Road Diesel Emission Factors spreadsheet, prepared by CARB (2021). CARB's spreadsheet provides the following formula to calculate fuel usage from off-road equipment activity:

*Fuel Used (gal)=Load Factor*Horsepower (Hp)*Total Operating Hours* Brake Specific Fuel Consumption /(Unit Conversion)*

Facility Type	Source	Types	Fuels	Fuel Consumption (gallons)
Composting	Off-Road	Fleet Average	Diesel	55,018
	Worker	LDA, LDT1, LDT2	Gasoline	1,329
	Vendor	MHDT, HHDT	Diesel	150
	TOTAL			56,497
Processing Facilities				
Material Processing Facility	Off-Road	Fleet Average	Diesel	25,876
	Worker	LDA, LDT1, LDT2	Gasoline	4,279
	Vendor	MHDT, HHDT	Diesel	3,482
	TOTAL			33,636

As shown in Table 3.9-2, the construction of future facilities would result in a maximum consumption of 56,497 gallons of fuel. For the buildout of collection, sortation, and processing facilities by 2032 (i.e., 816 large MRFs, 46 medium MRFs, 28 small MRFs, 1 composting facility, and 133-59 processing facilities), total fuel consumption would be approximately 5,807,6112,651,107 gallons or roughly 725,951331,388 gallons per year over the next eight years. Note that the analysis assumes that collection infrastructure, (i.e., PRO Depots) would be installed in existing depots or retail facilities and would require little to no modification of existing facilities. According to the California State Board of Equalization, 13.6 billion gallons of gasoline and 3.6 billion gallons of diesel fuel were sold in 2022 (CEC 2024b, 2024c). As such, the average annual fuel consumption associated with construction represents approximately 0.0180.008% of diesel fuel and 0.0010.0003% of gasoline fuel consumed per year in California. Compliance with the CARB anti-idling and emissions regulations would result in less fuel combustion and energy consumption and thus minimize the energy use during construction and operations. In addition, Project construction would be performed by contractors with an economic incentive to minimize costs, one element of which is fuel conservation. Therefore, construction of collection, sortation, and processing facilities developed in response to the Implementing Regulations would not result in the wasteful, inefficient, or unnecessary consumption of energy and impacts would be ***less than significant***.

OPERATION

Following construction, operation of collection, sortation processing facilities and end markets would require natural gas and electric power usage for each facility. The machinery and any buildings used at new or expanded facilities would require the use of electricity and liquid and gaseous fuels. Electricity could be obtained through a connection to a utility or produced on-site using renewable sources such as solar photovoltaics and wind turbines, or fuel-powered generators. The amount of energy required at each facility would depend on the total material-handling capacity. The movement of material to and from collection, sortation, processing facilities and end markets would require the consumption of fuels in on-road motor vehicles. The types of fuels used in vehicles that collect and transport covered materials include gasoline, diesel fuel, renewable diesel fuel, and compressed natural gas. Existing collection routes between customers and

MRFs could potentially be used to collect covered materials. For a detailed discussion of transportation routes and related effects on statewide VMT associated with the reasonably foreseeable means of compliance with the Implementing Regulations, see Section 3.20 (Transportation).

For operations, the CalEEMod-derived mass emissions of non-biogenic CO₂ from area, stationary, and mobile sources associated with project operation were used to estimate fuel consumption. CalEEMod aggregates area and mobile source CO₂ emissions into three broad categories (typical fuel types assumed):

- Off-road utility equipment (diesel);
- Heavy Mobile (medium-heavy and heavy-heavy duty predominately diesel trucks [MHDT, HHDT]); and
- Light Mobile (light duty gasoline automobiles and trucks [LDA, LDT1, LDT2]).

Fuel consumption associated with the off-road, on-road, and stationary sources were estimated (back calculated) using 2020 Climate Registry (40 CFR 98 Subpart C) emission factors for diesel and gasoline fuels. Using the CalEEMod annual emissions results (MTCO₂e) for the area and mobile source categories (refer to CalEEMod summary reports provided in Appendix B) and the corresponding CO₂ emission factors. Table 3.9-3 provides the estimated direct fuel consumption for each facility type.

Table 3.9-3. Annual Project Operation Off-Road, On-Road, and Stationary Source Energy Consumption Estimates

Facility Type	Source	Fuels	Fuel Consumption (gallons/year)
Sortation			
MRF – Small	Off-Road	Diesel	10,582
	On-Road	Diesel	13,926
	On-Road	Gasoline	261 1,601
	Stationary	Diesel	224
	TOTAL		24,994 26,334
MRF - Medium	Off-Road	Diesel	10,582
	On-Road	Diesel	46,828
	On-Road	Gasoline	261 5,385
	Stationary	Diesel	224
	TOTAL		57,896 63,019
MRF – Large	Off-Road	Diesel	21,164
	On-Road	Diesel	89,610
	On-Road	Gasoline	653 10,305
	Stationary	Diesel	561
	TOTAL		111,988 121,640

Facility Type	Source	Fuels	Fuel Consumption (gallons/year)
Composting	Off-Road	Diesel	10,582
	On-Road	Diesel	50,583
	On-Road	Gasoline	6535,817
	Stationary	Diesel	561
	TOTAL		62,380 67,544
Processing Facilities			
Material Processing Facility	Off-Road	Diesel	19,825 6,608
	On-Road	Diesel	20911,084
	On-Road	Gasoline	54,102 1,275
	Stationary	Diesel	46,531 46,438
	TOTAL		120,668 65,405

Source: CalEEMod Emissions and Energy Calculation Summary Reports in Appendix B

Notes: For On-road HDT Mix: 9% Gasoline, 91% Diesel (CARB 2021); adjusted for on-road fleet mix

As detailed in Section 3.6 (Air Quality), CalEEMod inputs for the defined land use were used to estimate energy consumption for operations. Based on CalEEMod results for the defined land, Table 3.9-4 shows estimated natural gas and electric power usage for each facility type. Fuel consumption at the processing facility is inclusive of natural gas usage for the external combustion heater/boiler assumed to be operating at the processing facility.

Table 3.9-4. Project Operational Utility Energy Use

Facility Type	Electric Power (kWh/year)	Natural Gas (kBtu/year)
Sortation		
MRF – Small	359,638	1,581,835
MRF - Medium	485,511	2,135,477
MRF – Large	1,069,923	4,705,958
Composting	14,386	63,273
Processing Facilities		
Material Processing Facility	629,367	2,768,211

Source: CalEEMod Emissions Summary Reports in Appendix B

For the buildout of collection, sortation, and processing facilities by 2032 (i.e., ~~816~~ large MRFs, ~~46~~ medium MRFs, ~~28~~ small MRFs, one composting facility, and ~~133-59~~ processing facilities), total annual electricity consumption would be approximately ~~106,629,135~~48,367,743 kWh/year or roughly ~~0.0370~~0.017% of California's annual electricity consumption with total natural gas consumption estimated at ~~468,998,206~~212,740,964

kBTU/year or roughly [0.040.018%](#) of California’s annual natural gas consumption. As required by the California airborne toxics control measures, idling times on all diesel-fueled commercial vehicles over 10,000 pounds shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. In addition, 13 CCR Section 2449 (“CARB Off-Road Diesel Regulations”) requires that idling times on all diesel-fueled off-road vehicles over 25 hp shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy advising of these regulatory measures. Implementation of these regulatory measures would further reduce fuel consumption and energy use. Increasingly stringent electricity, natural gas, and fuel efficiency standards combined with compliance with the energy efficiency standards of Title 24 would also ensure future facilities would demand only the energy required and that energy would be used efficiently. Accordingly, with compliance with applicable regulations, operation of collection, sortation, and processing facilities would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts would be **less than significant**.

Impact Criterion b) Would the Program conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

CONSTRUCTION AND OPERATION

The construction and operation of collection, sortation, and processing facilities would entail the use of buildings, equipment, and vehicles subject to state energy policies. Table 3.9-5 provides an overview of the state plans and regulations pertaining to energy efficiency and an analysis of the consistency with these policies with respect to the reasonably foreseeable means of compliance with the Implementing Regulations. An overarching theme across state policies is the goal to reduce energy consumption through efficiency and transition to energy generation with lower carbon intensities. The buildings, vehicles, and equipment used to process covered materials would conform to the energy efficiency standards set forth by the state. For these reasons, this impact would be **less than significant**.

Table 3.9-5. Project Consistency with Energy Efficiency Plans and Regulations

Sector	Policy	Description	Consistency with Implementing Regulations Reasonably Foreseeable Means of Compliance
Building Energy Efficiency	California Energy Code - 24 CCR Part 6	2019 Title 24 Standards must be achieved.	Applicability of the California Energy Code would depend on the buildings and occupancy types of the proposed facilities. Commercial buildings would fall under the non-residential section of this code, which contains efficiency standards that are required by existing California law to be enforced by cities and counties.
Industrial Equipment Energy Efficiency	20 CCR Section 1600 (State), 10 CFR Section 431 (Federal)	Design standards for the energy efficiency of industrial equipment, including electric motors, blowers, pumps, and heaters, must be met.	The manufacturing, sale, and import of industrial equipment in California, including machinery needed to operate collection, sortation, and processing facilities, would be required to comply with state and/or federal standards for energy efficiency.

Source Reduction

The source reduction requirements would lead to a decrease in plastic materials and an increase in alternative materials used for the manufacture of single-use food service ware and single-use packaging. In addition, the requirement to meet the 65% recycling rate would lead to a decrease in virgin material resource use as it is replaced with recycled material. Accordingly, the transition to alternative materials would lead to a shift in life-cycle GHG emissions (i.e., GHGs associated with material extraction and conversion to finished products, transportation, and end-of-life) relative to the reduction in plastic materials.

The manufacturing process for single-use plastic covered materials starts with petroleum products and consumes energy that generates GHG emissions. GHGs are also generated during the extraction of raw materials and manufacturing of alternative materials such as paper, aluminum, and glass. The amount of life-cycle GHG emissions varies depending on the type and quantity of product produced. Delivery trucks that transport empty single-use products from manufacturers to the filling facility and filled products to the distributors and/or local retailers also generate GHG emissions. Further, most single-use products that do not become litter or are not recycled are deposited in a landfill where they are left to decompose and degrade. CH₄ is emitted when waste material degrades in anaerobic conditions in a landfill.

Although LCAs are not required for CEQA, for the purpose of providing a comparison of relative GHG emissions of associated with plastic single-use products and single-use products made of alternative materials, this analysis considers the results of the Oregon Department of Environmental Quality's Waste Impact Calculator (WIC), which provides a framework for estimating the life cycle environmental impacts associated with solid waste materials and treatments, and projecting the impact consequences of solid waste management decisions (e.g., comparing waste prevention to recycling). While it was created with the needs of the Oregon Department of Environmental Quality in mind, it is relevant to all those interested in the relative impacts of materials, waste, and waste management. For the analysis of relative impacts related to life cycle GHG of plastics and alternative materials, the WIC was used to illustrate impacts in terms of the 100-year GWP (i.e., the average warming potential over 100 years). Although specific to 2022 Oregon waste stream tonnage, the data illustrated in Figure 3.11-1 shows the relative impacts associated with plastics versus other alternative materials such as glass, paper/fiber, aluminum, and aseptic containers per ton of material.

The impact chart shows the life cycle impacts of plastic materials as compared to various alternative materials, including any credits associated with recycling as is incorporated in the end-of-life impact factors. In Figure 3.11-1, the life cycle impacts are broken down into three life cycle stages: production, end-of-life transport, and end-of-life treatment, with the net impact shown as a black outline. As shown in Figure 3.11-1, per ton of material, the life cycle 100-Year GWP for glass is less than that associated with PET Plastic and other plastic products, as is the 100-Year GWP for paper/fiber materials, tinned cans, paperboard, and cardboard. Replacement with materials with greater GWP than plastic such as aluminum would be offset with the lesser GWP associated with other alternative materials that have lower GWP than plastics. In this general comparison, the majority of GHG emissions are associated with the production stage across all material types, with varying portions of GHGs offset by recycling activities assumed in the end-of-life stage for all materials. The comparison of the GWP associated with the various types of materials as compared to plastics indicates that life cycle GHG emissions associated with plastics could be reduced through a transition to materials with lower GWP such as glass, tin, paperboard, and paper/fiber materials.

Further, CalRecycle estimates that the decrease in plastic covered material would result in a reduction of approximately [13.14-07](#) million MTCO₂e emissions by 2032 based on an assumed reduction of 4.3 MTCO₂e per

metric ton of plastic eliminated (i.e., minimizing packaging material reduces 100% of the GHG emissions for the weight that was reduced) (CalRecycle 2025⁵⁴). The reduction of ~~4.07~~13.1 million MTCO₂e GHGs associated with the amount of plastic reduced could reasonably be expected to offset an increase in GHGs associated with a transition to alternative materials. Accordingly, the reasonably foreseeable means of compliance with the source reduction measures associated with the Implementing Regulations would not be expected to generate GHGs, either directly or indirectly, that would have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs. As such, impacts would be *less than significant*.

Accordingly, any potential increase in VMT associated with the customers making extra trips to participate in take-back programs would not be expected to result in a net increase in VMT due to offsets in transportation requirements associated with source reduction and transitioning to a circular economy.

In the SRIA, CalRecycle estimates that 10% of source reduction met entirely through refill and reuse would lead to a reduction in [553,073,286,472](#) tons of single-use covered material that would otherwise require manufacture, distribution, and waste management. The energy consumption associated with reusable and refillable systems is directly related to the number of times a product is reused. For instance, a 20-ounce aluminum bottle, used for one year and washed once daily, has an estimated net energy consumption of 2.25 million BTUs per 1,000 gallons. In comparison, an exempt PET single-use water bottle consumes about 9.90 million BTUs per 1,000 gallons. Approximately 82% of the energy demand for the reusable bottle was linked to home washing, which includes the energy required for heating water, treating the water used in the dishwasher, and treating the dishwasher effluent (Franklin 2009). However, this estimate assumes that reusable containers are washed separately from other dishes. It is assumed that in most instances, reusable containers would be more likely to be washed with regular daily dishwasher loads, which would occur regardless. Even when conservatively including the additional energy associated with dishwashing as analyzed by Franklin Associates, reusable containers would still use approximately 77% less energy than an equivalent number of single-use plastic bottles. Therefore, increasing the use of refillable containers could offset the overall rise in life cycle energy consumption associated with single-use containers. Commercial businesses that transition to reusable products (i.e., reusable food service ware) may increase washing of products as compared to single-use products. However, both residential and commercial washing appliances are required to comply with the energy efficiency standards of CCR Title 20, Sections 1601-1608 and Title 24 Building Efficiency Standards to reduce energy consumption in residences and businesses. These energy efficiency standards would effectively reduce GHG emissions associated with additional washing of reusable and refillable products.

Accordingly, the source reduction measures associated with the Implementing Regulations including a transition to refillable and reusable products are not expected to directly or indirectly generate GHGs that would have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs. As such, impacts would be ***less than significant***.

3.11.3.3.2 Collection, Sortation, and Processing

Impact Criterion a) Would the Program generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

CONSTRUCTION AND OPERATION

The reasonably foreseeable means of compliance with the Implementing Regulations would include the development of collection, sortation, and processing infrastructure throughout the state. The specific technologies, size, and type of facilities have not been identified at this time and local jurisdictions would evaluate these in the future based on the current and anticipated composition of the feedstocks to be managed at these facilities. However, GHG emissions generated as a result of the construction and operation of these future facilities have been estimated using the methodology outlined in Section 3.11.3.2 (Methodology) for a comparative analysis. Specifically, construction and operation GHG emissions were estimated using the CalEEMod 2022.1.1.26 model (refer to Appendix B) based on assumptions outlined in Section 3.6.3.2.2 (Construction Assumptions), including estimated project construction schedule and operation

activities. Short-term construction emissions (e.g., off-road equipment, worker vehicle trips, excavating, and trenching) and annual operation emissions associated with the future facilities were evaluated. According to the modeling results, total unmitigated construction emissions ranged from 387.51 to 750.41 MTCO₂e per year as summarized in Table 3.11-3. Some air districts recommend spreading construction emissions over a 30-year period and addressing them as part of operational GHG reduction strategies. Following this guidance, construction-related GHG emissions were amortized over a 30-year period and combined with operational emissions, as summarized in Table 3.11-3. As shown in Table 3.11-3, total GHG emissions for future facilities range from a minimum of 565.97 MTCO₂e per year for a small MRF to a maximum of 1964.24 MTCO₂e per year for a large MRF scenario.

Table 3.11-3. Project Construction and Operation GHG Emission Summary

Facility Type	Total Construction GHGs (MTCO ₂ e)	Construction GHGs Amortized Over 30 Years (MTCO ₂ e/year)	Operational Annual GHGs (MTCO ₂ e/year)	Total Annual GHGs (MTCO ₂ e/year)
Sortation				
MRF – Small	387.51	12.92	553.05	565.97
MRF – Medium	406.15	13.54	1029.40	1042.94
MRF – Large	593.40	19.78	1944.46	1964.24
Composting	750.41	25.01	1379.60	1404.61
Processing Facilities				
Material Processing Facility	420.61	14.02	607.94 374.26	621.96 388.28

Source: CalEEMod Emissions Summary Reports in Appendix B

As summarized in Section 3.11.3.1, SMAQMD has adopted the most restrictive mass emissions threshold in the state of 1,100 MTCO₂e per year for construction activities (SMAQMD 2020). The estimated total GHG construction emissions are compared against this threshold for the purposes of evaluating relative impacts. As shown in Table 3.11-3, the total construction-related emissions are below the SMAQMD significance threshold. However, the operational annual GHGs associated with large MRFs and composting facilities would exceed the SMAQMD *de minimis* operations threshold of 1,100 MTCO₂e/year. For projects that exceed the *de minimis* threshold, SMAQMD requires that a project demonstrate consistency with the GHG targets by sector by committing to a menu of BMPs such as the requirement that projects are designed and constructed without natural gas infrastructure, are electric vehicle ready, and achieving per capita VMT reductions relative to existing average VMT. For projects that cannot incorporate the required BMPs, other reductions or purchasing and retiring GHG/carbon offsets from a registry approved by SMAQMD would be required.

For estimating the maximum annual GHG emissions per year, a conservative estimate of the maximum statewide GHG emissions associated with collection, sortation, and processing facilities at full buildout can be calculated by multiplying the annual GHG emission rate for each facility type by the total number of facilities expected to be constructed by 2032 (i.e., ~~816~~ large MRFs, ~~46~~ medium MRFs, ~~28~~ small MRFs, one composting facility, and ~~133-59~~ processing facilities). Note that the analysis assumes that collection infrastructure, (i.e., PRO Depots) would be installed in existing depots or retail facilities and would require little to no modification of

existing facilities. Accordingly, the Program would result in a conservative estimate for statewide GHG emissions of ~~0.130.05~~ million MTCO₂e per year. This amount is equivalent to ~~0.050.025~~% of the statewide target for 2030 of 260 million MTCO₂e per year. As discussed in Section 3.11.3.2.2, the estimated GHG emissions do not account for potential energy efficiency improvements and future requirements of the Renewable Portfolio Standard Program. Similarly, the mobile-source GHG emissions estimates calculated in CalEEMod do not consider the full extent of a transition to zero-emission vehicles with implementation of Executive Order N-79-20. As such, GHG emissions associated with operation of collection, sortation, and processing facilities would be substantially less than the estimates provided herein.

In addition, the primary objectives of the Implementing Regulations are to reduce GHGs from production of virgin plastic material, and landfill disposal. From 2000 to 2021, the GHG emissions associated with the waste sector increased approximately 23.5% (CARB 2023). Since waste management accounts for approximately 2.2% of California's GHG inventory (CARB 2023b), implementing programs that support local waste reduction and recycling would result in a net reduction in GHG emissions. Specifically, recycling materials such as aluminum, plastic, glass, and paper generally require less energy than producing them from raw, virgin resources. For instance, recycling aluminum saves approximately 90% of the energy needed to create new aluminum from bauxite ore (Aluminum Association 2021). Accordingly, recycling reduces the demand for extraction and processing of raw materials, thus lowering associated emissions (refer to Figure 3.11-1). This reduction in energy consumption associated with avoiding virgin materials directly translates into lower GHG emissions since less fossil fuel is burned for energy production. Further, recycling reduces the volume of waste sent to landfills, slowing the rate at which landfills reach capacity. This can delay the need for new landfills, which are often associated with significant GHG emissions from land clearing, construction, and uncontrolled emissions associated with their operation. Building recycling infrastructure closer to where waste is generated can reduce the need for long-distance transportation of waste to landfills or other disposal sites, resulting in less fuel consumption, and consequently fewer GHG emissions. As such, in the context of legislated statewide GHG targets, this level of Program-related GHG emissions would not be considerable. Accordingly, construction and operation of collection, sortation, and processing facilities would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and impacts would be ***less than significant***.

Impact Criterion b) Would the Program conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

CONSTRUCTION AND OPERATION

As described in Section 3.11.2.2, California has enacted several pieces of legislation that relate to GHG emissions and climate change, much of which sets aggressive goals for GHG reductions within the state. The first and most far-reaching is AB 32, followed by SB 32 and AB 1279, in which CARB must ensure that statewide GHG emissions are reduced to 40% below the 1990 level by 2030 and carbon neutrality by 2045. For the purposes of this analysis, the applicable GHG reduction plan to evaluate associated impacts of the development of collection, sortation, and processing infrastructure in response to the Implementing Regulations against is the CARB 2022 Scoping Plan update.

CalRecycle estimates that an additional ~~2.61.3~~ million tons of plastic covered material will need to be recycled to meet the 65% recycling rate target in 2032 (CalRecycle 202~~5~~4). As discussed under Impact Criterion (a), the estimated GHG emissions associated with the anticipated full buildout of collection, sortation, and processing infrastructure to manage the anticipated shift in waste would lead to annual GHG emissions of approximately

0.130.05 million MTCO_{2e} per year. Construction of new facilities would be conducted in accordance with applicable BMPs of the CALGreen Code standards for efficiency and sustainability as well as the building efficiency standards of Title 24. Measures included in the Scoping Plan update would indirectly address GHG emission levels associated with construction activities, including the phasing-in of cleaner technology for diesel engine fleets (including construction equipment) and the development of a low-carbon fuel standard. Policies formulated under the mandate of AB 32 that apply to construction-related activity either directly or indirectly, would be implemented statewide and would affect the project construction activities should those policies be implemented before construction begins. Specifically, implementation of AB 32 control measures for reduced vehicle emissions would decrease GHG emissions from the Project.

Further, consumers of electricity and transportation fuels are, in effect, regulated by requiring providers and importers of electricity and fuel to participate in the GHG Cap-and-Trade Program and other Programs (e.g., low carbon fuel standard, renewable portfolio standard). Each such sector-wide program exists within the framework of AB 32 and its descendant laws, the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan. In summary, construction and operation of future facilities would increase GHGs emissions from operations, electricity use, and combustion of gasoline/diesel fuels, each of which is regulated near the top of the supply-chain. With respect to GHGs from electricity, the AB 32 Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. With respect to GHGs from use and combustion of gasoline/diesel fuels, the Cap-and-Trade Program also covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are “supplied” (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and the GHG emissions attributable to electricity use, virtually all GHG emissions from CEQA projects associated with VMT are covered under the Cap-and-Trade Program.

The development of collection, sortation, and processing facilities in response to the Implementing Regulations would directly reduce waste, divert waste from landfills, and encourage reuse and repurposing of products that would otherwise go to waste. Landfills are the third largest source of anthropogenic CH₄ in California (CalRecycle 2023). As discussed for Impact Criterion (a), recycling reduces the volume of waste sent to landfills, slowing the rate at which landfills reach capacity. This can delay the need for new landfills, which are often associated with significant GHG emissions from land clearing, construction, and uncontrolled emissions associated with their operation. Building recycling infrastructure closer to where waste is generated can reduce the need for long-distance transportation of waste to landfills or other disposal sites, resulting in less fuel consumption, and consequently fewer GHG emissions. Construction of new or expanded compost facilities in response to the Implementing Regulations would directly support the goals of SB 1383 to achieve specified targets for reducing organic waste in landfills and associated short-lived climate pollutants.

In addition, as discussed in detail in Section 3.20 (Transportation) the anticipated buildout of collection, sortation, and processing infrastructure would likely result in changes in VMT as compared to baseline conditions. Overall VMT may increase or be displaced to other locations. The existing trips related to the collection of covered materials, which in most jurisdictions in the state is currently commingled with solid waste, may be diverted from the current final destination at a landfill to a new or expanded waste recovery facility. It would be reasonable to expect that trip lengths and frequencies related to collection of covered materials and hauling to collection, sortation, and processing facilities would not change substantially from current travel requirements, because a robust system of waste collection and disposal is already in place and the location of future collection, sortation, and processing facilities would be influenced by the cost-control

incentive to keep trip lengths short. On-road total GHG emissions accounted for in the 2021 California GHG inventory totaled 135.8 million MTCO₂e. Given the uncertainty in distribution of vehicle types and fuel consumption of vehicles that would contribute to the potential increase in VMT, it would be speculative to calculate the associated GHG emissions. However, Caltrans estimates total statewide VMT for 2022 at 315,244.56 million miles (Caltrans 2023). Accordingly, the total estimate statewide VMT associated with the buildout of collection, sortation, and processing facilities is 7,847,8547,793,200 miles (refer to Table 3.20-4 in Section 3.20 [Transportation]), or roughly 0.002% of the total statewide VMT. For a comparative analysis, this can be equated to roughly 0.002% of statewide GHG emissions associated with on-road sources as reported in the 2021 California GHG inventory, equal to roughly 3,380.73,375.1 MTCO₂e per year. CalRecycle estimates that the reasonably foreseeable means of compliance with the Implementing Regulations would result in a reduction in 4.0713.1 million MTCO₂e emissions by 2032. As such, it is reasonable to expect that the GHG emissions from a change in VMT and construction and operation of collection, sortation, and processing facilities would be more than offset by the anticipated reductions achieved through other aspects of the Implementing Regulation, such as source reduction and transition to refillable and reusable products. Further, AB 32 establishes control measures that would apply to light, medium, and heavy-duty vehicles. Implementation of AB 32 control measures for reduced vehicle emissions would decrease GHG emissions associated with a shift in VMT associated with the Implementing Regulations. These measures are being implemented at the state level and future projects would not interfere with their implementation.

Because construction and operation of collection, sortation, and processing facilities that may be developed in response to the Implementing Regulations would be consistent and would not conflict with the applicable plans, policies, and regulations, and because the associated incremental increase in GHG emissions of 0.130.05 million MTCO₂e associated with construction and operations along with the estimated 3,380.73,375.1 MTCO₂e per year associated with a shift in VMT would be offset through reductions in waste that would otherwise go to landfills, impacts would be ***less than significant***.

public or the environment. To reduce the impact from the generation of waste to less than significant, **MM HAZ-1** would require implementation of a Waste Management Plan for all hazardous and non-hazardous waste generated during facility construction and demolition activities. The Waste Management Plan would describe waste management procedures, and all aspects associated with construction of a new facility. In addition, to further minimize the potential hazards to the public or the environment associated with hazardous materials, **MM HAZ-2** would require that all parties involved in construction activities are aware of the potential hazards and properly trained to address them.

Construction projects that disturb 1 acre of land or more are required to obtain coverage under the NPDES General Construction Permit. Project proponents would be required to prepare a SWPPP and file a Notice of Intent with the appropriate RWQCB obtain coverage under the NPDES General Construction Permit (Order 2022-057-DWQ). The SWPPP would include spill prevention measures to avoid and, if necessary, clean up accidental releases of hazardous materials, in order to prevent discharge into stormwater runoff. Compliance with all NPDES Construction General Permit requirements would minimize the potential for mishandling and/or the release of hazardous materials. In addition to compliance with these regulations, implementation of **MM HAZ-1** and **MM HAZ-2** would further reduce potential impacts.

SIGNIFICANCE AFTER MITIGATION

Adoption and implementation of these mitigation measures are beyond the authority of CalRecycle and LEAs. The authority to review site-specific, project-level impacts and require project-level mitigation lies primarily with local land use and/or permitting agencies for individual projects. Consequently, although it is reasonable to expect that impacts would be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. Therefore, this PEIR discloses, for CEQA purposes, that impacts are potentially *significant and unavoidable*.

OPERATION

Waste processing or handling facilities and the types of hazardous waste that may arrive at these facilities include hazardous, universal, special, and hazardous recyclable wastes. Section 18980.4.13-6 of the proposed Implementing Regulations specifies that a PRO shall identify in its plan any recycling technology that was not a type of mechanical recycling technology previously in use in the State and further, that facilities employing such technology must demonstrate several requirements before being considered recycling, including that it not produce significant amounts of hazardous waste (i.e., hazardous waste as defined in CFR Title 40, Section 261.3) that presents a substantial risk of harm to public health, or of contamination of the environment. ~~materials processing technologies that employ chemical, rather than mechanical or physical processes to alter the chemical structure of plastic to create new raw material for use in manufacturing will not be considered recycling unless demonstrated that the technology does not generate a significant amount of hazardous waste (i.e., a greater amount of hazardous waste by weight, per amount of plastic waste processed and returned to the economic mainstream).~~

~~Provisions to segregate these hazardous wastes at these facilities, and then transport the segregated wastes for recycling or disposal, is required to be integrated into the facility design and operations plans.~~ Operation of MRFs, composting facilities, and processing facilities, including chemical processes, could involve the transport and disposal of hazardous waste generated by the public. Depending on the location of future facilities, these activities could present a significant hazard to the public. However, extensive safety procedures and measures required by federal, state, and local laws protect worker health and safety and the environment to the maximum extent possible. With regard to the types of processes permitted by Section 18980.4.1, that Section

requires the facility to comply with all requirements applicable to Responsible End Markets, including applicable permitting, and a justification by the PRO that the technology does not produce significant amounts of hazardous waste and the production and management of any hazardous waste that is handled and disposed of in compliance with an applicable permit does not present a substantial risk of harm to public health or of contamination of the environment.

The future location of collection, sortation, and processing facilities is not known. Once a location is identified, the potential for hazards would be evaluated using site-specific information. Compliance with all applicable regulations involving the use, transport, and disposal of hazardous substances would minimize the risk of an accidental release of hazardous materials during disposal. Specifically, the Hazardous Materials Release Response Plans and Inventory Act requires facilities using hazardous materials or generating hazardous wastes to prepare Hazardous Materials Business Plans. These plans specify storage, secondary containment, and proper hazardous material and waste management procedures and practices, including personnel training and emergency response actions to contain, cleanup, and report unauthorized releases or spills. The Emergency Planning and Community Right-to-Know Act regulates facilities that use hazardous materials and wastes in quantities that require reporting to emergency response officials of the applicable Local Emergency Planning Committee. The Emergency Planning and Community Right-to-Know Act provides the requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals. Depending on where the future facilities are located and the types of materials they handle, community emergency plans may need to be reviewed and updated. Mandatory compliance with these required procedures would ensure impacts related to disposal of potentially hazardous residual waste are minimized. With compliance to the extensive existing federal, state, and local regulations related to routine transport, use, and disposal of hazardous materials, as well as potential risk of upset conditions, impacts would be reduced to below a level of significance. Therefore, impacts would be ***less than significant***.

Impact Criterion c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

CONSTRUCTION

The future facility locations are currently undetermined. Due to the potentially extensive nature of the proposed Program, it is possible that construction of proposed facilities would occur within one-quarter mile (1,320 feet) of schools. Because construction activities could potentially involve hazardous materials or substances, construction of new facilities would have the potential to emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. To reduce these potentially hazardous impacts from construction activities to less than significant, **MM HAZ-1** would require implementation of a Waste Management Plan for all hazardous and non-hazardous waste generated during facility construction and demolition activities. The Waste Management Plan would describe waste management procedures, and all aspects associated with construction of a new facility. Implementation of **MM HAZ-2** would require that Material Safety Data Sheets are provided to on-site personnel for hazardous materials that would be present at the construction site as well as require that all staff undergo training that would include instructions in case of a spill or release of hazardous materials and would comply with applicable laws and regulation regarding the use, transportation, and disposal of hazardous materials. With implementation of **MM HAZ-1** and **MM HAZ-2** impacts would be reduced.

3.17.3 Impact Assessment

3.17.3.1 Significance Criteria

For the purposes of this PEIR, CalRecycle applies the questions set out in Appendix G of the CEQA Guidelines as thresholds to determine significant impacts, and thus considers that the Program would have a significant impact on population and housing if it would:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.17.3.2 Proposed Program

3.17.3.2.1 Source Reduction and Refill/Reuse and Collection, Sortation, and Processing

Impact Criterion a) Would the Program induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Criterion b) Would the Program displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Reasonably foreseeable compliance measures with the Implementing Regulation's would not result in the construction of new homes. CalRecycle estimates that it would need to hire 62 permanent staff members, over a period of six years, to fully implement and enforce the Implementing Regulations and that [102,564,108,495](#) jobs across various industries (e.g., construction, transportation and public utilities, manufacturing) would be created from 2024 through 2034 (CalRecycle 20254). These increases do not surpass 0.15% of the baseline employment figures for California throughout the entire regulatory timeline (CalRecycle 20254). Further, these jobs would be spread throughout the state. Thus, there would not be a substantial increase in jobs such that new unplanned population growth would occur. Reasonably foreseeable compliance measures would not include any other growth-inducing measures and would not displace existing housing or people nor necessitate the construction of housing elsewhere. Therefore, there would be **no impact** on population and housing.

3.20 Transportation

This section describes the existing transportation system in California; identifies applicable regulations; and identifies the potential impacts of Program implementation on the transportation system, including traffic operations, bicycle, pedestrian, and transit facilities, roadway hazards and obstructions, and emergency access. The analysis also identifies mitigation measures for those impacts determined to be significant. Table 3.20-1 summarizes the impacts on traffic and transportation that would result from implementation of the Program.

Table 3.20-1. Summary of Transportation Impacts

Would the Program:	Source Reduction and Refill/Reuse	Collection, Sortation, and Processing	Mitigation Measure(s)
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact	Potentially Significant and Unavoidable	MM TR-1: Construction Transportation Management Plan MM TR-2: Restrict Lane Closures and Maintain Access MM TR-3: Closure Notification and Detours MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project-Specific Traffic Impact Report
b) Would the Program conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant	Potentially Significant and Unavoidable	None
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact	Potentially Significant and Unavoidable	MM TR-1: Construction Transportation Management Plan MM TR-5: Project-Specific Traffic Impact Report
d) Result in inadequate emergency access?	No Impact	Potentially Significant and Unavoidable	MM TR-1: Construction Transportation Management Plan MM TR-4: Notify Emergency Personnel of Road Closures MM TR-5: Project-Specific Traffic Impact Report

Urban areas often have well-developed recycling and composting programs. Single-stream recycling (where all recyclables are placed in one bin) is common, and organics collection includes yard trimmings, food scraps, and food soiled papers.

Urban areas are supported by a network of transfer stations and MRFs where waste is transferred from collection vehicles, sorted, and processed before being hauled to landfills or recycling centers. Many cities have waste diversion goals and programs to reduce landfill use and promote sustainability in addition to the 50% waste diversion requirements of the California Integrated Waste Management Act (Assembly Bill 939).

Rural counties currently account for 4.7% of the total waste disposed in California (CalRecycle 2024a). Low population densities and small tax rolls, as well as long distance costs to collection facilities and recycling markets, make implementing cost-effective, solid waste diversion programs more difficult (CalRecycle 2024a). As such, waste collection services might be less frequent in rural areas. Some areas may have weekly or bi-weekly curbside collection of waste. In addition to (or instead of) curbside collection, rural areas often have local drop-off centers or waste transfer stations where residents or businesses can take their waste if curbside collection is not available. Recycling programs in rural areas may not be as comprehensive or frequent as in urban areas. Residents might have to travel to recycling centers or drop-off points. Composting may be encouraged through educational programs, and some rural areas have community composting initiatives or provide composting bins to residents.

Rural areas may have fewer waste management facilities compared to urban areas. Transfer stations in rural regions serve as crucial points where waste is consolidated before being transported to larger processing facilities. The infrastructure for managing waste in rural areas can be less centralized, with more reliance on local solutions and community-based approaches.

3.20.1.6 Current Sources of Single-Use Products

Single-use products such as single-use food service ware and single-use packaging used in California is largely sourced from domestic and international manufacturers, with significant imports from Asia. Some plastic single-use products are currently produced and shipped within California. Facilities in the state manufacture various types of plastic containers, films, and wraps.

Other U.S. regions also produce plastic packaging materials that are transported into California. This includes facilities in states like Texas and Louisiana where 84% of U.S. plastic production across the sector's supply chain is located (Responsible Alpha 2024).

A significant portion of plastic packaging is imported from countries such as China, Mexico, and Canada (World Integrated Trade Solution 2024). These countries have large-scale plastic manufacturing facilities that produce packaging materials for global markets. Imported plastic packaging typically arrives at California's major ports, such as the Port of Los Angeles and the Port of Long Beach. From there, it is distributed to manufacturers, retailers, and other businesses throughout the state typically via truck or rail.

Alternatives to plastic packaging may include paper products, glass, metals, and biodegradable and compostable materials such as bioplastics. Paper and cardboard packaging are produced in the U.S. and can be sourced from domestic paper mills and corrugated board manufacturers. Companies in regions such as the Pacific Northwest and the Midwest have significant paper production facilities (U.S. Census Bureau 2024a). Glass packaging is produced in the U.S., with significant manufacturing facilities in California as well as in Indiana, Texas, and Oklahoma (U.S. Census Bureau 2024b). Glass can be recycled indefinitely, making it a

assumption that this would be representative of an average trip length for most regions as shown in Table 3.20-4 using the estimated total regional trips provided in Section 3.2.2 (Collection, Sortation, and Processing: Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved). For a bounding-level analysis (i.e., evaluation of a reasonable worst-case scenario), all processing facilities are assumed to be large and distributed throughout the state relative to the projected 2031 population for each region as follows (California Department of Finance, Demographic Research Unit 2022a):

- Bay Area: 7,640,539
- Coastal: 1,836,595
- Mountain: 580,658
- Southern: 21,954,007
- Valley: 7,520,229

Table 3.20-4. Operational Regional Vehicle Trips and VMT for Collection, Sortation, and Processing Facilities

Facility Type	Region	Total Regional Trips per Day	VMT (miles)	Per Capita VMT (miles/capita)
Collection				
PRO Depots	Bay Area	80,910	1,157,013	0.15
	Coastal	19,483	278,607	0.15
	Mountain	6,172	88,260	0.15
	Southern	232,380	3,323,034	0.15
	Valley	158,594	2,267,894	0.15
Sortation				
MRFs	Bay Area	838 <u>234</u>	11,983 <u>3,346</u>	0.0016 <u>0.0004</u>
	Coastal	200 <u>100</u>	2,860 <u>1,430</u>	0.0016 <u>0.0008</u>
	Mountain	424 <u>212</u>	6,063 <u>3,302</u>	0.0104 <u>0.0052</u>
	Southern	540 <u>482</u>	7,722 <u>6,893</u>	0.0004 <u>0.0003</u>
	Valley	838 <u>68</u>	11,983 <u>972</u>	0.0016 <u>0.0001</u>
Compost	Bay Area	150	2,145	0.0003
	Coastal	150	2,145	0.0012
	Mountain	150	2,145	0.0037
	Southern	150	2,145	0.0001
	Valley	150	2,145	0.0003

Facility Type	Region	Total Regional Trips per Day	VMT (miles)	Per Capita VMT (miles/capita)
Processing				
Material Processing Facilities	Bay Area	37415	58,830131,617	0.020.01
	Coastal	10217.5	4,37632,061	0.020.002
	Mountain	3415	48610,124	0.020.001
	Southern	112229.4	529,472377,978	0.020.02
	Valley	37420	58,830129,930	0.020.01
TOTAL AT BUILDOUT	Bay Area	81,66882,016	1,221,3341,302,759	0.170.16
	Coastal	19,83519,951	286,558315,673	0.170.16
	Mountain	6,5686,864	93,922106,592	0.180.16
	Southern	234,134233,188	3,861,5433,710,879	0.170.18
	Valley	159,186159,700	2,329,8422,411,952	0.320.31

It is important to note that not all of the projected trips would be considered “new” trips as some of these trips may carry materials that would have otherwise been destined for landfills. The associated net change in VMT would be relative to the change in distance of the trips diverted from the landfill to the new collection, sortation, or processing facility. Note also, that the estimates provided in Table 3.20-4 conservatively include expansion of facility capacity required in response to population growth trends that would occur without implementation of the Program.

3.20.3.3 Proposed Program

3.20.3.3.1 Source Reduction and Refill/Reuse

Impact Criterion a) Would the Program conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Compliance with the source reduction and refill/reuse requirements of the Implementation Regulations are expected to lead to a reduction in plastic covered materials, a transition to alternative materials proportional with the reduction in plastic covered materials, and a shift to refillable and reusable options. These types of foreseeable means of compliance with the Implementing Regulations would not generate a demand for transit, bicycle, or pedestrian facilities. Therefore, the source reduction requirements including an increase in refillable/reusable products would not directly create any conflicts with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, the source reduction requirements, including a transition to refillable and reuse options would have **no impact** with respect to the potential to conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

total shipping weight of 37,527 lbs.) (Royal Summit 2024). In comparison, a 64-ounce HDPE milk jug weighs approximately 0.14 lbs. with a pallet of 1,080 bottles weighing approximately 160 lbs. and dimensions of 40 inches x 48 inches x 94 inches, for a full truck load quantity of 21 pallets (i.e., 22,680 bottles and total shipping weight of 3,360 lbs.) (Berlin Packaging 2024). Given these relative shipment capacities, approximately 1.3 times more truck trips would be required to ship empty 64-ounce glass milk jugs to the filler compared with 64-ounce plastic milk jugs. The assessment of transportation requirements for shipping filled milk jugs from fillers to retailers considers the relative weight and volume of replacement bottling materials and density of the liquid. Milk is a dense product, and thus the shipment of bottled milk by truck is weight limited, rather than volume limited. To compare the shipping requirements for 64-ounce bottled milk in glass jugs versus plastic jugs, this analysis assumes a maximum weight capacity of 48,000 pounds for a standard 53-foot truck and divides by the weight of milk (4.3 lbs. per 64-ounces) plus the weight of the bottle (i.e., 0.14 lbs. for a 64-ounce HDPE plastic bottle versus 2.09 lbs. for a 64-ounce glass bottle; Royal Summit 2024, Berlin Packaging 2024). Disregarding any limitations on individual pallet dimensions, approximately 1.4 more truck trips would be required to ship 64-ounce filled half-gallon milk jugs compared with filled plastic half-gallon milk jugs. Note that dairy plants often produce HDPE milk jugs onsite using HDPE resin. Food grade HDPE resin is often shipped to California from top U.S. producers of pre-production HDPE resin (i.e., plastic pellets) located in Texas and the East Coast (Public Interest Research Group 2024). Milk is often also packaged in PET bottles which are often shipped as “preforms” to the filler and blown (inflated) onsite. In this scenario, the location of the preform manufacturer is of importance. Specifically, the U.S. is a top importer of PET preforms, primarily from India, Turkey, and/or China (The Trade Vision 2024), suggesting that PET preforms may be sourced overseas more often than U.S.-based PET preform manufacturers. Thus, the shipping requirements for PET preforms may include shipment from overseas manufacturers to the U.S. In contrast, the U.S. dominates the market for glass bottles (Chaudhary 2024), suggesting that these bottles are predominantly produced and distributed within the U.S. Therefore, to make a direct comparison of transport requirements between single-use plastic and glass bottles, this analysis limits the boundary of the analysis to the shipment of formed empty plastic milk bottles from domestic manufacturer to the filling facility.

In contrast to glass milk jugs, the number of trips required to transport alternative containers to the filler are assumed to be less than or comparable to trips required for plastic milk jugs. This is attributable to the relative low density of empty containers, leading to volume-limited shipments (i.e., the volume capacity of a vehicle is filled before the maximum weight limit of the vehicle is reached). More collapsible containers, like cartons or pouches, can be shipped in a single truck load as compared to empty plastic bottles or PET preforms that take up much more cargo space.

Numerous factors contribute to total VMT including trip length and percentage of backhaul trips (i.e., full return loads) versus empty return loads. As an example, the USDA reports that in 2023, roughly 3,014.4 million gallons of fluid milk were sold in California (USDA 2023). Based on data provided by the CDFA (2005), approximately 15.08% of fluid milk is sold in half-gallon sized containers, equating to approximately 7,819 million half-gallon jugs of milk sold. The CDFA (2005) also reports that approximately 82.28% of fluid milk products sold were packaged in plastic containers (as compared to 0.06% packaged in glass containers). For this comparative analysis, if roughly 25% of milk in half-gallon containers currently packaged in plastic containers were switched to glass as a result of compliance with the Implementing Regulations, approximately 1,608 million additional glass half-gallon milk jugs would be introduced to the market in place of plastic half-gallon milk jugs annually. Using the maximum weight capacity of 48,000 lbs. per truckload and total weight of filled 64-ounce HDPE milk jugs of 4.44 lbs., the total number of truck trips to transport 1,608 million half-gallon filled

HDPE milk jugs would be roughly 148,769 trips per year (using several assumptions that disregard loading logistics and percentage of loads that are not dedicated to milk deliveries). Accordingly, using the ratio of 1.4 times more trips to ship filled half-gallon milk jugs as compared to milk shipped in HDPE jugs calculated above, replacing 25% of HDPE milk jugs with glass milk jugs would result in an estimated 214,107 trips per year, equating to approximately 65,338 additional trips annually. Further, assuming all trips are 100 miles, the increase in trips associated with a transition to glass milk jugs would represent 6,533,783 additional miles per year (17,901 miles per day) or 0.0002 miles per day per capita (using California population projection for 2032 of 39,626,155 [California Department of Finance, Demographic Research Unit 2022]; $6,533,783 \text{ miles/year} \div 365 \text{ days/year} = 17,901 \text{ miles/day} \div 39,626,155 \text{ 2032 California Population} = 0.0004 \text{ miles per capita per day}$). This is a reasonable worst-case analysis assuming replacement with glass milk bottles, the most impactful of the alternative packaging material. Actual impacts are expected to be less as other alternative materials are considered.

Specifically, the source reduction requirements of the Implementing Regulations include consideration of a transition to refillable and reusable options. CalRecycle estimates the total weight of covered material under the 2023³¹ baseline conditions at 11,325,953,595,542 tons, with the estimated weight of new packaging under the 2031 scenario at 11,654,774,765,439 tons (inclusive of material switching and source reduction estimates) (CalRecycle 2024b2025). Using various broad assumptions and assuming a truck capacity of 48,000 lbs. while disregarding the density of packaged materials that are being transported, packaging dimensions, volume capacity limitations of truckloads, the increase in the weight of covered material could result in roughly a 3% increase in truck trips associated with transport logistics. As discussed above in Section 3.20.3.2 (Methodology), it is not possible to estimate VMT associated with the changes in covered material distribution at full implementation of the proposed regulations in 2031. However, a reasonably foreseeable means of compliance with the recycling rate requirements of the Implementing Regulations is the development of local markets for recycled covered materials, which would encourage the establishment of more local collection, sortation, and processing facilities and reduce the need to transport raw materials over long distances. Further, higher recycling rates lead to less waste going to landfills, which can decrease the frequency and number of waste collection trips and associated VMT. As such, the relatively minor increase in truck trips that may occur as a result of the transition to alternative materials would be offset by a reduction in trips to landfills, shortened supply chains, and decreased demand for transporting raw materials to manufacturing sites. Thus, no net change in VMT is expected to occur due to the reasonably foreseeable means of compliance with the source reduction requirements of the Implementing Regulations and impacts would be ***less than significant***.

Refill/Reuse

The Implementing Regulations require that 10% of source reduction requirements be met by either switching to reusable or refillable packaging or food service ware or through elimination of a plastic component. A transition to reusable products may result in additional trips as a result of return logistics associated with reuse and take-back programs. At this time, the number of additional vehicle trips and their ultimate destination is unknown but could range from negligible (if return logistics is at locations the consumer would travel to in any case) to a relatively minor increase. Reusable food service ware programs would be operated either by individual restaurants, where customers return the used containers back to the same restaurant, or as a collective with collection points located at restaurants and cafés or various common destinations for takeaway food, such as hotels and offices, enabling consumers to drop off their reusables while carrying out other errands. In collective reusable food service ware schemes, food service ware is standardized and system service providers collect items, clean them, and redistribute them back to restaurants and cafés. Cleaning the

trips per day. The estimated maximum daily vehicle trip count for each new facility is below the screening threshold of 110 trips per day recommended in the *Technical Advisory for Evaluating Transportation Impacts Under CEQA* (California Office of Planning and Research 2018). Per the guidance, projects that generate fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact relative to VMT. As such, the temporary increase in VMT associated with construction of collection, sortation, and processing facilities is not expected to conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and impacts would be ***less than significant***.

OPERATION

The buildout of collection, sortation, and processing infrastructure may result in an increase in VMT, primarily due to new or additional trips and/or material transport routes. In general, vehicular travel associated with the foreseeable development of collection, sortation, and processing facilities is related to changes in the way that covered materials are processed. The distance required to accommodate new trips is related to the location of facilities that would receive and process covered materials as well as location of where processed materials are ultimately distributed.

As detailed in Section 3.2.2 (Collection, Sortation, and Processing: Foreseeable Methods by which Compliance with the Rule or Regulation will be Achieved), the Implementing Regulations would lead to a shift in transportation requirements for the different collection streams, including comingled, source-separate materials, garbage, PRO Depots, transfer to MRF, and sorted materials to processing or disposal. As shown in Table 3.20-4, total regional VMT associated with the anticipated full buildout of collection, sortation, and processing infrastructure by 2031 would result in an estimated increase of VMT in each region ranging from [106,592,933,922](#) miles/day to [3,710,8793,861,543](#) miles/day. The total estimated per capita daily VMT ranges from [0.170.16](#) to [0.320.31](#) miles/day per capita. It is important to note that not all of the projected trips would be considered “new” trips as some of these trips may carry materials that would have otherwise been destined for landfills. The associated net change in VMT would be relative to the change in distance of the trips diverted from the landfill to the new collection, sortation, or processing facility.

Overall, the Implementing Regulations would lead to an increase in truck traffic due to new or additional trips and/or material transport routes. However, since the costs of transporting materials rise significantly with distance—such as fuel expenses, fleet maintenance, and staffing—haulers are motivated to limit the number and length of trips, regardless of the type of material being transported. Although VMT may increase relative to the buildout of collection, sortation, and processing infrastructure, it is important to understand the purpose of evaluating VMT. According to *Technical Advisory for Evaluating Transportation Impacts Under CEQA* (California Office of Planning and Research 2018), the VMT metric is intended to support statutory goals related to reducing GHG emissions, promoting the development of multimodal transportation networks, and encouraging diverse land uses. It's crucial to recognize that SB 743 is not specifically aimed at addressing public services activities, such as the plastic reduction goals outlined in the Implementing Regulation. Therefore, while there may be a slight increase in mobile source emissions (including air pollutants and GHG emissions) due to higher VMT, these emissions would be minimal compared to the significant benefits of reducing waste disposed of in landfills and development of a circular economy.

In summary, the Implementing Regulations would likely result in an increase in VMT relative to the buildout of collection, sortation, and processing infrastructure. Additionally, there is uncertainty in predicting the location of new processing facilities and the locations where rescued food and finished compost and other byproducts of organic waste recovery facilities would be distributed. Thus, recognizing uncertainty in future predictions, to

The principal facilities supplying water in California are operated by U.S. Bureau of Reclamation and DWR. In California, the Mid-Pacific Region of U.S. Bureau of Reclamation built and manages the Central Valley Project, which transports water from Lake Shasta in the north to Bakersfield in the southern San Joaquin Valley, providing agricultural irrigation and municipal uses to most of California's Central Valley.

The U.S. Bureau of Reclamation also manages the Colorado River, which serves seven western U.S. states, two Mexican states, and Native American Tribal nations with water supply, hydropower, recreation, fish and wildlife habitat, and other benefits. The State of California's normal allocation of Colorado River water is 4.4 million acre-feet.

DWR built and implements the State Water Project, which is the nation's largest state-owned water and power generator and user-financed water system. The State Water Project delivers water to 29 public agencies and local water districts (State Water Project contractors) that supply water to 27 million people and 750,000 acres of farmland through a system of reservoirs, aqueducts, power plants, and pumping plants that extends 705 miles across the state. In 2023, DWR announced a 100% allocation of requested supplies from the State Water Project, which amounts to approximately 4.2 million acre-feet (DWR 2023).

Water supply in individual communities is the responsibility of local utilities and water districts. Pursuant to California Water Code Section 10644(c)(1)(B), DWR publishes an annual summary report regarding water shortage information at the supplier level, based on suppliers' Annual Water Supply and Demand Assessments, as well as regional and statewide analyses of water supply conditions. In 2023, of 436 Annual Water Supply and Demand Assessments submitted to DWR, 415 suppliers reported no water shortages and 21 reported that shortages could be fully addressed by suppliers' responses (e.g., fixing leaks and breaks by customers, prohibiting runoff from landscape irrigation, prohibiting use of potable water for washing hard surfaces, and limiting landscape irrigation to specific days and times). Thus, no suppliers reported shortages (DWR 2023).

3.22.1.2 Wastewater

Over 100,000 miles of sanitary sewers and more than 900 wastewater treatment plants manage the approximately 4 billion gallons of daily wastewater across the State (Water Education Foundation 2013). The SWRCB and nine RWQCBs are responsible for development and enforcement of water quality objectives and implementation plans that protect the beneficial uses of the federal and state waters. Wastewater collection, treatment, and discharge service for developed and metropolitan areas is typically provided by local wastewater service districts or agencies that are required to secure treatment and discharge permits for the operation of a wastewater facility from the RWQCB. In areas that are remote or that are not served by an individual wastewater service provider, developments would be required to install an individual septic tank or other on-site wastewater treatment system.

3.22.1.3 Solid Waste Collection and Disposal

CalRecycle is responsible for the regulation of the disposal and recycling of all solid waste generated in California. Local agencies can create LEAs and, once approved by CalRecycle, LEAs have the primary oversight for operations and closures of solid waste facilities and also have responsibilities for guaranteeing the proper solid waste storage and transportation within their jurisdictions.

CalRecycle's SWIS database contains 1,225 active landfills, transfer/processing sites, composting sites, in-vessel digestion sites, engineered municipal solid waste conversion facilities, and transformation facilities throughout the state (CalRecycle 2024a).

Program would eliminate ~~1-38716,000~~ million tons of plastic through source reduction over the 10-year period from 2021 through 2031 with an estimated ~~2-91.5~~ million tons of plastic covered material diverted from disposal each year (CalRecycle ~~2024b~~2025). Within this total, CalRecycle estimates that ~~553,000~~286,472 tons or ~~11-76.1~~ billion plastic packages will be converted to refill/reuse materials (CalRecycle ~~2024b~~2025). The source reduction and refill/reuse reasonably foreseeable means of compliance would support state and local activities required to comply with waste reduction programs, including SB 54. Therefore, the Program would have **no impact** on solid waste and associated statutes and regulations.

3.22.3.2.2 Collection, Sortation, and Processing

Impact Criterion a) Would the Program require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact Criterion b) Would the Program have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Criterion c) Would the Program result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Reasonably foreseeable compliance responses would result in the construction of ~~816~~ large, ~~46~~ medium, and ~~28~~ small MRFs (see Table 3.2-9) and ~~133-59~~ new processing facilities (see Table 3.2-12) throughout the state by 2032. The construction and operation of new facilities would be likely to require new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, and/or telecommunication infrastructure to support employees and equipment needs.

The operations of MRFs and processing facilities may require large quantities of water and may create substantial amounts of wastewater. New water supplies may be necessary for construction (e.g., dust suppression), operations (e.g., equipment cleaning), domestic use (employee drinking fountains and restrooms), and fire suppression (during construction and operations). Water supply would come from connections to existing municipal water supply systems, onsite wells, or onsite water storage tanks. Wastewater would be discharged via on-site septic systems or connection to existing municipal services.

Energy supplies (see Section 3.9) would be required from local natural gas and/or electricity utilities to power collection, sortation, and processing equipment. New facilities would likely be placed in areas where utility infrastructure is available, such as in or adjacent to other industrial areas, so utility connections to existing infrastructure would be expected to be minimal and not require substantial construction. However, the location of future facilities is currently unknown as is the availability of utilities at project locations. However, water supply, wastewater, electric, and natural gas infrastructure would be constructed to the standards of the applicable local jurisdiction. As part of the permit approval process for individual facilities, the project proponent would need to coordinate with the local water and wastewater service provider and obtain a will serve letter (or equivalent) that demonstrates that adequate water supply is available to meet the required demand under all water year conditions and that adequate treatment capacity is available, respectively. If a municipal service is not needed, the project proponent would need to seek regulatory approvals, such as WDRs, consistent with federal and state requirements. Therefore, impacts to new or expanded utilities, water supply, and wastewater management would be **less than significant**.

Impact Criterion d) Would the Program generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Criterion e) Would the Program comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

To meet the recycling rate requirement specified in the Implementing Regulations, approximately [2-91.5](#) million tons of plastic covered material must be diverted from solid waste disposal each year (CalRecycle 202[54b](#)). Small amounts of solid waste generated by employees at facilities constructed to comply with the proposed regulation would be disposed of as typical domestic waste. The collection, sortation and processing reasonably foreseeable means of compliance would support state and local activities required to comply with waste reduction programs, including SB 54. Therefore, the Program would comply with all applicable solid waste and associated statutes and regulations, and **no impact** would occur.

Environmental Topic	Rationale
Biological Resources	<p>As discussed in Section 3.7 (Biological Resources), the reasonably foreseeable means of compliance would be expected to result in the expansion of existing facilities and the development of new facilities throughout the state for collection, sortation, and processing. There is uncertainty as to the specific location of these new facilities and to the extent that the modification of existing facilities would achieve program directives. Construction and operations could result in impacts to habitat or species during grading, excavation, stockpiling, vegetation or tree trimming or removal. Implementation of MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM AES-3, MM NOI-1, and MM NOI-2 can and should be required by agencies with project approval authority. Although it is reasonable to expect that impacts would be reduced to a less than significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. In addition, there may be rare instances in which even with adherence to MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM AES-3, MM NOI-1, and MM NOI-2, compliance with the implementing regulations may result in a significant impact on special status plant and wildlife species and their habitat. Therefore, the compliance methods of the proposed Implementing Regulations could result in a considerable contribution to significant cumulative impacts on biological resources, and this PEIR discloses, for CEQA purposes, that the impacts may be potentially <i>significant and unavoidable</i>.</p>
Cultural Resources	<p>As discussed in Section 3.8 (Cultural Resources), the reasonably foreseeable means of compliance would be expected to result in the expansion of existing facilities and the development of new facilities throughout the state for collection, sortation, and processing. There is uncertainty as to the specific location of these new facilities and to the extent that the modification of existing facilities would achieve program directives. Construction and expansion could involve ground disturbance (e.g., excavation, grading, drilling), vibration, and removal of historical and archaeological resources. Constructing these projects also has the potential to introduce new visual elements or modify existing visual elements (e.g., buildings and structures). Implementation of MM CUL-1, MM CUL-2, and MM CUL-3 can and should be required by agencies with project approval authority. It is reasonable to expect that impacts would be reduced to a less than significant level by land use and/or permitting agency conditions of approval, the degree to which another agency would require mitigation is uncertain. In addition, there may be rare instances in which even with adherence to MM CUL-1, MM CUL-2, and MM CUL-3, construction activities or the relocation of a historical, architectural, or archaeological resource may alter the significance of the resource. Therefore, the compliance methods of the proposed Implementing Regulations could result in a considerable contribution to significant cumulative impacts on cultural resources, and this PEIR discloses, for CEQA purposes, that the impacts may be potentially <i>significant and unavoidable</i>.</p>

- the extent to which the effects of the alternative can be reasonably ascertained and whose implementation is not remote or speculative;
- the potential feasibility of the alternative, in consideration of site suitability, economic viability, availability of infrastructure, and consistency with other applicable plans and regulatory limitations;
- the appropriateness of the alternative in contributing to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- the requirement of the CEQA Guidelines to consider a “No Project” alternative and to identify an “environmentally superior” alternative (CEQA Guidelines, Section 15126.6(e)).

Step 3: Determining the suitability of the proposed alternative for comparative analysis in the PEIR.

Following the screening analysis, those alternatives that pass are analyzed in comparison to the Program.

5.3.2 Alternatives Considered but Not Evaluated Further

CEQA Guidelines Section 15126.6(c) states that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) Cal.4th 1143, 1165–1167). In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project’s significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of “potentially feasible” alternatives, the ultimate determination as to whether an alternative is feasible is made by lead agency decision makers. (See PRC Section 21081(a)(3).) At the time of action on the project, the decision makers may consider evidence beyond that found in this EIR in addressing such determinations. The decision makers, for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint and may reject an alternative on that basis provided that the decision makers adopt a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998).

The EIR should also identify any alternatives that were considered by the lead agency but rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency’s determination. The following alternatives were considered by CalRecycle but are not evaluated further in this [Draft](#) PEIR.

5.3.2.1 Different Uptake Scenarios

In evaluating the economic effect of the Program (CalRecycle 2025⁵⁴), CalRecycle projected reuse and refill infrastructure costs across three scenarios each of which assumed different scaling for packaging system efficiencies, return rates, and the number of times packaging is returned (reusable packaging use cycles):

- fragmented effort,
- collaborative approach, and

this plastic waste was recycled; the rest was disposed in landfills or littered. This trend would continue under the No Project Alternative.

Improperly discarded packaging, including plastics, can end up in the environment. Harmful chemicals contained in the plastics can enter natural water systems, potentially causing harm to natural ecosystems and human health. This trend would continue under the No Project Alternative.

As described in Section 1.4.2 (Program Objectives), the production and use of single-use packaging and food service ware results in GHG emissions, toxic chemical releases, and can impact water quality and human health. Reuse, recycling and source reduction of plastics reduces the amount of new plastic that is manufactured and reduces the corresponding GHG emissions and release of toxic chemicals (CalRecycle 20254). Specifically, CalRecycle estimates that the decrease in plastic covered material would result in a reduction of approximately ~~4.07~~13.1 million MTCO₂e emissions by 2032 based on an assumed reduction of 4.3 MTCO₂e per metric ton of plastic eliminated (i.e., minimizing packaging material reduces 100% of the GHG emissions for the weight that was reduced) (CalRecycle 20254). In addition, the manufacturing of new plastics releases various pollutants which are identified as carcinogens. CalRecycle estimates that ~~550-623~~ cases of disease from carcinogens will be avoided as a result of increased recycling of covered material and plastic source reduction (CalRecycle 20254). These reductions in GHG emissions and toxic compound releases would not occur under the No Project Alternative.

Historically disadvantaged, low-income, and rural communities are disproportionately affected by climate change and other forms of pollution (CalRecycle 20254). As such, the Program measures that reduce GHG emissions and pollution that would directly benefit these communities would not occur under the No Project Alternative. In addition, under the No Project Alternative these communities would also not benefit from the funds set aside in the California Plastic Pollution Mitigation Fund to reduce the environmental and public health impacts of plastic pollution.

Under the No Project Alternative, the burden for recycling and disposing of single-use packaging and food service ware would not be shifted to producers. California's efforts to shift to a circular economy and to hold the producers, rather than local jurisdictions, ratepayers, and consumers, responsible for the management of covered materials would be undermined under the No Project Alternative. Specifically, the Program provides for a statewide coordinated effort which would supersede local efforts to reduce plastic food service ware and single-use packaging. Under the No Project Alternative, local efforts would continue ad hoc. Local areas that are not pursuing similar types of plastics reduction programs would continue to generate these wastes and these local governments would continue to bear 100% of the burden of managing single-use packaging and plastic food service ware waste.

5.4.2 Alternative 2: Less Stringent Classification of Plastic Covered Materials

5.4.2.1 Alternative 2: Description

Under Alternative 2, the Implementing Regulations would be revised to allow covered materials composed mostly of paper to contain less than 20% plastic by weight without being categorized as plastic covered material. These materials would be categorized as paper covered materials and would not be subject to source reduction or meeting the plastic recycling rate requirement. These materials would still need to be recyclable by the January 1, 2032 statutory deadline, but they would not be categorized as plastic.

This alternative would result in approximately ~~1.8 million~~^{1,138} tons less material categorized as plastic covered material compared to the Program. Accordingly, the amount of material subject to the source reduction and recycling rate requirements would be reduced, which would lower the burden to comply and the associated cost. Consequently, a smaller volume of plastic covered material would need to be recycled and fewer new collection, sortation, and processing facilities would need to be constructed to responsibly manage the material.

Alternative 2 would meet most of the objectives of the Program but to a lesser degree. It therefore passes Step 2 of the screening methodology and under Step 3 is retained for comparative analysis, provided in the following subsection.

5.4.2.2 Alternative 2: Impact Discussion

In Alternative 2, paper packaging and food service ware with less than 20% ~~percent~~ plastic (mixed materials) are categorized as paper instead of plastic covered material. Mixed materials including laminated paper and multi-layer packaging, composed of paper and plastic, are harder to recycle than non-mixed materials like milk jugs, which are solely composed of plastic. The paper and plastic materials need to be separated to be used as feedstock for new products, and the separation process is not simple. There are already systems in place throughout California to recycle plastic containers such as soft drink bottles and milk jugs. However, robust recycling infrastructure does not exist for packaging such as plastic-lined mailing pouches and bakery boxes with plastic windows. Therefore, not including them in the plastic category exempts them from the source reduction and recycling rate requirements, and it is likely they would be disposed due to how difficult they are to recycle.

With a smaller volume of plastic covered material requiring recycling under Alternative 2, there would be a reduced need for constructing new collection, sortation, and processing facilities. Consequently, this would lead to a decreased level of construction and operation activities as compared to what is outlined for the Implementing Regulations. While fewer overall facilities would be required, the construction and operation of any new facilities could result in significant impacts as described for the Program, depending on the location of the facilities. Therefore, selection of this alternative would not necessarily avoid or minimize all of the significant impacts related to collection, sortation, and processing facilities identified for the Program, although the potential for significant impacts related to aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation, tribal cultural resources, and wildfire, would likely be minimized on aggregate throughout California. As described in Section 3.20 (Transportation), the full buildout of collection, sortation, and processing infrastructure may result in an increase in VMT, primarily due to new or additional trips and/or material transport routes. In general, vehicular travel associated with the foreseeable development of collection, sortation, and processing facilities is related to changes in the way that covered materials are processed. The distance required to accommodate new trips is related to the location of facilities that would receive and process covered materials as well as location of where processed materials are ultimately distributed. Under Alternative 2, there would likely be fewer collection, sortation, and processing facilities as compared to the Program. Therefore, Alternative 2 may result in relatively less overall vehicle trips and potentially less VMT and vehicle-related emissions (i.e., criteria pollutants and GHGs) as compared to the Program. However, it's important to note that depending on the development of future collection, sortation, and processing infrastructure, a reduced number of facilities as compared with the Program also has the

potential to increase VMT and associated emissions because the array of options for management of covered materials would be limited and could increase the likelihood that material would need to travel greater distances to be managed by the smaller number of facilities. As such, because the locations of future facilities are not known, it is not clear that Alternative 2 would avoid or even necessarily reduce the potentially significant transportation effects of the Program.

SB 54 was developed to address the environmental and human health impacts of plastics, and challenges involving recycling plastic materials. If Alternative 2 is adopted and paper packaging and food service ware with less than 20% ~~percent~~ plastic (mixed materials) are categorized as paper instead of plastic covered material, the key objective of SB 54 to reduce difficult to recycle packaging and encouraging a transition to recyclable materials would be undermined. GHG emissions associated with manufacture of plastic products using virgin materials would be reduced under Alternative 2. However, based on the comparison conducted by CalRecycle (CalRecycle 20254), Alternative 2 would result in approximately ~~1.4 million~~ 62,000 MTCO₂e more GHG emissions than the Program because less plastic material would be recycled and more virgin plastic material would continue to be produced. In addition, Alternative 2 would not decrease the volume of plastic pollution in the environment to the same extent as the Program because fewer materials would be classified as plastic covered materials subject to the source reduction requirement. As such, the benefits of the Program would occur to a lesser degree under Alternative 2.

5.5 Environmentally Superior Alternative

Table 5.5-1 summarizes the impacts of the Alternatives Evaluated in Detail as against the impacts of the Proposed Implementing Regulations. CEQA Guidelines Section 15126.6 [e][2] states, in part, that “[i]f the environmentally superior alternative is the “No Project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives”. The No Project Alternative would avoid the significant impacts that could occur based on reasonably foreseeable means of complying with the Implementing Regulations. Therefore, based on the analysis and substantial evidence provided in this PEIR, CalRecycle has determined that the No Project Alternative is the environmentally superior alternative.

As illustrated in Table 5.5-1, below, Alternative 2, the Less Stringent Classification of Plastic Covered Material Alternative, is anticipated to lead to less construction of new or expanded facilities for collection, sortation, and processing. As such, Alternative 2 would minimize the potential for significant impacts of foreseeable means of compliance related to aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation, tribal cultural resources, and wildfire, compared to the foreseeable means of compliance with the Implementing Regulations. Therefore, the environmentally superior alternative other than the No Project Alternative is Alternative 2. The substantial benefits of the Program would not be realized under the No Project Alternative and would be realized to a lesser degree for Alternative 2.

Table 5.5-1 compares the impacts of the alternatives to those of the Program, focusing on the potential for adverse effects, using the words “similar” or “less”. The “+” notation indicates whether the alternative would entirely forego the environmental benefits of the Program in that resource category (i.e., ++), or whether the environmental benefits of the program would be realized to a lesser extent than the Program (i.e., +).

SECTION 7 References

7.1 Introduction

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None

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None

7.3.2 Reasonably Foreseeable Methods by Which Compliance with the Proposed Measures Would be Achieved

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Appendix A SB 54 Implementing Regulation Text

PROPOSED REGULATION TEXT

Plastic Pollution Prevention and Packaging Producer Responsibility Act Regulations

Division of Circular Economy

DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

CALIFORNIA CODE OF REGULATIONS

Note: All text is added text to title 14, division 7 of the California Code of Regulations.

TITLE 14

DIVISION 7

ADOPT

CHAPTER 11.1. Plastic Pollution Prevention and Packaging Producer Responsibility

ARTICLE 1-14

Adopt sections 18980.1, 18980.1.1, 18980.2, 18980.2.1, 18980.2.2, 18980.2.3, 18980.2.4,

18980.2.5, 18980.2.6, 18980.2.7, 18980.3, 18980.3.1, 18980.3.2, 18980.3.3, 18980.3.4,

18980.3.5, 18980.4, 18980.4.1, 18980.4.2, 18980.4.3, 18980.5,

18980.5.1, 18980.5.2, 18980.6, 18980.6.1, 18980.6.2, 18980.6.3, 18980.6.4, 18980.6.5,

18980.6.6, 18980.6.7, 18980.6.8, 18980.7, 18980.7.1, 18980.7.2, 18980.7.3, 18980.7.4,

18980.7.5, 18980.7.6, 18980.7.7, 18980.8, 18980.8.1, 18980.8.2, 18980.9,

18980.9.1, 18980.10, 18980.10.1, 18980.10.2, 18980.11, 18980.11.1, 18980.11.2,

18980.12, 18980.13, 18980.13.1, 18980.13.2, 18980.13.3, 18980.13.4, 18980.13.5, and

18980.14, California Code of Regulations, title 14

CHAPTER 11.5. Environmental Marketing and Labeling

Adopt section 18981, California Code of Regulations, title 14

Chapter 11.1 Plastic Pollution Prevention and Packaging Producer Responsibility

ARTICLE 1: Definitions

Section 18980.1. Definitions

(a) Except as otherwise noted, the following definitions shall govern the provisions of this chapter along with the definitions set forth in Chapter 3 (commencing with section 42041), Part 3, Division 30 of the Public Resources Code:

- (1) “Act” means the Plastic Pollution Prevention and Packaging Producer Responsibility Act, Chapter 3 of Part 3 of Division 30 of the Public Resources Code (sections 42040 through 42084).
- (2) “Alternative collection” means a program that collects covered materials, regardless of whether the covered material is discarded or considered solid waste and regardless of the manner and location of collection, and is not “curbside collection,” as defined in subdivision (g) of section 42041 of the Public Resources Code, because it is not conducted by a local jurisdiction or recycling or composting service provider under contract with a local jurisdiction.
- (3) “Anaerobic Digestion” means the controlled biological decomposition of material in the absence of oxygen or in an oxygen-starved environment. Anaerobic digestion produces biogas and a residual digestate.
- (4) “Component” and related terms are defined as follows:
 - (A) “Component,” with respect to covered material, means a covered material item that has no physically distinct subparts, or a piece or subpart of a covered material item, if the piece or subpart is distinct with respect to its composition or function or is

otherwise physically distinct from other pieces or subparts. “Item” is defined in paragraph (12).

(B) For purposes of categorizing components into covered material categories, each detachable component shall be considered individually and not necessarily categorized in the same category as the components from which it was detached.

(C) A “detachable component” is one that may be completely detached from all other components or material and is either of the following:

(i) A component designed such that it may be detached by consumers or during or after collection without the use of tools, substances, or non-manual processes. A component shall not be considered designed to be detached merely because it may be detached from all other components or materials during processing.

(ii) Typically or necessarily detached through ordinary usage by the consumer before being discarded, regardless of whether the component is discarded attached to the other components.

(D) A “non-detachable component” is a component that is not detachable, as defined in subparagraph (C).

(E) The term “separable and distinct material component,” as stated in the definition of “packaging” in subdivision (s) of section 42041 of the Public Resources Code, means a component, as defined in this subdivision, that is not the good being packaged but rather is the covered material serving the functions of packaging, as set forth in that definition.

(5) “Covered material” has the same definition as in subdivision (e) of section 42041 of the Public Resources Code and encompasses materials that originated from covered material items. In the context of end-of-life handling and processing, if a substance comprises both materials that are covered material because they originated from such

items and materials from other origins, only the portions originating from covered material items shall be considered covered materials.

(6) “Covered material category list” and “CMC list” mean the list, established pursuant to section 42061 of the Public Resources Code, containing elements evaluating recycling rates, recyclability, and compostability, by covered material category.

(7) “Food” has the same meaning as in section 113781 of the Health and Safety Code.

(8) “Food service ware” means the goods identified in subparagraphs (A) and (B). Plastic single-use food service ware is covered material and shall not be considered “packaging” for purposes of this chapter.

(A) Trays, plates, bowls, clamshells, lids, cups, utensils, stirrers, hinged or lidded containers, straws, and other goods typically used with food, provided that such goods are intended or marketed to be used, or are customarily used, in the act of consuming food or providing to consumers food or beverages that require no further preparation or packaging prior to consumption. A good exclusively marketed and labeled as not intended for such uses shall not be considered customarily put to such use. To be a food service ware item, the good must either necessarily directly contact food when used to serve or consume food or be designed specifically for use in conjunction with food service ware items when the items are used to serve or consume food. Examples of goods designed specifically for such use include a cup sleeve or cup tray used with cups that contact beverages, trays used with liners that contact food, or a lid or cover that fits securely atop a tray that touches food. An item is not food service ware pursuant to this subparagraph merely because it may be used to contain, store, handle, protect, or prepare food.

(B) Wraps, wrappers, and bags marketed, designed, or intended to be used in the manner described in clause (ii) of subparagraph (B) of paragraph (1) of subdivision (e) of section 42041 of the Public Resources Code: “used in the packaging of food

offered for sale or provided to customers by food service establishments". For purposes of section 42041 of the Public Resources Code:

- (i) A food service establishment is a retail business that operates at a physical location, whether permanent or nonpermanent, and serves prepared food for human consumption, regardless of whether the food is consumed on or off the operation's premises, and regardless of whether there is a charge for the food.
 - (ii) Packaged food products that were not packaged by the operation and are not removed from their packaging by the operation, such as prepackaged, sealed food that was mass produced by a third party, shall not be considered food offered to consumers by a food service establishment.
 - (iii) Notwithstanding the foregoing, bags provided to customers by a business that is a "store" pursuant to Chapter 5.3 of Part 3 of Division 30 of the Public Resources Code (commencing with section 42280) shall not be considered bags used in the packaging of food, provided such bags are precheckout bags (as defined in that Chapter) or are provided to customers at the point of sale. For purposes of this clause, paragraphs (1) and (2) of subdivision (g) of section 42280 of the Public Resources Code shall not apply, such that retail establishments cannot be excluded from the definition of "store" based on their gross annual sales or square footage of the retail space.
- (9) "Incompatible material" means covered material that a receiving responsible end market is not designed, permitted, or authorized to recycle, as defined in subdivision (aa) of section 42041 of the Public Resources Code, or does not recycle for any other reason.
- (10) "Independent Producer" means a producer that is approved by the Department to comply with the requirements of this chapter without being a participant producer.

- (11) “Intermediate supply chain entity” means, with respect to certain materials, any facility or operation, excluding the end market, that receives the materials after they have been collected, except that a facility or operation of the person that collected the materials is an intermediate supply chain entity if the facility or operation conducts processing or receives the materials after any processing of the materials has occurred. A facility or operation is an intermediate supply chain entity, not an end market, with respect to material it transfers off-site for further processing or disposal, regardless of whether it is an end market with respect to other materials.
- (12) “Item,” with respect to covered material, packaging, or food service ware, including packaging and food service ware that is excluded from the definition of covered material or exempt from requirements of the Act, means an individual physical embodiment of covered material, packaging, or food service ware, rather than a substance or material in general or an amount of material. A group of physically connected non-detachable components is a single item. Detachable components are distinct items.
- (13) “Nonplastic,” as used in the Act, means that a material is not considered plastic under paragraph (15) of this subdivision and subdivision (t) of section 42041 of the Public Resources Code.
- (14) “Participant,” “participant producer,” “participant of the PRO,” and “producer who participates in the PRO’s approved plan” all mean a producer, as defined in subdivision (w) of section 42041 of the Public Resources Code, approved by a PRO to participate in the PRO’s plan.
- (15) “Plastic,” when used to describe a component of covered material or other physical object, means the component or object contains or is made partially or entirely of plastic, as defined in subdivision (t) of section 42041 of the Public Resources Code, unless the plastic is present solely as a result of contamination not caused by the

producer, a person acting on behalf of the producer, or a third party responsible for the manufacture or handling of the component or object. Notwithstanding the foregoing, for purposes of subdivision (g) of section 18980.6.7, section 18980.7.6, 18980.9, and subdivisions (a) and (d) of section 18980.9.1, the weight of plastic covered material is the weight only of the plastic, as defined in subdivision (t) of section 42041 of the Public Resources Code, that the covered material comprises.

- (16) “Plastic or polymers,” as used in subdivision (d) of section 42356.1 of the Public Resources Code, means a plastic component or any amount of plastic, as defined in subdivision (t) of section 42041 of the Public Resources Code, incorporated into a component. Notwithstanding the foregoing, contamination not caused by equipment or processes used in manufacturing shall not be considered plastic incorporated into a component.
- (17) “Producer” has the same definition as provided in subdivision (w) of section 42041 of the Public Resources Code. For purposes of that definition and this chapter:
- (A) “Person” means an individual, firm, limited liability company, association, partnership, public or private corporation, or any other legal entity.
- (B) The terms “product that uses covered material” and “product using the covered material” refer to a good that uses covered material. A good uses covered material if its packaging is covered material or if the good itself is plastic single-use food service ware and thus constitutes covered material. Empty packaging materials not yet used by a good are not “single-use packaging” or otherwise “covered material” under the Act, such that a person is not a producer merely because they manufacture, sell, offer for sale, or distribute such materials.
- (C) When a product is offered for sale, sold, distributed, or imported, the covered material used by the product is also considered to be offered for sale, sold, distributed, or imported.

- (D) If the product is physically provided to the consumer on the premises of a retail seller or other distributor where it is sold or distributed, only packaging associated with the product before the point of sale or distribution and before the initial physical display of the product to the consumer shall be considered the product's packaging.
- (E) "Brand or trademark" means a trademark or service mark, as those terms are defined in subdivisions (a) and (b) of section 14202 of the Business and Professions Code. Use of a brand or trademark is only relevant to whether a person is a producer if the brand or trademark is the one, if any, identified pursuant to subdivision (b) of section 18980.1.1.
- (i) Use of a brand or trademark with or on a good that uses covered material means the placement or display of the brand or trademark in a way that directly associates the brand or trademark with that good for the purpose stated in subdivision (a) of section 14202 of the Business and Professions Code. Without limitation, a brand or trademark is directly associated with a good if it is displayed or placed directly on the good, on the good's packaging, on tags or labels affixed to the good, or on documents (electronic or otherwise) associated with the goods or their sale.
- (ii) Use of a brand or trademark with the sale or distribution of a good that uses covered material means display of the brand or trademark in a way that directly associates the brand or trademark with such sale or distribution for the purpose stated in subdivision (b) of section 14202 of the Business and Professions Code. Without limitation, such display may be in advertisements or other promotional material (whether hard copy or electronic), business signs, catalogs, or web-based sales interfaces.
- (iii) For the purpose of identifying the producer of covered material used by a good, the placement or display of a brand or trademark in any manner is not relevant

unless it is for the purpose stated in subdivision (a) or (b) of section 14202 of the Business and Professions Code with respect to that good or its sale or distribution.

(F) “Distribution” and “distribute,” as used in the Act and this chapter, mean the act of transferring products to another person within the supply chain or to the end user of the products, and “import” means the act of bringing products from outside the state into the state for purposes of sale or distribution, except that:

(i) If products are transported outside the state without being provided to users of the products in the state or discarded in the state, the products and the covered material used by the products shall not be considered distributed or imported in or into the state, provided that documentation of such transport is available upon request by the Department from the person who otherwise would be the producer of the covered material.

(ii) The mere transportation of products (e.g., parcel or freight shipping) on behalf of another person shall be deemed conducted by that person, not the transporter.

(G) “Offered for sale,” when used in the Act and this chapter in reference to a quantity, amount, or proportion of covered material, refers to covered material that physically existed and was made available for purchase but was discarded in California by the producer without being sold or distributed.

(H) Pursuant to paragraph (4) of subdivision (w) of section 42041 of the Public Resources Code, “agricultural commodity” as used in paragraph (4) of subdivision (w) of section 42041 of the Public Resources Code has the same meaning as in Title 7, section 5602 of the U.S. Code.

(18) “Product,” for purposes of this chapter, means a physical good and all of its packaging, if any.

- (19) "Ratepayer," as used in the Act, means a person that pays user fees for recycling, composting, or solid waste collection and handling services provided by a local jurisdiction and/or their designated recycling service provider.
- (20) "Recycled organic product" means compost, digestate for land application, or biogas. To be considered a recycled organic product, the process producing it must be recycling, as defined in the Act.
- (A) "Biogas" has the same meaning as provided in paragraph (3) of subdivision (a) of section 17896.2 of this division.
- (B) "Compost" has the same meaning as provided in paragraph (4) of subdivision (a) of section 17896.2 of this division.
- (C) "Digestate for land application" means digestate, as defined in paragraph (13.5) of subdivision (a) of section 17852 of this division, that meets the requirements of paragraph (24.5) of subdivision (a) of section 17852 of this division.
- (21) "Recycling rate" has the meaning set forth in subdivision (ab) of section 42041 of the Public Resources Code, except that recycling rate shall be calculated as described in section 18980.3.2.
- (22) "Reporting entity" means a PRO, which shall report all reportable activities by its participating producers on their behalf, and the producers identified in subparagraphs (B) and (C).
- (A) Reportable activities are those required to be reported to the Department pursuant to Article 9 and Article 10 of this chapter, as applicable. All reporting entities must register with the Department as set forth in section 18980.10.
- (B) Independent Producers are reporting entities and must report all their reportable activities pursuant to this chapter.

(C) Producers participating in a PRO's approved plan are reporting entities if they choose to report any of their reportable activities directly to the Department or do not provide data to the PRO so that the PRO could report the activities on their behalf.

(23) "Responsible End Market" means an end market described in subdivision (ad) of section 42041 of the Public Resources Code that meets the criteria specified in section 18980.4.

(24) "Retailer" and "wholesaler" are defined as in subdivision (ae) of section 42041 of the Public Resources Code. A retailer or wholesaler is a producer only for covered material for which it meets the definition of producer pursuant to subdivision (w) of section 42041 of the Public Resources Code.

(25) "Reusable," "refillable," "reuse," and "refill" have the same definition as provided in subdivision (af) of section 42041 of the Public Resources Code. Determinations of whether packaging or food service ware items are reusable or refillable shall be subject to subdivision (b) of section 18980.2.1.

(A) The terms "reuse" and "refill" refer to usage of packaging or food service ware items after their initial use, where the items and the circumstances of such subsequent use satisfy the requirements for the items to be deemed reusable or refillable pursuant to paragraphs (1) or (2) of subdivision (af) of section 42041 of the Public Resources Code. The purpose and function of the subsequent usage must be the same as the purpose and function of the initial use, except that subsequent uses of packaging or food service ware as described in paragraph (1) of subdivision (af) of section 42041 of the Public Resources Code need not be with respect to the same good previously associated with the packaging or food service ware.

(B) An item considered reusable or refillable pursuant to this paragraph and

subdivision (af) of section 42041 of the Public Resources Code shall not be considered single-use pursuant to subdivision (ai) of section 42041 of the Public Resources Code.

(26) “Significant effect on the environment” means a substantial, or potentially substantial, adverse change in physical conditions, such as with respect to land, air, water, minerals, or animals, resulting from an operation, practice, product, substance, action, or any other cause. Mere disposal in a landfill does not necessarily constitute a significant effect on the environment.

(27) “Single use” and “single-use” are defined as provided in subdivision (ai) of section 42041 of the Public Resources Code for “single use.”

(A) With respect to packaging, an individual packaging item is disposed of after one use if it is discarded after it has served one or more of the purposes identified in subdivision (s) of section 42041 of the Public Resources Code with respect to the physical good originally associated with the packaging, without being reused for such purposes with respect to additional physical goods. Once use of the packaging begins, usage with respect to the specific physical good associated with it constitutes a single use, regardless of whether the usage is intermittent or continuous. Physical goods used to refill or reuse packaging are distinct from the specific physical good with which the packaging was originally associated, such that usage of the packaging with respect to such distinct goods constitutes a new use.

(B) With respect to food service ware, an individual item is disposed of after one use if it is discarded after serving one or more of the purposes identified in paragraph (8) of this subdivision once with respect to food goods without being subsequently washed and used again. Once initial usage of a food service ware item begins, any usage of it before it is washed and used with additional food goods constitutes a

single use.

(C) A packaging or food service ware item shall be considered conventionally disposed of after a single use if it is not reusable or refillable according to paragraph (25) of this subdivision and paragraphs (1) or (2) of subdivision (af) of section 42041 of the Public Resources Code.

(28) “Small producer” means a producer that has a current exemption on file with the Department pursuant to section 18980.5.2.

(b) When referred to in this chapter, the following documents are incorporated by reference in their entirety:

(1) “ISO/IEC 17025:2017” refers to the publication titled “General requirements for the competence of testing and calibration laboratories,” International Organization for Standardization/International Electrotechnical Commission, November 2017.

(2) “ISO/IEC 17065:2012” refers to the publication titled “Conformity assessment—Requirements for bodies certifying products, processes and services,” International Organization for Standardization/International Electrotechnical Commission, September 2012.

(3) State Administrative Manual, section 9213.1, Allocation of Costs—Indirect Cost Rate Determination Methodology, California Department of General Services (as published on 01/2022).

(4) “ISO 59014” refers to the publication, which is incorporated by reference in its entirety, titled “Environmental management and circular economy — Sustainability and traceability of the recovery of secondary materials — Principles, requirements and guidance,” International Organization for Standardization, October 2024.

Authority: Sections 40401, 40502, 42041, 42052, 42057 and 42060, Public Resources Code.

Reference: Sections 41780.01, 42040, 42041, 42050, 42051, 42051.1, 42051.2, 42052, 42053, 42057, 42060, 42060.5, 42061, 42063, 42064, 42067, 42080, 42081, 42280, 42281.2, 42281.5 and 42356.1, Public Resources Code; section 20, title 1, California Code of Regulations.

Section 18980.1.1. Producer Identification

- (a) For purposes of paragraphs (1) and (2) of subdivision (w) of section 42041 of the Public Resources Code only, a person is in the state if the person is subject to the jurisdiction of California courts pursuant to section 410.10 of the Code of Civil Procedure with respect to the Act and any of the following is true:
- (1) Service of summons, excluding service in a manner requiring a court order, on the person may be completed in the state pursuant to sections 413.10 through 417.40 of the Code of Civil Procedure (Article 1 of Chapter 4 of Title 5 of Part 2 of the Code of Civil Procedure) or section 2110 of the Corporations Code.
 - (2) The person consents to being considered in the state, being served notices and accusations by any means chosen by the Department pursuant to section 18980.13.3 and being personally subject to the jurisdiction of California courts. To be considered in the state, such person must be registered as a producer pursuant to section 18980.10 and must, upon demand, confirm the foregoing consent in writing, such as by affidavit or written agreement, and through conduct consistent with such consent. Conduct consistent with such consent includes responding to an accusation, filing a pleading, or otherwise appearing in a legal proceeding in the state.
- (b) One brand or trademark shall be designated as the one referred to in paragraphs (1) and (2) of subdivision (w) of section 42041 of the Public Resources Code, and the person deemed to be the producer of the covered material used by goods shall be identified according to subdivisions (c), (d), and (e), if possible.

(c) For covered material other than food service ware, the producer shall be determined in accordance with this subdivision.

(1) Subject to subdivision (e), the designated brand or trademark shall be one used with goods when they are first sold or distributed along with covered material or used with such initial sale or distribution, regardless of where such use occurs. The person who manufactured the goods is the producer, provided that the person is in the state and either owns the designated brand or trademark or is licensed to manufacture the goods. To be the producer, the licensee must have the legal right to use the brand or trademark on the goods in connection with manufacturing the goods and be entitled to be the only person with such right in the state or in a subregion of the state.

(2) If the person who manufactured the goods is not the producer pursuant to paragraph (1), and the owner of the designated brand or trademark is in the state, that owner is the producer.

(3) If there is no producer pursuant to paragraphs (1) and (2) of this subdivision, a licensee of the designated brand or trademark shall be identified as the producer, if possible, as follows:

(A) The licensee must be in the state.

(B) The licensee must have the legal right to use the brand or trademark or authorize others to do so, whether on the goods or with their sale, offer of sale, or distribution, and be entitled to be the only person with such right in the state or in a subregion of the state. Such a licensee is the producer of the covered material used by the goods sold, offered for sale, or distributed in the state pursuant to their authority over the brand or trademark.

(C) Notwithstanding subparagraph (B), a person that otherwise would be the producer under this paragraph is not the producer if it acquired the right to use the brand or

trademark under an agreement, such as a sublicense or franchise agreement, with another person in the state. That other person is the licensee for purposes of this paragraph and is the producer of the covered material used by the goods sold, offered for sale, or distributed pursuant to such an agreement.

(4) This subdivision does not apply to covered material packaging added to a good by a person other than the owner or licensee of the brand or trademark or someone acting on behalf of the owner or licensee. The producer of such covered material shall be determined as described in subdivision (f).

(d) For food service ware, the producer shall be determined in accordance with this subdivision.

(1) Subject to subdivision (e), the brand or trademark referred to in paragraphs (1) and (2) of subdivision (w) of section 42041 of the Public Resources Code shall be one used with the food service ware when they are first sold or distributed or used with such initial sale or distribution, regardless of where such use occurs. The person who manufactured the food service ware is the producer, provided that the person is in the state and either owns the designated brand or trademark or is licensed to manufacture the food service ware. To be the producer, the licensee must have the legal right to use the brand or trademark on the food service ware in connection with manufacturing the food service ware and be entitled to be the only person with such right in the state or in a subregion of the state.

(2) If the person who manufactured the goods is not the producer pursuant to paragraph (1), and the owner of the designated brand or trademark is in the state, that owner is the producer.

(3) If there is no producer pursuant to paragraph (1) or (2) of this subdivision, a licensee of the designated brand or trademark shall be identified as the producer, if possible, as follows:

- (A) The licensee must be in the state.
- (B) The licensee must have the legal right to use the brand or trademark or authorize others to do so, whether on the food service ware or with its sale, offer of sale, or distribution, and be entitled to be the only person with such right in the state or in a subregion of the state. Such a licensee is the producer of the covered material used by the food service ware sold, offered for sale, or distributed in the state pursuant to their authority over the brand or trademark.
- (C) Notwithstanding subparagraph (B), a person that otherwise would be the producer under this paragraph is not the producer if it acquired the right to use the brand or trademark under an agreement, such as a sublicense or franchise agreement, with another person in the state. That other person is the licensee for purposes of this paragraph and is the producer of the covered material used by the food service ware sold, offered for sale, or distributed pursuant to such an agreement.
- (e) If there are multiple brands or trademarks that may be designated for purposes of subdivisions (c) or (d), one of them shall be designated in accordance with this subdivision.
- (1) If the covered material is food service ware, the brand or trademark directly associated with (as described in subparagraph (E) of paragraph (17) of subdivision (a) of section 18980.1) food or food service shall be designated. Otherwise, the designated brand or trademark shall be the one owned or licensed by the manufacturer or licensee, provided that such person satisfies the requirements of paragraph (1) of subdivision (c) or paragraph (1) of subdivision (d) for being a producer of either food service ware or packaging.
- (2) If no brand or trademark can be designated pursuant to paragraph (1) of this subdivision, the brand or trademark most prominently used with or on the goods or, if the covered material is food service ware, with or on the food service ware shall be

designated.

- (3) If no brand or trademark can be designated pursuant to paragraphs (1) and (2), the brand or trademark most prominently used with the initial sale or distribution of the goods, or, if the covered material is food service ware, with or on the food service ware shall be designated.
 - (4) For purposes of this subdivision, if any of the brands or trademarks are owned by the same person or used by the same licensee, the combination of them shall be considered a single brand or trademark.
 - (5) Notwithstanding paragraphs (1) through (4) of this subdivision, the owners of the brands or trademarks may agree among themselves to designate one of the brands or trademarks, provided that the owner or a licensee of that brand or trademark otherwise satisfies the criteria to be the producer under this subdivision.
- (f) If no producer can be identified pursuant to subdivisions (c), (d), or (e), the producer of covered material used by a good shall be identified according to paragraph (3) of subdivision (w) of section 42041 of the Public Resources Code. What constitutes such covered material shall be evaluated as of the time a person sells, offers for sale, or distributes the good, and the person is the producer only with respect to covered material items for which there was not already a producer at such time. For example, for a branded good that is packaged using covered material and is sold or distributed in the state:
- (1) If the brand owner or licensee is in the state, it is the producer of all covered material items used by the good when the good is sold or distributed by the owner or a person acting on the behalf of the owner or licensee. It is the producer, for example, of the sales packaging or primary packaging described in paragraph (1) of subdivision (s) of section 42041 of the Public Resources Code, as well as any additional covered material items, such as transport or tertiary packaging, used by the good before it is received by any person who subsequently sells or distributes it. If a person

subsequently sells or distributes the good using additional covered material packaging (e.g., transport or tertiary packaging), that person is the producer of the additional covered material items. That person is not the producer of the packaging items for which the brand owner was already the producer when the person received the product.

- (2) If there is no brand owner or licensee in the state, the person who first sells or distributes the good in the state is the producer of all covered material items, including any covered material items added by such person, used by the good at the time of such sale or distribution.
- (3) If a wholesaler or retailer in the state subsequently obtains the good and causes it to use additional items of covered material packaging, the wholesaler or retailer is the producer of such additional items, and the producer of the other covered material items used by the good is either the person identified according to subdivisions (c) or (d), or, if there is no such person, the person identified in paragraph (2) of this subdivision.

Authority: Sections 40401, 40502, 42041 and 42060, Public Resources Code.

Reference: Sections 42040, 42041, 42051 and 42052 Public Resources Code.

ARTICLE 2: Covered Material and Covered Material Categories

Section 18980.2. Categorically Excluded Materials

(a) The following are not covered material:

- (1) Packaging and other items identified in paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code.

(2) In accordance with paragraphs (1) and (2) of subdivision (b) and with subdivision (d) of section 42060 of the Public Resources Code, packaging or packaging components used by a food or agricultural commodity (without regard to its origin) if it is not reasonably possible to use other packaging or packaging components to comply with regulations, rules, or guidelines issued by the United States Department of Agriculture or the United States Food and Drug Administration. A determination of exclusion pursuant to this paragraph may consider standards to prevent microbial contamination or to maintain the safety or structural integrity of packaging under the Food, Drug, and Cosmetic Act; the FDA Food Safety Modernization Act; the Poultry Products Inspection Act; the Federal Meat Inspection Act; the Egg Products Inspection Act; or other applicable food or agricultural regulations, rules, or guidelines.

(A) Any entity that has determined that packaging is not covered material pursuant to paragraph (2) of subdivision (a) shall notify the Department and provide both a specification for the packaging or packaging component and the associated product(s) along with a summary of the basis for its determination. The basis shall identify the specific provision of this Chapter that causes a conflict, cite the conflicting federal regulations, rules, or guidelines, and explain why no reasonably possible alternative packaging or packaging component is available. The Department shall maintain on its website a publicly available electronic database of each such determination that includes the entity name, the specification for the packaging and the associated product(s), and the status of any review by the Department of such determination.

(B) At any time, the Department may request from an entity additional information supporting that entity's determination, which must be provided within 60 days. If such information is not provided, or if the Department believes the information provided is incomplete or insufficient as a basis for the determination, it shall notify the entity, which shall respond within 60 days. Following review of the information

provided by the entity, and any further consultation with the entity and any state or federal government agencies (including the California Department of Food and Agriculture and the California Department of Public Health) that the Department deems advisable, the Department shall determine whether the packaging or packaging component qualifies for the exclusion. If the Department determines that the packaging or packaging component does not qualify for the exclusion, then it shall be considered covered material 180 days following the Department's decision.

(C) In implementing this paragraph, the Department shall withhold from public disclosure any information that the entity appropriately identifies as trade secrets, subject to the requirements and limitations set forth in section 18980.14.

(3) Packaging that is "refillable" or "reusable," as defined in subdivision (af) of section 42041 of the Public Resources Code.

(4) Packaging used for "devices," as defined in subsection (h) of section 321 of Title 21 of the United States Code.

(5) Packaging used for "drugs," as defined in subsection (g) of section 321 of Title 21 of the United States Code, that require a prescription pursuant to subsection (b) of section 353 of Title 21 of the United States Code.

(6) Packaging for medical products. "Medical products" means products that are "drugs," as defined pursuant to paragraph (5), that do not require a prescription and satisfy at least one of the following criteria:

(A) They are neither "cosmetics," as defined in subsection (i) of section 321 of Title 21 of the United States Code, nor "soap," as defined in section 701.20 of Title 21 of the Code of Federal Regulations.

(B) They are not a drug solely by virtue of containing a "sunscreen active ingredient," as defined in section 352.3 of Title 21 of the Code of Federal Regulations.

- (b) For purposes of subparagraphs (A) through (D) of paragraph (2) of subdivision (e) of section 42041, packaging used for a good or used to contain a good includes primary, secondary, and tertiary packaging. Notwithstanding the foregoing, tertiary packaging used for goods not identified in those subparagraphs is covered material regardless of whether the packaging also contains goods identified in those subparagraphs.
- (c) For purposes of subparagraph (E) of paragraph (2) of subdivision (e) of section 42041, “[b]everage containers subject to the California Beverage Container Recycling and Litter Reduction Act” is defined according to sections 14504 and 14505 of the Public Resources Code and regulations adopted pursuant thereto.
- (d) Nothing in this section precludes the Department from conducting investigations pursuant to subdivision (a) of section 42080 of the Public Resources Code, including to determine whether any packaging or other item qualifies for an exclusion identified in this section, or from taking any enforcement action consistent with its authority pursuant to this Act.

Authority: Sections 40401, 40502, 42060, 42080 and 42081, Public Resources Code.

Reference: Sections 42040, 42041, 42060, 42080 and 42081, Public Resources Code.

Section 18980.2.1. Exclusion of Reusable and Refillable Packaging and Food Service Ware

- (a) Packaging and food service ware that meet the requirements to be deemed “reusable” or “refillable” pursuant to this subdivision and subdivision (af) of section 42041 of the Public Resources Code are not covered material.
- (1) For purposes of this subdivision and subdivision (af) of section 42041 of the Public Resources Code:

- (A) The term “producer” includes a person that would be a producer pursuant to subdivision (w) of section 42041 of packaging and food service ware items that are reusable or refillable if the items were instead single-use and thus covered material items. The term “producers” also includes retailers and wholesalers that are alleged by the Department to be producers under subdivision (w) of section 42041 of the Public Resources Code because packaging or food service ware they claim to be reusable or refillable do not satisfy the applicable requirements under subdivision (af) of section 42041 and this subdivision.
- (B) The term “consumer” means the end user of an item, or the last person in the supply chain who acquires and uses an item. For example, a retailer that obtains and uses a covered material item in its business operations, without selling or otherwise further distributing the item, is the consumer of the item.
- (2) Whether packaging or food service ware is reusable or refillable shall be assessed with respect to the circumstances under which items of the packaging or food service ware are potentially reused or refilled. Packaged goods or food service ware items sold, offered for sale, or distributed under circumstances that cause the good’s packaging or the food service ware items not to satisfy a requirement of subdivision (af) of section 42041 of the Public Resources Code shall be considered covered material, despite otherwise identical items being reusable or refillable because they satisfy the applicable requirements under the different circumstances present where they are sold, offered for sale, or distributed.
- (3) For purposes of paragraphs (1) and (2) of subdivision (af) of section 42041 of the Public Resources Code:
- (A) To be considered “reused or refilled by a producer,” packaging or food service ware items must be recovered from users of the items and returned into the supply chain. Subject to the limitations in this subdivision, recovery of items must use any

systematic means, such as drop-off locations, return to the original point of sale, and pickup directly from consumers. Packaging or food service ware recovered through systems operated by third parties in the supply chain at the direction of, on behalf of, or otherwise directly or indirectly for a producer shall be considered returned to and reused or refilled by that producer.

(B) To be considered “reused or refilled by a consumer,” packaging or food service ware items must be utilized multiple times by consumers for the same good without being recovered from the consumers or returned into the supply chain.

(4) For purposes of subparagraph (C) of paragraph (1) of subdivision (af) of section 42041 of the Public Resources Code, “infrastructure to ensure the packaging or food service ware can be conveniently and safely reused or refilled for multiple cycles” is adequate if the requirements of this paragraph are met when an item is offered for sale, sold, or distributed.

(A) Unless the item was delivered directly to a consumer, there is at least one location for returning the item that is either:

(i) the same location where the item was obtained or delivered; or

(ii) within one mile of the location where the original item was obtained and has hours of operation that encompass, at a minimum, the hours of operation of the location where the item was obtained.

(B) If the item was ordered via remote means (e.g., Internet, phone, or any method not requiring the purchaser to visit any particular physical location) and was delivered directly to a consumer, the same means must be available for return of the item without requiring travel to a location other than the delivery location. If the item was ordered by visiting a particular physical location, such as a retail store, and was delivered directly to a consumer, return of the item must be able to be arranged via

remote means or by visiting that physical location or a location described in clause (ii) of subparagraph (A).

(5) For purposes of subparagraph (C) of paragraph (2) of subdivision (af) of section 42041 of the Public Resources Code, the “infrastructure for bulk or large format packaging that may be refilled” is adequate and convenient, such that it enables the original packaging or food service ware item associated with a particular physical good to be conveniently and safely reused or refilled by the consumer multiple times with that good, if it meets the requirements of this paragraph. Meeting the requirements of this paragraph does not necessarily require that the original item be returned or brought back to a store or other location.

(A) The good must be readily available (i.e., in stock), in a form that enables the original item to be reused or refilled with it, at one or more of the following locations:

(i) the same physical location where the original item is available;

(ii) a physical location within one mile of the location where the original item is available, provided that such location’s hours of operation encompass, at a minimum, the hours of operation of the location where the original item is available;

(iii) the website where the original item is available; or

(iv) a website to which the consumer is directed, by labeling on the item or by the website specified in clause (iii), for purposes of obtaining the good.

(B) Notwithstanding subparagraph (A), this requirement shall be deemed fulfilled with respect to food service ware items that, by their nature, do not require infrastructure for bulk or large format packaging to be conveniently and safely used multiple times. Without limitation, such items include food service ware items used multiple times with food provided directly to consumers by food service establishments, food

service ware items not sold or distributed in association with food, and food service ware items that are reused or refilled only at the same location where it is first used.

- (b) The producer of items sold, offered for sale, or distributed in the state is in violation of the Act if, despite the producer's claim that such items are reusable or refillable for purposes of the Act, the items are not reusable or refillable and selling, offering for sale, or distributing them results in a violation of the Act. Violations may result from conditions that exist throughout the state or conditions present only at certain locations or in geographic regions where the criteria for items to be considered reusable or refillable are not satisfied.
- (c) Nothing in this section precludes the Department from conducting investigations pursuant to subdivision (a) of section 42080 of the Public Resources Code, including to determine whether packaging or food service ware is covered material.

Authority: Sections 40401, 40502, 42060, 42080 and 42081, Public Resources Code.

Reference: Sections 40062, 42040, 42041, 42050, 42057, 42080 and 42081 Public Resources Code.

Section 18980.2.2. Exclusion of Certain Types of Packaging

- (a) Pursuant to subparagraph (F) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code, packaging used for the long-term protection or storage of a good having a lifespan of not less than five years is not covered material. Upon request by the Department, any person claiming not to be subject to the Act with respect to particular packaging on the basis that subparagraph (F) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code excludes the packaging from the definition of covered material shall substantiate such a claim. To be excluded, the packaging and the good associated with it must meet the following requirements:

- (1) The good must be one that is not ingested, irreversibly used, destroyed, or expended

through its ordinary use.

(2) For the packaging to be considered used for the long-term protection or storage of a good, the packaging must be more commonly retained and used for storage or protection of the good for at least five years, without being discarded, than discarded within five years. Such five-year period shall begin when the good and the packaging are sold or distributed to the user of the good.

(3) For the good to be considered to have a lifespan of not less than five years:

(A) The good must reasonably be expected to remain usable for at least five years after it is sold or distributed, as determined with respect to the totality of the circumstances, such as the good's marketing, evidence of the actual average duration of use, and the duration of use of similar goods under similar circumstances. This requirement shall be considered satisfied if the good is covered by an express, written five-year warranty with no exclusion for ordinary wear and tear. The warranty must guarantee that the consumer can obtain a full refund or replacement, with no cost for returning the good, if the good does not remain usable at least five years when subject to ordinary or foreseeable use.

(B) Use of the good must not be limited by the depletion of nonreplaceable constituent parts, pieces, or other materials, so that the duration of its usability depends on its continued ability to function rather than on how quickly such materials are depleted or discarded. Examples of such goods include, but are not limited to: multi-piece toys sold in containers and designed to be stored in the containers when not in use; tools sold in rigid containers and designed to be stored in the containers when not in use; and board games or puzzles contained in paperboard boxes.

(b) Pursuant to subparagraph (A) of paragraph (4) of subdivision (s) of section 42041 of the Public Resources Code, material that is part of or directly connected to packaging but is of de minimis weight or volume is not itself packaging for purposes of the Act.

(1) For purposes of this subdivision, the following definitions apply:

- (A) "Component" refers both to a component, as defined in paragraph (4) of subdivision (a) of section 18980.1, and to material that would be a packaging component if it were not of de minimis weight or volume.
- (B) "Independent plastic component" is a packaging component, or a group of components, that wholly or partially comprises plastic and for which both of the following are true:
 - (i) It is a detachable component, or a group of components that, if considered a single component, would satisfy the criteria for being a detachable component.
 - (ii) It is not a coating, film, tape, sticker, label, or other sheet-like material adhered to the surface of another component or group of components.

(2) A component or group of components is of de minimis weight or volume if it satisfies the following requirements:

- (A) It is not an independent plastic component.
- (B) Due to its small size or weight and other relevant characteristics, if any, it has no effect on whether any covered material satisfies any of the recyclability criteria provided in section 42355.51 of the Public Resources Code.
- (C) Due to its small size or weight and other relevant characteristics, if any, it does not prevent recyclability pursuant to subdivision (c) of section 18980.3 or make recycling or composting more difficult pursuant to subdivision (h) of section 18980.6.7.
- (D) Designating it as having a de minimis weight or volume enables usage of recyclable, compostable, reusable, or refillable packaging.
- (E) Its disposal, processing, and handling does not create health or safety risks or

have a significant effect on the environment.

(F) Its use in packaging is not prohibited under any law of this state or federal law.

(3) The PRO or an Independent Producer may request that the Department deem certain components or groups of components to be of de minimis weight or volume. Requests must be in writing and describe each component or group of components at issue with sufficient detail, such as its purpose, range of physical characteristics, and the types of packaging or goods with which it is conventionally used, to clearly distinguish it from other materials. The request must include supporting evidence and explanation establishing that the component or group of components meets the requirements of paragraph (2).

(4) The Department shall publish on its website a list of its components and groups of components, whether proposed in requests submitted pursuant to paragraph (3), alleged to be of de minimis weight or volume in response to a notice of violation, or otherwise identified by the Department, that it has determined to be of de minimis weight or volume. The Department shall reevaluate each determination no more frequently than every five years.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 40062, 42040 and 42041, 41780.01 and 42355.51 Public Resources Code.

Section 18980.2.3. Exemptions for Specific Material with Demonstrated Recycling Rates

(a) For purposes of the exemption from the definition of “covered material” pursuant to subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code:

- (1) The person seeking to demonstrate that packaging or food service ware is entitled to the exemption shall be considered the “producer” of such packaging or food service ware.
- (2) The person shall also be considered a producer for purposes of the registration requirements provided in section 18980.10, regardless of whether the Department approves the exemption.
- (3) As provided in clause (ii) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041, only the particular packaging or food service ware items that satisfy the requirements of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 are deemed not covered material. For particular items to satisfy those requirements, all the following must be true:
 - (A) The items are collected by alternative collection programs or programs that collect the items at non-residential sites.
 - (B) After being collected, none of the items are commingled with unsorted material collected by curbside programs.
 - (C) Some or all of the materials originating from the items are accepted by the end market. This requirement must be shown to have been satisfied as of no later than January 1, 2027, and as of every two years thereafter.
- (4) To satisfy the annual recycling rate requirements of subclause (IV) of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code, the packaging or food service ware must be shown to have had a recycling rate of at least 65 percent for 2024, 2025, and 2026, and at least 70 percent for 2027 and each year thereafter. The rate for each year shall be determined as of January 1 of the following year, calculated as described in subdivision (b) of section 18980.3.2. The recycling rates shall be with respect only to materials originating from

the items that satisfy the requirements of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041, as described in paragraph (3) of this subdivision.

- (5) The producer must maintain complete, up-to-date data regarding collection and recycling for purposes of demonstrating that the packaging or food service ware items meet the requirements of this section. If complete data for a certain calendar year is not yet available, data for a twelve-month period partially encompassing that year and the preceding year may be used to calculate the recycling rate for that year.
- (b) The person seeking the exemption shall electronically submit an application to the Department. The Department shall grant the exemption if the application establishes that the packaging or food service ware items satisfy each criterion in subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code. The application shall include, but not necessarily be limited to the following:
 - (1) Name, description, and other information sufficient to uniquely identify the packaging or food service ware items for which an exemption is sought.
 - (2) Description of how and where the packaging or food service ware items are collected, processed, and recycled, including:
 - (A) All means through which the packaging or food service ware items, including materials originating from them, are collected, and the entities, programs, locations, and types of locations that collect them. Such information must demonstrate that the packaging or food service ware items to be exempted are collected as described in subparagraph (A) of paragraph (3) of subdivision (a).
 - (B) All means through which the packaging or food service ware items, including materials originating from them, are processed and the entities that process them. Such information shall demonstrate that, after being collected, none of the items

are commingled with unsorted material collected by curbside programs.

(C) A list of responsible end markets where the packaging or food service ware items, including materials originating from them, are accepted.

(D) If any of the end markets identified pursuant to subparagraph (C) are not identified as responsible end markets in an approved PRO or Independent Producer annual report, information demonstrating that those end markets meet the criteria set forth in subdivision (a) of section 18980.4.

(3) Data and calculations demonstrating that the items satisfy the recycling rate requirements of subclause (IV) of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 of the Public Resources Code, as further described in paragraph (4) of subdivision (a) of this section, through the most recently concluded calendar year.

(c) The application shall be a public document subject to mandatory disclosure under the California Public Records Act (Division 10 of Title 1 of the Government Code (commencing with section 7920.000)) unless an exemption from mandatory disclosure applies. The Department shall withhold from public disclosure portions of the application that the applicant appropriately identifies as trade secrets, subject to the requirements and limitations set forth in section 18980.14.

(d) For any producer that is a participant of a PRO with respect to the covered material to be exempted, the PRO may submit the application on behalf of the producer.

(e) When approving the exemption, the Department may supplement or modify the description of the items to ensure that it clearly describes the material to which the exemption applies and distinguishes such material from covered material to which it does not apply, such as covered material items that do not satisfy the requirements of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e) of section 42041 of the Public

Resources Code.

- (f) If approved, an exemption pursuant to this section shall be deemed effective as of the application submittal date. If the application was submitted before January 1, 2028, such that it was based only on pre-2027 recycling rates, it shall be valid for one year from the submittal date. The exemption is otherwise valid for two years from the submittal date.
- (g) To renew an exemption granted pursuant to this section, the producer must submit a renewal request before the exemption expires. For an exemption that expires during 2028, a renewal request may be based only on pre-2027 recycling rates, but a renewal request based on the 2027 recycling rate must be submitted no later than January 1, 2029. If approved, renewed exemptions are deemed effective as of the request submittal date and expire according to the same terms described in subdivision (f) for initial application. To request renewal, the applicant must do the following:
 - (1) If the applicant believes the information provided in the application for the exemption pursuant to paragraphs (1) and (2) of subdivision (b) remains accurate and valid, submit a certification to such fact. The certification shall be submitted electronically in the form of a letter to the Department. The Department shall grant renewal unless it determines that information or evidence included in the application is no longer accurate and valid, that information or evidence in the application is out of date, or that changed circumstances have otherwise rendered the previous basis for granting the exemption invalid or insufficient. If the producer cannot provide such certification, a new application pursuant to subdivision (b) is required.
 - (2) If the information submitted pursuant to paragraphs (1) and (2) of subdivision (b) is no longer accurate and valid, submit an updated application. The Department shall evaluate the application in the same manner as it reviews initial applications.
 - (3) Provide the most up-to-date available data demonstrating recycling rates for purposes of subclause (IV) of clause (i) of subparagraph (H) of paragraph (2) of subdivision (e)

of section 42041 of the Public Resources Code, as described in paragraphs (4) and (5) of subdivision (a), from 2024 through the most recently concluded calendar year.

(4) For end markets not already identified by a PRO or Independent Producer pursuant to an approved plan, verify that the end markets used by the applicant continue to meet the criteria specified in 18980.4(a). Each verification shall be submitted with the renewal and include at minimum, the following:

- (A) Information demonstrating that a responsible end market met or exceeded its average recycling yield threshold, including a detailed explanation of how the entity measured and calculated the amount of material that was accepted and the amount of covered material that was successfully recycled by the responsible end market.
- (B) All information and evidence related to any failure of an end market to satisfy the requirements to be a responsible end market, as described in subdivision (a) of section 18980.4.
- (C) Descriptions of any corrective actions that were taken.
- (D) Descriptions of any instances where the applicant prohibited sending materials to an end market due to that entity's noncompliance.
- (E) Records of complaints made against the end market, including records described in subparagraph (B) of paragraph (2) of subdivision (a) of section 18980.4 maintained by the end market.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 40062, 42040 and 42041, Public Resources Code.

Section 18980.2.4. Exemptions for Certain Covered Materials

- (a) Only a PRO or an Independent Producer may submit a request for an exemption pursuant to paragraph (3) of subdivision (a) of section 42060 or paragraph (4) of subdivision (a) of section 42060 of the Public Resources Code. The effect of such an exemption is that exempted covered material may be sold, offered for sale, imported, or distributed regardless of whether the covered material complies with section 42050 or subdivision (i) of section 42057 of the Public Resources Code. The exemption does not affect the status of the single-use packaging or single-use plastic food service ware as covered material and does not otherwise change the obligations of producers with respect to the covered material, such as reporting and payment of PRO fees.
- (b) A PRO or an Independent Producer registered with the Department pursuant to subdivision (a) of section 18980.10 may request an exemption under this section by electronically submitting an application to the Department. The Department shall only consider an application if it contains all the elements prescribed in this section.
 - (1) A PRO may establish any procedure it deems appropriate for receiving applications prepared in whole or part by a producer or group of producers and deciding whether to submit the applications to the Department.
 - (2) Notwithstanding paragraph (1), a PRO shall not submit to the Department an application unless the PRO has reviewed the application and considers it to meet the standards set forth in this section for approval.
- (c) The application shall be submitted electronically to the Department in a form and manner prescribed by the Department and include all the following:
 - (1) Name, description, and other information sufficient to uniquely identify the packaging or food service ware for which an exemption is sought.
 - (2) Identification of the exemption sought. A single application can be submitted covering

both exemptions, provided that the application contains the elements prescribed in this section.

(3) Except as otherwise provided with respect to entire classes of products or covered materials under section 18980.2.7, identification of all products or potential products that would be covered by the exemption because they use or constitute covered material. Products shall be identified by name, description, and other information sufficient to uniquely identify the products. Such identification may be achieved, for example, with respect to unique physical characteristics, such as the product's form, materials, and dimensions, or identifying information such as a unique stock keeping unit (SKU) or a global trade item number, such as a universal product code (UPC).

(4) Depending on the basis for the exemption, the following information and analyses:

(A) For an application requesting an exemption pursuant to paragraph (3) of subdivision (a) of section 42060 of the Public Resources Code based on unique challenges in complying with the Act or this chapter:

(i) Identification of which requirements of the Act for which the covered material presents unique challenges for compliance with the Act and this chapter.

(ii) The nature of the unique challenges, including, but not limited to: how they are unique; the circumstances that render them unique; their technical, legal, and financial elements, as applicable; and how the characteristics of the covered material cause the challenges.

(iii) The practical necessity of the covered material that justifies exempting the covered material from the Act despite it not complying with the requirements identified according to clause (i). Without limitation, the justification shall address the extent to which the exemption is necessary to minimize risks with respect to public health, the environment, economic development, burdens on

vulnerable populations, disproportionate effects on identifiable classes of persons or industries, and conflicting obligations under any other laws.

- (iv) Potential alternatives to the covered material and a description of why they are infeasible or unreasonable. At a minimum, such description shall address technological or financial limitations, if any, and the extent to which the alternatives present challenges or risks similar to those described pursuant to clauses (i) through (iii).
- (v) To the extent not otherwise addressed, potential impacts of the covered material on disadvantaged communities, low-income communities, or rural areas from exempting or not exempting the covered material.
- (vi) Current impacts of the covered material on the existing collection, processing, recycling infrastructure, and the effect that the exemption may have on those impacts.
- (vii) If applicable, a description of why the covered material cannot be recycled, composted, or source reduced.
- (viii) A proposed plan pursuant to subparagraph (B) of paragraph (3) of subdivision (a) of section 42060 of the Public Resources Code to phase the covered material into the requirements of the Act, or an explanation of how the nature of the unique challenges makes such a plan unfeasible or unnecessary, in which event the applicant shall explain why a plan is unfeasible or unnecessary to prevent the exemption, if granted, from interfering with the intent of the Act, including achievement of the requirements of section 42050 of the Public Resources Code and the policy goal established in section 41780.01 of the Public Resources Code as it relates to covered material. Such a proposal shall address, at a minimum, the requirements of the Act that the covered material currently satisfies, a timeline for when the covered material is anticipated to

satisfy all requirements of the Act, and progress requirements for each year of that timeline with respect to addressing the challenges described in the application and otherwise progressing toward full compliance with the Act. The proposed plan shall also provide for periodic reporting to the Department demonstrating implementation of the phase-in plan and the extent to which the plan's yearly progress requirements have been met.

- (B) An application for an exemption pursuant to paragraph (3) of subdivision (a) of section 42060 of the Public Resources Code may be based on the challenges involved in establishing an alternative collection program that satisfies the requirements of paragraph (5) of subdivision (d) of section 42355.51 of the Public Resources Code. Such an exemption shall not be granted unless the application includes a proposed phase-in plan, as described in clause (viii) of subparagraph (A). In addition to satisfying the requirements of subparagraph (A), such an application shall include the following elements:
- (i) Explanation, information, and evidence concerning the nature of the challenges, generally and with respect to the specific covered material at issue, affecting the establishment of an alternative collection program that satisfies the applicable requirements of paragraph (5) of subdivision (d) of section 42355.51.
 - (ii) Explanation, information, and evidence demonstrating how the challenges will be overcome to satisfy the applicable requirements, the efforts to overcome them to date, and the extent to which such efforts have been successful.
 - (iii) If the applicant has already established an alternative collection program for the covered material to be exempted, a complete description of the program, its current status, and plans for further development. Such description shall include, but not necessarily be limited to:
 - (l) since the program's inception, the amount of the covered material being

collected, by month or year, as necessary to provide details about the program's performance over time, and its percentage of the total such covered material sold or distributed;

- (II) other covered material, if any, also collected by the program;
 - (III) efforts undertaken to ensure that covered material being collected is ultimately recycled, and explanation of the efficacy of such efforts;
 - (IV) details regarding consumer convenience, efforts to facilitate and incentivize participation, and the extent to which consumer behavior, rather than the collection program's infrastructure and operations, is a barrier to recovery of the covered material;
 - (V) educational outreach and marketing activities to raise awareness of the program;
 - (VI) names of entities that operate or partner with the program, including recycling service providers, if any, and any planned partnerships or agreements with additional entities;
 - (VII) the infrastructure, technology, and methods established to facilitate collection of the covered material; and
 - (VIII) the financial investment made in the program to date.
- (iv) If there is no current collection program, a description of the anticipated program, including its planned start date and anticipated features, including with respect to the elements listed in clause (iii).
 - (v) Projections of the current or anticipated program's progress toward meeting the applicable requirements. Such projections shall address all known and anticipated financial, technical, and other assumptions on which such

projections are based and shall identify the date by which the program is expected to satisfy the applicable requirements.

- (vi) Information, if available, similar to the information required under clauses (iii) through (v), regarding comparable takeback programs, such as those that collect similar covered material.

(C) For an application requesting an exemption pursuant to paragraph (4) of subdivision (a) of section 42060 of the Public Resources Code based on health and safety reasons:

- (i) Identification of which requirements of the Act and this chapter for which health and safety concerns prevent compliance.
- (ii) The nature of the health and safety concerns, including how the characteristics of the covered material relate to the concerns and how the concerns prevent compliance with the Act and this chapter.
- (iii) The information described in clauses (iii) through (vii) of subparagraph (A), but with respect to the health and safety concerns asserted in the request and the challenges related to them, rather than to the unique challenges referred to in that subparagraph.

(D) For an application requesting an exemption pursuant to paragraph (4) of subdivision (a) of section 42060 of the Public Resources Code because the covered material is unsafe to recycle:

- (i) Identification of which requirements of the Act and this chapter with which the covered material cannot comply due to it being unsafe to recycle.
- (ii) Characteristics of the covered material that render recycling unsafe.
- (iii) Explanation of the nature of the safety risks, why they cannot reasonably be

mitigated without an exemption, and how granting the exemption would mitigate or avoid them. The explanation shall, at a minimum, address the extent to which such risks relate to the environment, health and safety, and worker health and safety. The explanation shall also explain the extent to which recycling the covered material creates or exacerbates risks, including contamination of equipment by a toxic or hazardous substance, to end markets, processors, and intermediate supply chain entities.

(iv) The information described in clauses (iii) to (vii) of subparagraph (A), but with respect to the safety issues asserted pursuant to this subparagraph rather than to the unique challenges referred to in subparagraph (A).

(v) To the extent not otherwise addressed, the risk that recycling the covered material would result in the manufacture of new products that would expose consumers to toxic or hazardous substances.

(E) For an application requesting an exemption pursuant to paragraphs (3) or (4) of subdivision (a) of section 42060 of the Public Resources Code, the application shall include an analysis of:

(i) whether the justification for the exemption would necessarily apply to any other products or covered material, such as those having the same or similar composition, facing similar compliance challenges, or presenting similar health or safety concerns as the ones for which the exemption is sought;

(ii) the likely consequences of the same exemption being approved for all such products or covered materials; and

(iii) circumstances, if any, that the applicant contends justify a duration of longer than two years pursuant to paragraph (1) of subdivision (g).

(d) The application shall be a public document subject to mandatory disclosure under the

California Public Records Act (Division 10 of Title 1 of the Government Code (commencing with section 7920.000)) unless an exemption from mandatory disclosure applies. The Department shall withhold from public disclosure portions of the application that the applicant appropriately identifies as trade secrets, subject to the requirements and limitations set forth in section 18980.14.

(e) Except as otherwise provided in section 18980.2.7, if an application is approved by the Department, the exemption for covered material shall apply only to the products and covered material identified in the application. When approving the exemption, the Department may, in its sole discretion, supplement or modify the application's descriptions of the covered material and products as necessary to ensure that the application describes the covered material and products to which the exemption applies.

(f) The Department shall evaluate applications as follows:

(1) The Department shall reject any application that does not contain the required elements described in this section.

(2) For an exemption request based on unique challenges (paragraph (3) of subdivision (a) of section 42060 of the Public Resources Code):

(A) The request must clearly and convincingly establish that compliance with the Act is impractical due to challenges unique to the covered material or related circumstances.

(B) The request must clearly and convincingly establish that the exemption and the accompanying phase-in plan, if any, will promote achievement of the requirements of section 42050 of the Public Resources Code in a manner consistent with the intent of the Act, as described in section 42040 of the Public Resources Code, and the policy goal established in section 41780.01 as it relates to covered material.

(C) If the exemption request does not include a phase-in, it shall be rejected unless a

phase-in plan would be unfeasible or would be unnecessary to prevent the exemption from harming implementation or enforcement of the Act or otherwise interfering with the intent of the Act, including achievement of the requirements of section 42050 of the Public Resources Code and the policy goal established in section 41780.01 as it relates to covered material.

(D) Notwithstanding subparagraph (B), the Department may approve the exemption based on an alternative phase-in plan developed by the Department that it determines satisfies the requirement of that subparagraph more clearly than the plan submitted by the applicant, and approval of the exemption shall be conditioned on the applicant's acceptance of such phase-in plan.

(E) Unless the exemption was approved without a phase-in plan, its approval is conditioned on successful implementation of such plan and compliance with all its requirements. In the reports required under the phase-in plan, the applicant shall report to the Department the extent to which it has implemented the phase-in plan and satisfied its progress requirements. If implementation has been unsuccessful or any requirement has not been satisfied, the applicant shall explain the reasons for such noncompliance. The Department shall terminate the exemption unless it determines that the noncompliance was reasonably unavoidable due to economic, technological, legal, or other impediments not caused by the applicant and that the exemption is still appropriate for the reasons required pursuant to subparagraphs (A) and (B).

(3) An exemption request based on section 42060(a)(4) of the Public Resources Code) shall be approved if the application clearly and convincingly establishes both of the following:

(A) Compliance with the Act is not possible without increasing overall risks to health or safety or risks of significant effects on the environment compared to the risks posed

by exempting the packaging or food service ware.

(B) The exemption will not make it more difficult for any other producer to satisfy the requirements of section 42050 of the Public Resources Code.

(g) Upon approval, the exemption is valid for two years, except that:

(1) The Department may deem the exemption valid for a longer period, which shall be no longer than five years, if it determines that there is no reasonable likelihood that the circumstances justifying the exemption will change and render exemption no longer justified within the longer period.

(2) Subject to the termination provisions in subparagraph (E) of paragraph (2) of subdivision (f), a phase-in plan may establish a longer duration.

(3) All exemptions are subject to the termination provisions of subdivision (i).

(h) To renew an exemption, the PRO or Independent Producer must request renewal between 120 days and 90 days before the exemption would otherwise expire. If approved for renewal, the exemption shall be valid for an additional two years or more, as described in subdivision (g), from the date the exemption otherwise would have expired.

(1) If all the information and evidence submitted with the application remains accurate and valid, such that the original justification for the exemption remains current and sufficient, the PRO or Independent Producer may request renewal by certifying as such in writing. The certification shall be in the form of a letter to the Department, submitted electronically. The Department shall grant renewal unless it determines that information or evidence included in the application is no longer accurate and valid, that information or evidence in the application is out of date, or that changed circumstances have otherwise rendered the previous basis for granting the exemption invalid or insufficient.

(2) If any information or evidence in the application is no longer accurate and valid, or

changed circumstances have otherwise rendered the original justification for the exemption no longer sufficient, the PRO or Independent Producer must file a new application to renew the exemption. The Department shall evaluate the application in the same manner as it reviews initial applications.

- (i) Notwithstanding any other provision of this section, the Department shall terminate an exemption if it determines any of the following:
 - (1) The information provided in the application for the exemption was incomplete, or false, or the relevant circumstances have materially changed such that the information is no longer accurate;
 - (2) The exemption harms implementation or enforcement of the Act, or the basis for granting the exemption is otherwise no longer valid; or
 - (3) Conditions or requirements of a phase-in plan established pursuant to subparagraph (B) of paragraph (3) of subdivision (a) of section 42060 of the Public Resources Code have not been satisfied.
- (j) The Department shall provide written notice of a termination pursuant to subdivision (i). If the basis for termination is that the PRO or Independent Producer negligently or intentionally submitted incomplete or false information, termination shall be effective immediately upon receipt of the notice. Otherwise, termination shall be effective as of 120 days after receipt of the notice, except that, if the PRO or Independent Producer submits a new application at least 90 days before the effective date of the termination, termination shall be delayed until the Department approves or denies the application.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 40062, 42053, 42060 and 42355.51, Public Resources Code.

Section 18980.2.5. Covered Material Category List Updates

- (a) The Department shall review and, if necessary, update the CMC list within the applicable timeframe specified by subdivisions (e) or (f) of section 42061 or subdivision (a) of section 42082 of the Public Resources Code. The period during which the list must be reviewed and updated pursuant to subdivisions (e) or (f) of section 42061 of the Public Resources Code shall be based on calendar years, not the date of the most recent review or update.
- (b) For purposes of subdivision (a), updates are necessary if new information or changed circumstances renders the list out of date, incomplete, or otherwise inaccurate with respect to how it relates to waste generation and the handling and end-of-life management of covered material.
- (c) To update covered material category recycling rates, the Department shall review the sources of information identified in paragraph (2) of subdivision (b) of section 42061 of the Public Resources Code and any additional information submitted pursuant to paragraph (3) of subdivision (f) of section 42061 of the Public Resources Code. Data and information obtained by the Department through characterization studies, needs assessments, or other studies shall be considered data and information received by the Department for purposes of subparagraph (l) of paragraph (2) of subdivision (b) of section 42061 of the Public Resources Code.
- (d) To update the compostability determinations of the CMC list pursuant to subdivision (e) of section 42061 of the Public Resources Code, the Department shall apply the criteria set forth in subdivision (b) of section 18980.3.3 of these regulations.
- (e) To update the recyclability determinations of the CMC list pursuant to subdivision (e) of section 42061 of the Public Resources Code, the Department shall follow the requirements and apply the criteria set forth in section 18980.3 of these regulations.

(f) Subject to the following restrictions, persons may submit information to the Department for consideration.

(1) If the information is submitted after April 1 in a given year, the Department will consider the information for purposes of updates made during that year only if it determines that the information is sufficiently limited such that the Department can evaluate it before January 1 of the next calendar year.

(2) Information intended to inform the Department's review of, or updates to, the CMC list shall be submitted electronically in a form and manner prescribed by the Department.

(g) Notwithstanding any other provision of this chapter, updates to the CMC list that impose additional obligations on local jurisdictions or recycling service providers under subdivision (a) of section 42060.5 of the Public Resources Code shall not take effect with respect to those obligations until one year after the CMC list incorporates the change or, if the Department publishes the updated list with an effective date later than the publication date, one year after such publication.

Authority: Sections 40401, 40502, 42060 and 42061, Public Resources Code.

Reference: Sections 42041, 42060.5 and 42061, Public Resources Code.

Section 18980.2.6. Covered Material Category List Recommendations

(a) A PRO, participant producer, or Independent Producer may recommend changes to the CMC list, subject to the same time constraints applicable to information submissions under subdivision (f) of section 18980.2.5.

(b) All recommendations shall be submitted electronically and include the following:

- (1) A description of the recommended changes, specifying which elements of the CMC list are impacted by the recommended changes.
 - (2) An identification of covered material categories affected by the recommended changes, including those suggested for addition to or removal from the CMC list.
 - (3) An explanation of how any changes resulting from accepting the CMC list recommendations will impact the producer responsibility plan, and how the plan must be adapted, if at all, to ensure that producers continue to meet the requirements of section 42050 of the Public Resources Code. As part of this explanation, the PRO shall describe the financial implications, if any, of the recommended changes on the fee schedule for participant producers and eco-modulated formulas.
 - (4) A list of additional producers, if any, supporting the recommendation, including contact information for each.
 - (5) An explanation of the necessity of the recommended changes. Such explanation may include, without limitation, data not considered in the existing evaluations, changes in infrastructure, updated acceptance rates at responsible end markets, and new innovations in materials, products, or technologies.
- (c) Participant producers that submit recommendations to the Department shall additionally submit a copy of such recommendations to any PRO in which they participate. Independent Producers shall submit recommendations to the Department.
- (d) The Department may request additional information from a PRO, participant producer, or Independent Producer as necessary to decide whether to update the list pursuant to section 18980.2.5 in the manner recommended, such as:
- (1) Data, analysis, forecasting, or projections pertaining to the recommendations and a description of the methodologies relied upon.
 - (2) Financial implications of recommended changes on affected entities, including

potential effects of the recommended changes on existing responsible end markets and intermediate supply chain entities and the extent to which the changes will necessitate expansion of existing facilities or creation of new ones.

Authority: Sections 40401, 40502, 42060 and 42061, Public Resources Code.

Reference: Sections 42041, 42050 and 42061, Public Resources Code.

Section 18980.2.7. Scope of Exemptions

- (a) Applications for exemptions pursuant to this article may request that the exemption be applicable to an entire class of products or covered materials having certain characteristics in common. The class must be clearly defined according to the combination of characteristics that justify the exemption, so that items to which the exemption would apply are readily distinguishable from those to which it would not apply. The Department shall deem the exemption to apply to such class if the application's justification for the exemption necessarily applies to all products or covered material within the class.
- (b) If the Department determines that an application asserts a justification that necessarily applies to a class of products or covered materials, the applicant shall be required to amend the application to cover such class as described in subdivision (a).
- (c) An exemption for a class of products or covered materials may not necessarily cover all covered materials in a particular covered material category.
- (d) When granting a class-wide exemption, the Department may supplement or modify the definition of the class set forth in the application to ensure that it clearly identifies the items to which it applies and distinguishes them from the items to which it does not apply.

- (e) A class-wide exemption shall apply to all products or covered materials within the class, regardless of whether the products or covered materials were in existence when the Department issued the exemption.
- (f) The Department shall publish on its website all issued exemptions that apply to classes of products or covered materials.
- (g) The provisions of this article concerning expiration, renewal, and termination of exemptions apply to an exemption for a class of products or covered materials, except that an Independent Producer of the exempted covered material may request that the exemption be renewed by submitting a new application meeting the applicable requirements of this article, regardless of whether it had submitted the application on which the exemption was originally based.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42040, 42041, 42050, 42051, 42051.1, 42053, 42057, 42060, 42061 and 42067, Public Resources Code.

ARTICLE 3: Evaluations of Covered Material and Covered Material Categories

Section 18980.3. Recyclability

- (a) For the purposes of this chapter and the Act, and subject to paragraph (2) of subdivision (b), a covered material category shall be considered recyclable only if all covered material items within the category necessarily satisfy the categorical requirements for being considered recyclable as set forth in paragraph (2) of subdivision (d) of section 42355.51 of the Public Resources Code.
- (b) To be considered recyclable for purposes of subdivision (b) of section 42050 of the Public

Resources Code, covered material items must either:

- (1) be within one of the covered material categories on the list maintained by the Department pursuant to subdivisions (c) and (e) of section 42061 of the Public Resources Code, satisfy the additional criteria listed in paragraph (3) of subdivision (d) of section 42355.51 of the Public Resources Code, and, if applicable, satisfy the requirements of subdivision (d); or
 - (2) be excepted from the requirements of paragraphs (2) and (3) of subdivision (c) of section 42355.51 of the Public Resources Code pursuant to paragraphs (4), (5) or (6) of subdivision (d) of section 42355.51 of the Public Resources Code.
- (c) For purposes of determining compliance with the criteria identified in subparagraphs (A) and (B) of paragraph (3) of subdivision (d) of section 42355.51 of the Public Resources Code, plastic covered material includes components, inks, adhesives, or labels that prevent recyclability pursuant to the design guide incorporated into a producer responsibility plan pursuant to paragraph (1) of subdivision (j) of section 18980.8 if, according to the design guide, either:
- (1) Any component, ink, adhesive, or label renders the packaging “non- recyclable”; or
 - (2) Any component, ink, adhesive, or label “requires test results,” unless the producer has obtained the required test results described in the design guide from a laboratory having an ISO/IEC 17025:2017 accreditation (issued by a body described in paragraph (1) of subdivision (b) of section 18981) and provided such results to the PRO (for PRO plan participants) or to the Department (upon request by the Department).
- (d) In addition to meeting the requirements of subdivision (c), covered material that is packaging used with food or food service ware must comply with the material composition restrictions set forth in paragraphs (1) and (3) of subdivision (a) of section 17989.2 of this division. Packaging is considered used with food if it is used for the containment,

protection, handling, delivery, or presentation of food and may come in direct contact with food through ordinary usage. Upon demand, a producer shall provide the Department test results from a laboratory having an ISO/IEC 17025:2017 accreditation (issued by a body described in paragraph (1) of subdivision (b) of section 18981) verifying compliance with this subdivision. A PRO may provide such test results on behalf of a producer.

(e) For purposes of paragraph (5) of subdivision (d) of section 42355.51 of the Public Resources Code:

- (1) The “product or packaging in the program” encompasses all the covered material items sold or distributed in the state that are eligible for recovery by the program.
- (2) The percentage of the items recovered by the program is the percentage of the total weight of the items sold or distributed during the one-year period described in subparagraph (3) that was collected by the program during the most recent one-year period. That percentage shall be used for determining whether the minimum recovery percentage requirement has been met.
- (3) To minimize inclusion of items not both sold or distributed and collected during the periods used in the percentage calculation, the one-year period used in the calculation for sales or distribution shall precede the one-year period used for collection according to the average time between the items’ sale or distribution and collection.
- (4) If the program has not been in existence for at least one year, the calculation shall be applied to the partial year of its existence. The program shall be considered to have begun on the date the items were first sold or distributed.

(f) For purposes of paragraphs (4) and (5) of subdivision (d) of section 42355.51 of the Public Resources Code:

- (1) Participant producers shall demonstrate to their PRO how the covered materials meet the requirements of paragraphs (4) or (5) of subdivision (d) of section 42355.51 of the

Public Resources Code. The “product or packaging in the program” encompasses all the covered material items sold or distributed in the state that are eligible for recovery by the program.

(A) A PRO shall establish a process for evaluating whether a particular covered material meets the requirements. The process shall be described in the PRO plan. The description shall demonstrate how the PRO will obtain and use reliable data and reasonably calculate the relevant rates.

(B) A PRO shall specify in its annual report which covered materials are considered recyclable pursuant to paragraphs (4) or (5) of subdivision (d) of section 42355.51 of the Public Resources Code and which participants are producers of the covered materials.

(C) A PRO shall conduct annual audits and investigations of participant producers to ensure that the covered materials identified pursuant to subparagraph (B) continue to meet the requirements specified in paragraphs (4) or (5) of subdivision (d) of section 42355.51 of the Public Resources Code. The scope of these audits and investigations shall, at a minimum, include verification of data received from the PRO or participant producers and visits to at least two intermediate supply chain entities and two end markets that collect, process, or recycle the material under investigation, unless there is only one intermediate supply chain entity or one end market, in which case the audit shall visit that entity or end market. The results of any audits and investigations shall be included in a PRO's annual report. All investigations and audits shall be conducted by an independent third-party. The Department shall have full access to any results of an audit or investigation.

(2) Independent Producers shall:

(A) Specify in their plan any covered materials that they claim meet the requirements of paragraphs (4) or (5) of subdivision (d) of section 42355.51 of the Public

Resources Code and provide data supporting such claims.

- (B) Annually demonstrate to the Department that the covered material continues to meet the requirements of paragraphs (4) or (5) of subdivision (d) of section 42355.51 of the Public Resources Code. The annual report shall include, at a minimum, data to support their claims.

Authority: Sections 40401, 40502, 42041 and 42060, Public Resources Code.

Reference: Sections 42040, 42041, 42050, 42061 and 42355.51, Public Resources Code.

Section 18980.3.1. Recyclability of Certain Covered Material Categories Identified by the Department

- (a) The Department's identification of covered material categories that are trending towards being considered recyclable as described in subparagraph (B) of paragraph (3) of subdivision (a) of section 42061 of the Public Resources Code shall be subject to this section.
- (b) To be considered recyclable under this section, a covered material category must first be preliminarily identified by the Department when the Department publishes a material characterization study update or additional information pursuant to clause (ii) or (iii) of subparagraph (B) of paragraph (1) of subdivision (d) of section 42355.51 of the Public Resources Code. The Department may preliminarily identify a covered material category only if it preliminarily concludes that the following conditions are met:
 - (1) The update to the material characterization study or other available information demonstrates an increase in the collection and sorting of materials within the covered material category.

- (2) Such an increase is more likely than not to continue.
 - (3) Such an increase is more likely than not to result in the covered material category satisfying the requirements of paragraph (2) of subdivision (d) of section 42355.51 of the Public Resources Code before the next mandatory update to the material characterization study.
- (c) If the Department preliminarily identifies a covered material category pursuant to subdivision (b), it shall publish the basis for its determination on its website. The Department shall provide an opportunity for public engagement and allow public comment and submission of relevant information and evidence. The Department shall consider comments and submissions only to the extent that they address the following with respect to the covered material category:
- (1) The likelihood that the covered material category will satisfy the requirements of paragraph (2) of subdivision (d) of section 42355.51 of the Public Resources Code before the next mandatory update to the material characterization study.
 - (2) The extent to which statewide recycling programs and alternative collection programs, such as take-back systems, as a whole have contributed to the increases in statewide collection and sorting recognized by the Department. For purposes of this section, “statewide recycling programs” refers to the aggregate of all recycling programs throughout the state administered by local jurisdictions or recycling or composting service providers under contract by a local jurisdiction.
 - (3) How designation of the covered material category as recyclable on the list maintained pursuant to subdivisions (c) and (e) of sections 42061 of the Public Resources Code is necessary to avoid disruption of ongoing increases in collection, sorting, and development of responsible end markets.
 - (4) For assertions that such disruption would be caused by the inability to lawfully label

particular covered material as “recyclable” or with the chasing arrows symbol, submissions must address, in addition to the factors identified in paragraphs (1) through (3):

- (A) How, and to what extent, absence of the covered material category from the recyclable covered material category list inhibits particular covered materials from being considered recyclable pursuant to paragraphs of subdivision (d) of section 42355.51 of the Public Resources Code other than paragraph (2), such as paragraph (4), (5), or (6).
 - (B) How labeling the covered material as “recyclable” or with the chasing arrows symbol affects consumer behavior, including with respect to disposal for collection by local recycling programs, in a way that will affect whether collection, sorting, and development of responsible end markets will increase.
 - (C) How, if at all, use of the term “recyclable” or the chasing arrows symbol on labels otherwise will affect collection and sorting operations of recycling programs and development of responsible end markets.
 - (D) How, if at all, the ability to label items as “recyclable” or with the chasing arrows symbol affects existing alternative collection programs, such as takeback systems, or will affect anticipated alternative collection programs.
- (d) The Department shall review available information and evidence and confirm or withdraw its preliminary identification of covered material categories. The preliminary identification shall be deemed withdrawn unless it is confirmed within one year after the Department publishes it pursuant to subdivision (b). If the Department confirms any preliminary identification of a covered material category, the Department shall update the status of the covered material category on the list maintained by the Department under subdivisions (c) and (e) of section 42061 of the Public Resources Code. The preliminary identification shall be deemed confirmed when the Department either updates the covered material category

on the list maintained pursuant to subdivisions (c) and (e) of section 42061 of the Public Resources Code or publishes on its internet website its decision to do so.

(e) The Department shall confirm the identification of a covered material category pursuant to subdivision (d) if the following criteria have been met:

(1) The comments and submissions received pursuant to this section clearly demonstrate, with reference to specific information and evidence, that:

(A) Improvements in statewide recycling programs or alternative collection programs, such as takeback systems, are responsible for the increase in statewide collection and sorting rates underlying the Department's preliminary identification of the covered material category.

(B) Not adding the covered material category to the list maintained by the Department pursuant to subdivisions (c) and (e) of section 42061 of the Public Resources Code will result in disruption of increased collection or sorting of covered materials, or development of responsible end markets.

(2) The comments and submissions received pursuant to this section do not clearly invalidate the Department's preliminary conclusion that the conditions described in subdivision (b) have been satisfied.

(f) Identification of a covered material category pursuant to this section shall be reconsidered by the Department according to the process set forth in this section upon each update to the study or publication of additional information pursuant to clauses (ii) or (iii) of subparagraph (B) of paragraph (1) of subdivision (d) of section 42355.51 of the Public Resources Code, unless the Department determines, based on such update, information and evidence previously submitted, and other information and evidence in its possession, that such process is unnecessary for it to determine that the covered material category continues to satisfy the requirements of subparagraph (B) of paragraph (3) of subdivision

(a) of section 42060 of the Public Resources Code.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42041, 42050, 42061 and 42355.51 Public Resources Code.

Section 18980.3.2. Methodology for Recycling Rate Determination

- (a) For purposes of calculating recycling rates, any process meeting the definition of recycling in subdivision (aa) of section 42041 of the Public Resources Code is recycling, including the production of compost.
- (b) Unless otherwise provided in this chapter, recycling rate shall be calculated using data and methodology as described below:
 - (1) Recycling rate shall be calculated as the weight of covered material that is recycled divided by the sum of the total weight of covered material disposed of, as described in paragraph (3), and the weight of covered material recycled, as described in paragraph (2). The recycling rate as of a particular date shall be calculated over the latest twelve-month period before such date for which sufficient data to make the calculation exists.
 - (2) For the purposes of this calculation, the weight recycled shall be determined as follows:
 - (A) For end markets specified in paragraphs (1) through (5) of subdivision (b) of section 18980.4, the weight recycled shall be calculated at the point that the material is sold or transferred by a responsible end market as recycled content feedstock that meets the quality standards necessary to be used in lieu of virgin material for the creation of new or reconstituted products. The weight recycled shall be adjusted as necessary to exclude the proportion of the recycled content

feedstock derived from materials other than covered material.

- (B) For end markets specified in paragraph (6) of subdivision (b) of section 18980.4, the weight shall be calculated at the point that the material is accepted by the responsible end market. Covered material removed for further processing or disposal by the responsible end market after acceptance shall not be included. The disposal portion shall be included in the calculation pursuant to subparagraph (3).
 - (C) For end markets not specified in paragraphs (1) through (6) of subdivision (b) of section 18980.4, the PRO or Independent Producer shall identify in their study conducted pursuant to paragraph (1) of subdivision (b) of section 18980.4.3 whether subparagraph (A) or (B) above is most appropriate for estimating the weight recycled for that end market.
- (3) For the purposes of this calculation, the weight disposed of is the sum of the following:
- (A) Weight of covered material that is sent to an end market that does not qualify as a responsible end market pursuant to section 18980.4.
 - (B) Weight of covered material disposed of.
- (4) The Department shall consider the following sources of data when calculating recycling rates:
- (A) Data from a PRO regarding recycling and generation of covered materials, submitted pursuant to section 42052 of the Public Resources Code.
 - (B) Data reported by facilities registered with the Recycling and Disposal Reporting System pursuant to section 18815.1 through 18815.13 of this division.
 - (C) Data provided by local jurisdictions, producers, or other entities.
 - (D) Data described in paragraph (2) of subdivision (b) of section 42061 of the Public Resources Code that it deems relevant. Data may include information obtained

through characterization studies, needs assessments, and other studies.

- (c) Recycling rate shall be calculated based on the weight of materials, rather than volume or number.
- (d) Recycling rate shall be calculated for each covered material category, except as established in subdivisions (f) and (g).
 - (1) For covered material components that are not detachable, a single recycling rate shall be calculated for the covered material category applicable to the item comprising those components rather than calculating a recycling rate for each component.
 - (2) For covered material components that are detachable, a recycling rate shall be calculated using the covered material category applicable to each component.
 - (3) If the Department determines that a recycling rate can be calculated for a group of components representing more than one covered material category and that a recycling rate cannot be calculated separately for a covered material category in such group, then the recycling rate of the group shall be used for each covered material category in the group for which an individual recycling rate cannot be calculated.
- (e) If recycling rate cannot be calculated because data have not been reported to the Department, then the recycling rate shall be marked as “unreported.” This rate will be assumed not to meet the required rate under subdivision (c) of section 42050 of the Public Resources Code.
- (f) For a new covered material category created after 2024 for which insufficient information exists to calculate the recycling rate, the recycling rate shall be marked as “pending” and assumed to achieve the required rate under subdivision (c) of section 42050 of the Public Resources Code, as may be adjusted pursuant to section 42062 of the Public Resources Code. The “pending” status shall apply until one year of data is available for the covered material category, at which point the recycling rate shall be calculated using that data. The

“pending” status shall not be construed as having any effect on whether covered material is considered recyclable or compostable for purposes of subdivision (c) or (d) of section 42061 of the Public Resources Code, or for any other purpose.

- (g) When a PRO or Independent Producer calculates an estimated recycling rate and reports it to the Department, the methodology described in subdivision (b) or an alternative methodology described in the PRO’s or Independent Producer’s approved plan shall be used. The Department will approve an alternative methodology as part of a plan if the plan demonstrates that the methodology is the most accurate way to calculate the recycling rate, as defined in subdivision (ab) of section 42041 of the Public Resources Code. The description of the methodology shall explain why the methodology is necessary or otherwise preferable, including any practical limitations on available data underlying the necessity or preferability, and disclose the data and assumptions used in the calculation.
- (h) For purposes of demonstrating recycling rates pursuant to subdivision (i) of section 42057 of the Public Resources Code:
- (1) “All expanded polystyrene” means covered material comprising expanded polystyrene. It does not refer to materials that are not covered materials.
 - (2) The recycling rate for all expanded polystyrene shall be calculated using the data and methodology set forth in subdivision (b), unless the Department approves an alternative methodology pursuant to subdivision (g). The recycling rate for all expanded polystyrene shall be calculated in a manner consistent with this section.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

References: Sections 42041, 42050, 42051, 42051.3, 42052, 42060, 42061 and 42062, Public Resources Code.

Section 18980.3.3. Eligibility for Being Labeled “Compostable”

- (a) To be considered “eligible for being labeled ‘compostable’” pursuant to subdivision (b) of section 42050 of the Public Resource Code, covered material must satisfy the criteria set forth in Chapter 5.7 of Part 3 of Division 30 of the Public Resources Code (sections 42355 through 42358.5) for lawful labeling of commercial goods using the word “compostable.” The criteria concerning the lawfulness of discrete labels themselves, such as restrictions on the manner of labeling pursuant to subparagraph (D) of paragraph (1) of subdivision (g) or paragraph (2) of subdivision (g) of section 42357 of the Public Resources Code, shall not be construed to concern eligibility.
- (b) The list published by the Department pursuant to subdivision (d) of section 42061 of the Public Resources Code shall identify each covered material category that satisfies both of the following conditions:
 - (1) There is any covered material within the covered material category that satisfies the requirements set forth in subparagraph (B) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code.
 - (2) The covered material category may encompass any covered material that, if used by individual items that meet the requirements set forth in paragraphs (3) through (5) of subdivision (c), would be eligible for being labeled compostable.
- (c) To be eligible for being labeled compostable, individual covered material items must satisfy the following criteria, as applicable:
 - (1) They must be within one of the covered material categories listed pursuant to subdivision (d) of section 42061 of the Public Resources Code.
 - (2) They must not have characteristics that cause them not to satisfy the requirements

under subparagraph (B) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code.

(3) They must be certified as required by subparagraph (A) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code, if made effective according to its terms, including the condition that the Department shall have approved at least one third-party certification entity pursuant to section 18981 of this division. This requirement shall not apply to covered materials that are exempt from this paragraph according to paragraph (4).

(4) If the covered material items do not satisfy the requirements of paragraph (3), they must be exempt from the certification requirement pursuant to subdivision (d) of section 42356.1 of the Public Resources Code because they comprise fiber and do not incorporate any plastics or polymers, as defined in paragraph (16) of subdivision (a) of section 18980.1. For the purposes of this exemption:

(A) Producers shall maintain documentation demonstrating that this exemption applies while the covered material items are offered for sale, sold, or distributed and for three years thereafter. The documentation must:

(i) Demonstrate that the manufacture of the items does not incorporate plastics or polymers, as defined in paragraph (16) of subdivision (a) of section 18980.1, into the item through an intentional process or combination of processes, such as lamination, extrusion, and mixing.

(ii) Identify all substances present in the covered material items, including those that are used as ingredients to produce the items or are adhered to the items. Upon request by the Department, the Independent Producer, PRO, or producers of the covered material shall provide a written description of any substance identified pursuant to this paragraph. The description shall demonstrate that the substance does not constitute plastic.

(B) Upon request by the Department, a person claiming not to be a producer with respect to single-use food service ware items on the basis that the items do not incorporate plastic or polymers, as defined in paragraph (16) of subdivision (a) of section 18980.1, and are thus not covered material shall provide documentation satisfying the requirements of clauses (i) and (ii) or subparagraph (A).

(5) They must satisfy the requirement set forth in subparagraph (E) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code concerning association with the recovery of desirable organic wastes. For purposes of this requirement an item is designed to be associated with the recovery of desirable organic waste if it is desirable organic waste itself or is marketed, labeled, or otherwise sold or distributed in a manner that directs or otherwise causes users of the item to use and discard it with desirable organic waste.

(6) The requirements of this section govern whether covered material items satisfy the requirements of section 42357 of the Public Resources Code only for the purposes of determining whether the items comply with subdivision (b) of section 42050 of the Public Resources Code. No requirement of this section or any other provision of this article shall be construed as governing compliance with section 42357 of the Public Resources Code for any other purpose.

(d) The provisions of this article shall not be construed as setting forth all the requirements for a particular label or labeling practice to comply with applicable requirements of sections 42355 through 42358.5 of the Public Resources Code or any other law.

(e) Satisfying the legal requirements for being labeled “home compostable” pursuant to sections 42355 through 42357.5 of the Public Resources Code or any other law shall not be construed to mean that any covered material is eligible for being labeled “compostable” for purposes of section 42050(b).

Authority: Sections 40401, 40502, and 42060, Public Resources Code.

Reference: Sections 42041, 42050, 42061, 42355, 42355.5, 42355.51, 42356, 42356.1, 42356.2, 42357, 42357.5, 42357.6, 42358 and 42358.5, Public Resources Code

Section 18980.3.4. Independent Third-Party Validation for Postconsumer Recycled Content

- (a) A PRO shall not apply the source reduction credit based on incorporation of postconsumer recycled content, as described in section 42057(a)(2)(B)(i) of the Public Resources Code, unless the alternative compliance formula described for doing so has been proposed and approved as part of a PRO's plan in accordance with this section.
- (b) The Department shall approve an alternative compliance formula as part of a PRO's plan only if the plan establishes the following:
 - (1) That the formula will accurately and reliably assess the reduction, by weight, in the use of virgin plastic through incorporation of postconsumer recycled content. To measure source reduction, it will compare the amount of postconsumer recycled content used to the amount used in the 2023 calendar year. The plan shall include a detailed description of the formula, including all assumptions, estimates, and supporting information.
 - (2) That data to be reported to the Department or otherwise available to the PRO will enable the PRO to perform the measurement described in paragraph (1). The plan must describe how it will identify the producers for which there is sufficient data and apply the formula only with respect to those producers.
 - (3) That the formula will give a source reduction credit for the use of postconsumer recycled content in lieu of virgin plastic no greater than the source reduction credit that

would be achieved by eliminating use of both the recycled content and virgin plastic altogether.

- (4) That postconsumer recycled content used in covered material can be validated by the Association of Plastic Recyclers through its APR Postconsumer Resin Certification Program for purposes of validating the comparison described in paragraph (1). Alternatively, the plan may propose a different third party to perform the validations. The plan may do so only if the plan and the alternative third-party validation entity meet the following requirements:

(A) The plan must explain with specificity the differences between the alternative third party and the APR program and demonstrate how the alternative third party's validations will result in more consistent and accurate assessments of postconsumer recycled content used in covered material. The explanation must, for example, show that the standards used by the other third party are at least as stringent as those employed by the APR program.

(B) The third party must be independent and impartial, and it must not have any conflict of interest with respect to validating postconsumer recycled content. Without limitation, the entity shall be deemed not to satisfy this requirement if either of the following is true:

(i) It holds any ownership interest, whether direct or indirect, in any person that is a PRO participant and a producer of plastic covered material.

(ii) Other than for services related to verification or certification programs, market research, advocacy, education, scientific or policy research or studies, scientific testing, or industry development, it transacts business with any person that is a PRO participant and a producer of plastic covered material, regardless of whether such business is with the producer directly or indirectly, such as through subsidiary or parent companies of the producer. Merely purchasing

items for purposes unrelated to the activities identified in this clause, without any further contractual or other relationship related to the purchase, shall not be considered transacting business with any person for purposes of this clause.

(C) The alternative third party or entities that conduct validations on its behalf have ISO/IEC 17065:2012 accreditation issued by an accrediting body that is a signatory member of the International Accreditation Forum or is a signatory to a mutual recognition arrangement established by that organization.

(5) How the formula will grant source reduction credit only for usage of postconsumer recycled content that contains no intentionally added perfluoroalkyl and polyfluoroalkyl substances.

(c) Except under the following conditions, a formula and, if any, an alternative third-party validation entity approved as part of a producer responsibility plan shall be considered approved for inclusion in an updated or amended version of the plan.

(1) At least one year before the expiration date of a currently approved PRO plan, the Department may notify the PRO that the Department has identified evidence, information, or circumstances that were not considered in connection with the Department's approval of the plan's alternative compliance formula or alternative third-party validation entity and potentially render the basis for that approval out of date or otherwise insufficient. The subsequent plan update pursuant to section 42051.2(d)(2) of the Public Resources Code must reestablish the elements to comply with subdivision (b) of this section. The plan must specifically address the new evidence, information, or circumstances or information identified by the Department.

(2) If the Department determines that the PRO negligently or intentionally included false information, relied on false evidence, failed to incorporate or consider known information or evidence not supportive of the PRO's proposal, or otherwise negligently or intentionally obscured potential flaws in its proposal, the formula and, if applicable,

the alternative third- party validation entity shall be deemed no longer approved.

(d) For purposes of section 42053(e)(1) of the Public Resources Code, a third party shall be deemed approved to perform validation services under either of the following circumstances:

- (1) The entity is the entity included in the PRO's current plan for purposes of section 42057(a)(2)(B)(i) of the Public Resources Code.
- (2) The third party satisfies the requirements of subparagraphs (B) and (C) of paragraph (4) of subdivision (b), and the PRO opts to rely on the third party's validation services.

Authority: Sections 40401, 40502, 42053 and 42060, Public Resources Code.

Reference: Sections 42053 and 42057, Public Resources Code.

Section 18980.3.5. Disposal of Covered Material

For the purposes of this chapter, any amount of covered material that is disposed of shall not be considered recycled. Disposal includes any of the following activities in or outside of the state.

- (a) Final deposition at a landfill.
- (b) Use as alternative daily cover as specified in section 20690 of Title 27 of the California Code of Regulations or intermediate cover as specified in section 20700 of Title 27 of the California Code of Regulations.
- (c) Energy generation or fuel production, except for anaerobic digestion of source separated organic materials.
- (d) Other activities that involve directly depositing the material onto land, into the atmosphere, or into water, including, but not limited to, littering, open burning, or illegal dumping.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 40120.1, 40121, 40192, 42041 and 42061, Public Resources Code.

ARTICLE 4: Responsible End Markets

Section 18980.4. Responsible End Market Criteria

- (a) For an entity to be considered a responsible end market as defined in section 42041(ad) of the Public Resources Code, that entity shall, in its ordinary course of business, meet the following criteria:
- (1) The entity and the intermediate supply chain entities that handle materials it receives operate in compliance with all permitting, licensing, and other clearances that may be required to lawfully conduct collection, processing, or recycling activities under all applicable local, sub-national, national, and international laws including, but not limited to, laws concerning public health, safety, and land use.
 - (2) The entity is transparent, which means the entity:
 - (A) Maintains records establishing the chain of custody encompassing all intermediate supply chain entities and the end market for all covered materials accepted by the end market for at least the past three years. Such records shall document, at a minimum, every person that took possession of the discarded covered materials and the collection, processing, or recycling activities conducted by such persons with respect to the material. Notwithstanding the foregoing, a PRO or Independent Producer may, in a plan or plan amendment, propose an alternative manner for establishing transparency with respect to the intermediate supply chain entities that handle the material accepted by responsible end markets. The Department shall

approve the proposal if it determines that the proposed approach will provide the same or greater degree of transparency, including availability of information concerning compliance with the Act's requirements related to responsible end markets, as otherwise provided herein.

- (B) Documents all complaints, penalties, violations, and other forms of enforcement action taken against the entity.
 - (C) Maintains records of all permits, licenses, and other clearances with respect to collection, processing, or recycling activities as required by all applicable local, sub-national, national, and international laws.
 - (D) Consents to be audited by a PRO or an Independent Producer pursuant to section 18980.4.2.
 - (E) Provides any records identified in subparagraph (A) through (C) to a PRO or Independent Producer that requests them.
 - (F) Upon request, discloses to the Department, a PRO, or any Independent Producers, the types of covered materials and covered material categories that it will accept.
 - (G) Upon request, provides a PRO or Independent Producer documentation establishing that it handles materials in the manner described in paragraph (3).
- (3) The entity shall minimize the discharge of emissions, effluents, and materials produced by the entity, including feedstocks and residuals, and shall handle incompatible materials in the following manner:
- (A) For incompatible materials that can be further processed and recycled, the entity sends materials to entities that are authorized to further process and recycle the material.
 - (B) For incompatible materials that cannot be further processed and recycled, the

entity disposes of the material in a way that minimizes significant effects on the environment and risks to public health and safety.

(4) The entity achieves the following, as applicable:

- (A) Each calendar year, the entity's average recycling yield meets or exceeds the threshold recycling yields identified by a PRO or Independent Producer in their approved plan for each material type identified in paragraphs (b)(1) through (b)(5) and any end markets identified following a study pursuant to section 18980.4.3(b)(1). Each plan shall include a justification for each threshold recycling yield, including how the yield is informed by relevant data, if any, in the most recent needs assessment conducted by the Department pursuant to section 42067 of the Public Resources Code and other verifiable data pertaining to recycling processes.
 - (i) For any period, average recycling yield shall be calculated by taking the total weight of material that has been recycled and dividing it by the total weight of material that has been accepted by the end market and not sent to a responsible end market for further processing.
 - (ii) For the purpose of this subparagraph, the weight of material recycled shall be determined according to section 18980.3.2(b)(2), except that "material" includes covered material and non-covered material.
 - (iii) A separate yield rate shall be calculated for each recycling process that accepts covered material.
- (B) Covered material partially or wholly comprising plastic and intentionally included in the process used to generate a recycled organic product must fully biologically decompose, and the recycled organic product must meet standards necessary to be sold into the marketplace. Full biological decomposition of compostable plastic refers to the complete biodegradation and disintegration of the material under

controlled composting conditions, resulting in its conversion to carbon dioxide, water, biomass, and inorganic compounds, with no visible, distinguishable, or toxic residues remaining after the composting cycle. The entity must neither dispose of undecomposed material intentionally included in the process nor send it to another entity that subsequently disposes of it, and the entity must ensure that it fully biologically decomposes, through additional processes conducted either by the entity or by subsequent entities to which the material is transferred. Covered material inadvertently included in the process that remain undecomposed shall be considered incompatible materials and are subject to paragraph (3) of subdivision (a).

(C) For covered material comprising fiber or paper substrates (without a plastic component) or wholly derived from natural resources not of mineral or fossil fuel origin, the covered material intentionally included in the process used to generate a recycled organic product must biologically decompose and may be processed in a manner consistent with the management of other feedstocks to produce a marketable product that complies with standards found in sections 17868.2, 17868.3 and 17868.3.1 of Article 7 of Chapter 3.1 of Division 7 of Title 14 of the California Code of Regulations or in sections 17896.59, 17896.60, and 17896.61 of Article 6 of Chapter 3.2 of Division 7 of Title 14 of the California Code of Regulations, as applicable.

(b) An end market is an entity that produces and sells or transfers recycled organic product or recycled content feedstock that meets the quality standards necessary to be used for the creation of new or reconstituted products. An entity that produces and uses such material in the creation of new or reconstituted products is also an end market. An entity may be an end market for some materials and an intermediate supply chain entity for others. For example, if an entity transfers a portion of covered material it accepts to other entities for further processing, the entity is an intermediate supply chain for that portion, but an end

market for the covered material it retained.

- (1) For material made of glass, the end market is the entity that first produces glass feedstock that meets the quality standards necessary to be used in lieu of virgin material for the creation of new or reconstituted products. Such end markets include, but are not limited to, the glass beneficiation plant that produces cullet.
- (2) For material made of metal, the end market is the entity that first produces metal feedstock that meets the quality standards necessary to be used in lieu of virgin material for the creation of new or reconstituted products. Such end markets include, but are not limited to, entities that smelt metal and produce ingots, sheets, and coils.
- (3) For material made of paper or non-plastic fiber, the end market is the entity that first produces paper feedstock that meets the quality standards necessary to be used in lieu of virgin material for the creation of new or reconstituted products. Such end markets include, but are not limited to, the beneficiation wastepaper plant or entity that re-pulps the material into a pulp product.
- (4) For material made of plastic, the end market is the entity that first produces plastic feedstock that meets the quality standards necessary to be used in lieu of virgin material for the creation of new or reconstituted products. Such end markets include, but are not limited to, entities that create pellet.
- (5) For material made of wood, the end market is the entity that first produces wood feedstock that meets the quality standards necessary to be used for the creation of new or reconstituted products. Such end markets include, but not limited to, entities that chip and grind the material, including, but not limited to, C&D wood debris chipping and grinding operations, facilities as described in section 17383.3, and facilities as defined in paragraph (1) of subdivision (a) of section 17852.
- (6) Entities that convert material into a recycled organic product are end markets for such

material. Such entities include, but are not limited to, compostable material handling operations or facilities described in paragraph (12) of subdivision (a) of section 17852 and in-vessel digestion facilities and operations described in paragraphs (15), (16), and (19) of subdivision (a) of section 17896.2.

- (7) For covered material that is eligible for multiple types of end markets, any of the eligible end markets shall be deemed valid.
- (8) For a covered material item made of a material type that is not represented in paragraphs (1) through (6), the end market shall be an end market established through a study conducted by a PRO or Independent Producer pursuant to paragraph (1) of subdivision (b) section 18980.4.3.

Authority: Sections 40401, 40502, 42041, 42060 and 42057, Public Resources Code.

Reference: Sections 42041, 42051, 42051.1, 42057, 42061 and 42067, Public Resources Code.

Section 18980.4.1. End Market Identification

- (a) A PRO or Independent Producer shall include in its plan the method by which it will identify responsible end markets. At minimum, the plan shall:
 - (1) Describe how end markets will be identified.
 - (2) Describe the process by which a PRO or Independent Producer will evaluate whether each end market meets the standards specified in section 18980.4.
 - (3) To the extent that an end market cannot be identified as, or confirmed to be, responsible without cooperation from the end market or intermediate supply chain entities, describe how such cooperation will be obtained. For example, the plan must explain how the PRO or Independent Producer will ensure that intermediate supply chain entities continue to operate with all required permits, licenses, and other clearances.

- (b) A PRO or Independent Producer shall maintain records of all contracts or agreements established with end markets and intermediate supply chain entities during the contract term and for at least three years thereafter.
- (c) A PRO or Independent Producer shall, for at least three years, maintain all records described in subdivision (b) and paragraph (2) of subdivision (a) of section 18980.4 and, if applicable, paragraphs (4) and (6) of subdivision (d) of section 18980.4 that it receives from end markets and intermediate supply chain entities and shall produce the records to the Department upon written request. Records provided to the Department shall be a public document subject to mandatory disclosure under the California Public Records Act (Division 10 of Title 1 of the Government Code (commencing with section 7920.000)) unless an exemption from mandatory disclosure applies. The Department shall withhold from public disclosure portions of the application that the applicant appropriately identifies as trade secrets, subject to the requirements and limitations set forth in section 18980.14.
- (d) A PRO or Independent Producer shall identify in its plan any recycling technology that was not a type of mechanical recycling technology in use within the State as of the effective date of the Act. Facilities employing such technology must not produce significant amounts of hazardous waste as defined in paragraph (1).
- (1) For purposes of paragraph 5 of subdivision (aa) of section 42041 of the Public Resources Code, “significant amounts of hazardous waste” means hazardous waste as defined in Title 40 of the Code of Federal Regulations Section 261.3 that presents a substantial risk of harm to public health, or of contamination of the environment.
- (A) Mechanical recycling technologies that were in use within the State as of the effective date of the Act do not produce significant amounts of hazardous waste for the purposes of the Act and this chapter.
- (B) The production and management of hazardous waste that is handled and disposed of in compliance with an applicable permit does not present a substantial risk of

harm to public health or of contamination of the environment, for purposes of the Act and this chapter. Minor technical violations or minor deviations from permit conditions that do not result in, or are not reasonably likely to lead to, actual environmental harm or harm to public health shall not, by themselves, be considered noncompliance for purposes of this section.

- (2) A facility's use of a technology that is not a type of mechanical recycling technology in use within the State as of the effective date of the Act shall not be considered recycling for the covered material processed using it unless the facility operates in a manner consistent with ISO 59014:2024.
- (3) A facility using the technology shall not be considered to be recycling the covered material processed unless the facility complies with all applicable requirements established in this Article.
- (4) Before it may be considered recycling in the PRO or Independent Producer's program, any facility using the technology must provide to the PRO or Independent Producer:
 - (A) A description of the technology and how that technology is consistent with the definition of recycling pursuant to subdivision (aa) of section 42041 of the Public Resources Code.
 - (B) A description of the covered material to be processed and the yield of the recovered material that meets the quality standards necessary to be used for the creation of new or reconstituted products.
 - (C) The weight (in kilograms) of material processed per calendar month for the last twelve months.
 - (D) The weight (in kilograms) of hazardous waste as that term is defined in Title 40 of the Code of Federal Regulations Section 261.3, generated per calendar month for the last twelve months.

(E) The weight (in kilograms) of “acute hazardous waste” as that term is defined in Title 40 of the Code of Federal Regulations Section 261.11(a)(2), generated per calendar month for the last twelve months.

(5) In its plan, a PRO or Independent Producer shall justify its conclusion that use of a particular technology does not produce significant amounts of hazardous waste.

(6) A facility using a technology that is included in an approved PRO or Independent Producer plan under this subdivision shall report annually the information identified in paragraph (4) of this subdivision to the PRO or Independent Producer.

Authority: Sections 40401, 40502, 42041, 42060 and 42057, Public Resources Code.

Reference: Sections 40062, 42041, 42051, 42051.1 and 42057, Public Resources Code.

Section 18980.4.2. End Market Compliance Audits and Verification

(a) A PRO or Independent Producer shall have annual compliance audits of responsible end markets conducted and completed to ensure that each end market it uses satisfies the requirements to be a responsible end market as specified in subdivision (a) of section 18980.4. All compliance audits shall be conducted by an independent third-party.

(b) A PRO or Independent Producer shall include the findings of any compliance audits in the annual report pursuant to section 18980.9.1(c). The Department shall have full access to any compliance audit reports upon request.

(c) A PRO or Independent Producer shall annually verify that each end market it uses satisfies the requirements to be a responsible end market as specified in subdivision (a) of section 18980.4. Each verification shall be documented in the annual report pursuant to subdivision (c) of section 18980.9.1 and shall include, but not necessarily be limited to, the

following:

- (1) Information that demonstrates a responsible end market met or exceeded its average recycling yield threshold, including a detailed explanation of how the entity measured and calculated the amount of material that was accepted and the amount of covered material that was successfully recycled by the responsible end market.
 - (2) All information and evidence related to any failure of an end market to satisfy the requirements to be a responsible end market as specified in subdivision (a) of section 18980.4.
 - (3) Descriptions of any corrective actions that were taken.
 - (4) Descriptions of any instances where a PRO or Independent Producer prohibited sending materials to an end market due to that entity's failure to satisfy the requirements as specified in subdivision (a) of section 18980.4.
 - (5) Records of complaints made against the end market, including records maintained by the end market as described in section 18980.4(a)(2)(B) and records maintained by a PRO or Independent Producer pursuant to sections 18980.6.8(b)(7) and 18980.7.7(b)(7).
- (d) The Department may require a PRO or Independent Producer to provide any records necessary to verify responsible end markets. The records shall be provided without redactions. As described in section 18980.14, a PRO or Independent Producer may specify what records it claims are wholly or partially confidential or otherwise exempt from public disclosure.
- (e) If the Department determines that an end market identified by a PRO or Independent Producer no longer meets the standards specified in section 18980.4, the end market is no longer a responsible end market and any covered material sent to that end market thereafter shall not be considered recycled for purposes of compliance with the Act.

Authority: Sections 40401, 40502, 42041 and 42060, Public Resources Code.

Reference: Sections 42041, 42051, 42051.1, 42051.3 and 42053, Public Resources Code.

Section 18980.4.3. End Market Development

- (a) A PRO or Independent Producer must support the establishment, expansion, and continued existence of responsible end markets sufficient to satisfy the obligations of the PRO or Independent Producer under the Act, in the manner set forth in their approved plans. Each plan must establish, at a minimum, how the PRO or Independent Producer will do the following:
- (1) Provide financial support to end markets as necessary to develop responsible end markets and ensure that they continue to satisfy the standards specified in section 18980.4. The plan must specify, at a minimum, how the PRO or Independent Producer will identify where financial support is needed and decide whether to provide it.
 - (2) Facilitate material recycling and assist end markets in satisfying the standards specified in section 18980.4, by providing financial support to local jurisdictions, recycling service providers, alternative collection programs, intermediate supply chain entities, and other entities that provide services used for the diversion of materials. The plan must specify, at a minimum, how the PRO or Independent Producer will identify and evaluate opportunities to provide such support and decide whether to provide it.
 - (3) Develop new responsible end markets for covered materials and explore alternatives for covered materials that do not have a responsible end market. Alternatives include, but are not limited to, investing in refill and reuse infrastructure to facilitate the phasing out of covered materials lacking responsible end markets. The plan must, at a

minimum, describe known opportunities for developing new responsible end markets or alternatives to covered materials.

(b) If a PRO or an Independent Producer identifies a covered material that does not have an end market, as described in section 18980.4(b), the following requirements apply:

(1) Except as provided in paragraph (3), the PRO or Independent Producer shall conduct a study that:

(A) Evaluates technology that could be used to recycle the covered material and ensure that the technology can constitute recycling, as defined in section 42041(aa) of the Public Resources Code.

(B) Evaluates the feasibility of collecting, transporting, processing, and recycling the covered material.

(C) Evaluates how any current or new end market can meet the standards specified in section 18980.4.

(D) May also include pilot programs to test the components specified in subparagraphs (A), (B), or (C).

(2) If a PRO or Independent Producer, after having conducted the study described in paragraph (1), determines that a responsible end market exists or can exist for such covered material, the PRO or Independent Producer shall include in its plan or a plan amendment:

(A) A description of the end market.

(B) A justification of how the end market can meet the standards specified in section 18980.4 for the covered material.

(C) A budget and investment strategy that describes how the PRO or Independent Producer will fund the development of the end market, along with any necessary

development of collection, transportation, and processing infrastructure.

(D) A timeline detailing the proposed end market development.

(E) A determination on how the weight of covered material recycled is estimated, pursuant to section 18980.3.2(b)(2).

(3) A study pursuant to paragraph (1) shall not be required if the PRO or Independent Producer opts to phase out the covered material such that the PRO participants or the Independent Producer will no longer sell, offer for sale, or distribute the covered material in the state. The PRO or Independent Producer shall invest in alternatives to that covered material to facilitate phasing it out. Alternatives may include, for example, investing in refill and reuse infrastructure that reduces reliance on the covered material.

(c) When a PRO or Independent Producer decides to conduct a study pursuant to paragraph (b)(1), the PRO or Independent Producer shall notify the Department and disclose the date on which the study was initiated.

(d) When a PRO or Independent Producer completes a study pursuant to paragraph (b)(1), the PRO or Independent Producer shall include the results of the study in a plan, plan amendment, or annual report.

Authority: Sections 40401, 40502, 42041 and 42060, Public Resources Code.

Reference: Sections 42041, 42051, 42051.1 and 42053, Public Resources Code.

ARTICLE 5: Requirements for Producers

Section 18980.5. Producer Compliance

(a) Within 30 days of the effective date of this chapter each producer shall register with the

Department pursuant to subdivision (a) of section 18980.10. Entities that become producers after 30 days after the effective date of this chapter but prior to January 1, 2027, shall register within 30 days of becoming a producer.

- (b) Pursuant to subdivision (b) of section 42051 of the Public Resources Code, each producer shall, within 30 days after the effective date of this chapter, apply to become a participant of an approved PRO or apply to be an Independent Producer subject to the requirements of section 18980.5.1. Entities that become producers after 30 days after the effective date of this chapter but before January 1, 2027, shall apply within 30 days of becoming a producer. This obligation shall apply to a person if the covered material for which the person is a producer is sold, offered for sale, imported, or distributed in the state by any person.
- (c) Entities that become producers on or after January 1, 2027, shall, within six months of becoming a producer, register with the Department pursuant to subdivision (a) of section 18980.10 and either become a participant producer or apply to be an Independent Producer pursuant to section 18980.5.1.
- (d) Each producer that applies to become a participant of an approved PRO pursuant to subdivision (b) of this section shall, at the time of its application, submit to the PRO that producer's supply data for calendar year 2023. For purposes of this subdivision, "supply data" means the information described in section 18980.10.2.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Section 42051, Public Resources Code.

Section 18980.5.1. Application for Independent Producer Compliance

- (a) A producer seeking to comply with the Act without participating in a PRO shall first, if not already registered with the Department pursuant to subdivision (a) of section 18980.5, register with the Department pursuant to subdivision (a) of section 18980.10 and submit an application for individual compliance to the Department. The application shall be submitted electronically and shall include the following:
- (1) Types of covered material the producer is selling, offering for sale, importing, or distributing in or into the state.
 - (2) Information that demonstrates compliance with the requirements of subparagraph (A) of paragraph (2) of subdivision (b) of section 42051 of the Public Resources Code.
- (b) The Department shall approve the application if the application establishes that the producer satisfies all requirements of subparagraph (A) of paragraph (2) of subdivision (b) of section 42051 of the Public Resources Code and this chapter. The Department will not consider the applicant in violation of paragraph (1) of subdivision (b) of section 42051 of the Public Resources Code before the Department has approved or denied the application and notified the applicant accordingly.
- (c) If the Department denies the application, the producer shall become a participant in a PRO or submit a revised application within 30 days after receiving notice of the denial. If the Department denies the revised application, the producer shall, within 30 days of receiving notice of the second denial, become a participant in a PRO. The producer shall not be considered to be in violation of paragraph (1) of subdivision (b) of section 42051 of the Public Resources Code until after such 30-day period.
- (d) Notwithstanding subdivisions (b) and (c), a producer submitting a second revised application following the denial of the revised application shall be considered in violation of paragraph (1) of subdivision (b) of section 42051 of the Public Resources Code during the pendency of such application unless the producer is a participant of the PRO.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42041 and 42051, Public Resources Code.

Section 18980.5.2. Exemptions for Small Producers

- (a) A producer seeking an exemption pursuant to paragraph (5) of subdivision (a) of section 42060 of the Public Resources Code shall, if not already registered with the Department pursuant to subdivision (a) of section 18980.5, register with the Department pursuant to subdivision (a) of section 18980.10 and submit an application electronically to the Department. The application shall include the following:
- (1) Records showing the producer's gross sales in the state in the most recent calendar year were less than one million dollars (\$1,000,000).
 - (2) The nature of business, including: what business activities it conducts, such as retail or wholesale activity; whether it conducts business online, at physical locations, or both; the nature of the products it sells, offers for sale, or distributes, including the degree to which it acquires the products from out-of-state suppliers and the degree to which it owns the brands or trademarks associated with the products.
- (b) The Department shall approve an application if the application meets the requirements of this section, unless the Department determines that the exemption would hinder a type of covered material or covered material category from satisfying the requirements of section 42050 of the Public Resources Code. If the Department lacks sufficient information and evidence to assess whether such a determination is justified, the producer shall supplement the application with information and evidence requested by the Department as the Department deems necessary to further assess the potential effect of granting the

exemption. If the application is approved, the exemption shall become effective on the date the application is approved and is valid for two years.

- (c) To renew an exemption, the small producer shall, between 120 days and 90 days before the expiration date, provide updated information satisfying the requirements of subdivision (a). The Department shall evaluate the application in the same manner as it reviews initial applications under this section. If approved, the exemption shall be renewed for two additional years from the original expiration date.
- (d) A producer no longer exempt pursuant to this section shall be subject to the requirements of the Act pursuant to section 18980.5.
- (e) Any producer who is exempt pursuant to this section shall maintain their registration pursuant to subdivision (a) of section 18980.10.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42050, 42052 and 42060, Public Resources Code.

ARTICLE 6: Requirements for the Producer Responsibility Organization

Section 18980.6. Producer Participation General Requirements

- (a) In notifying the Department of information required by subdivision (d) of section 42051 of the Public Resources Code, a PRO shall include the following information, as applicable:
 - (1) For an instance of producer non-compliance, including producers that are non-compliant because they are the producer of covered material within a non-compliant covered material category, delineated by covered material category:
 - (A) The name of the producer.

- (B) Name, description, and other information sufficient to uniquely identify each particular product using the involved covered material. Such identification may be achieved, for example, with respect to unique physical characteristics, such as the product's form, materials, and dimensions, or identifying information such as a unique stock keeping unit (SKU) or global trade item number, such as a universal product code (UPC).
 - (C) The effects of PRO-identified producer non-compliance on the PRO's implementation and ability to implement this chapter, including how the PRO's approved plan is affected.
 - (D) What actions the PRO has taken or will take to ensure compliance with this chapter.
- (2) For a producer that no longer participates in the PRO's plan, including producers that are non-compliant because they are the producer of covered material within a non-compliant covered material category, delineated by covered material category:
- (A) Information specified in subparagraphs (A) and (B) of paragraph (1).
 - (B) The date the producer no longer participated in the plan and the reason provided, if any, by the producer for ceasing to participate in the PRO's approved plan.
 - (C) If the producer was dismissed by the PRO, explanation and documentation sufficient to demonstrate compliance with subdivision (b).
 - (D) The effects of PRO-identified producer non-compliance or non-participation on the PRO's implementation and ability to implement this chapter, including how the PRO's approved plan is affected.
- (b) A PRO may dismiss producers only for good cause, after exerting good faith effort to resolve the good cause.

- (1) Good cause for dismissal must be based on substantial noncompliance with the Act or requirements of the PRO plan. Noncompliance is substantial if it causes the PRO to incur financial harm or creates the risk that the PRO or other producers will violate the Act. The PRO may further base dismissal on additional conduct, regardless of whether the conduct itself violates the Act, if the conduct imposes significant costs or other significant burden on the PRO, or if it creates the risk that the PRO or other producers will violate the Act.
 - (2) Good faith effort to resolve the good cause requires, at a minimum, notice to the producer and reasonable opportunity for the producer to cure the good cause through corrective actions. The notice shall identify the required actions with particularity, and a producer shall not be dismissed if it performs such actions.
 - (3) Notwithstanding paragraph (2), the opportunity to cure the good cause for dismissal shall not be required if the cause is based on the same conduct or circumstances that had already been the subject of notice and the opportunity to cure within the preceding year.
- (c) A PRO may refuse to accept a producer as a participant in its plan only for good cause, after exerting good faith effort to resolve the good cause.
- (1) Good cause for refusal must, at a minimum, be based on at least one of the following circumstances:
 - (A) The producer fails to provide information reasonably required by the PRO for acceptance of the producer, as set forth in the PRO's approved plan.
 - (B) The information provided to the PRO or other evidence available to the PRO clearly establishes that the producer is unwilling to exert good faith effort to comply with the Act.
 - (C) The PRO has previously dismissed the producer for good cause pursuant to

subdivision (b), and the cause identified in the notice preceding that dismissal still exists.

- (2) Good faith effort to resolve the good cause for refusal requires, at a minimum, notice to the producer and reasonable opportunity for the producer to cure the good cause through corrective actions. The notice shall identify the required actions with particularity. A producer shall be accepted as a participant if it performs such actions and shall not be deemed to have violated paragraph (1) of subdivision (b) of section 42051 of the Public Resources Code.
- (3) During the period provided for the producer to cure the good cause, the producer shall be considered to be a participant in the PRO for purposes of subdivision (b) of section 42051.
- (4) Notwithstanding paragraph (2), the opportunity to cure the good cause for refusal shall not be required if the cause is based on the same conduct or circumstances that had already been the basis for dismissing or refusing to accept the producer within the preceding year.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051 and 42051.1, Public Resources Code.

Section 18980.6.1. Producer Responsibility Plan Submission

- (a) Except as provided in subdivision (b), a PRO approved by the Department pursuant to subdivision (a) of section 42051 of the Public Resources Code shall, on or before April 1, 2026, prepare and submit a producer responsibility plan to the advisory board pursuant to section 42051.2 of the Public Resources Code.

(b) Notwithstanding the deadline in subdivision (a), a PRO approved by the department pursuant to subdivision (a) of section 42051 of the Public Resources Code may choose to submit its producer responsibility plan to the advisory board after April 1, 2026, but on or before June 15, 2026, subject to the following conditions:

(1) The PRO shall waive its right to the full 120-day period in paragraph (1) of subdivision (b) of section 42051.2 of the Public Resources Code. The PRO shall instead submit the plan to the department with revisions, pursuant to paragraph (1) of subdivision (b) of section 42051.2 of the Public Resources Code, within 60 calendar days of receipt of the advisory board's comments.

(2) The Department shall review the plan for compliance with the Act and take action on the plan, pursuant to paragraph (2) of subdivision (b) of section 42051.2 of the Public Resources Code, within 75 calendar days of receipt of the plan from the PRO.

(c) A successor or additional PRO approved by the Department shall prepare and submit a producer responsibility plan to the advisory board pursuant to section 42051.2 of the Public Resources Code within six months of approval.

(d) Upon submittal of the producer responsibility plan to the advisory board as required by subdivision (a) of section 42051.2 of the Public Resources Code, the PRO shall make the plan available for review and public comment by, at minimum, posting the plan to its internet website.

(e) The producer responsibility plan submitted to the Department as required in paragraph (1) of subdivision (b) of section 42051.2 of the Public Resources Code shall include a summary of all comments received from the advisory board and the public, and identify revisions, if any, made in response to the comments. Additionally, the PRO shall make the plan available for public review by, at minimum, posting the plan to its internet website until an approved plan is posted pursuant to subdivision (c) of section 42051.2 of the Public Resources Code.

Authority: Sections 40401, 40502, 42057 and 42060, Public Resources Code.

Reference: Sections 42051.1, 42051.2 and 42061.5, Public Resources Code.

Section 18980.6.2. Producer Responsibility Plan Approval

- (a) The Department shall approve a PRO plan if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. In determining whether the PRO plan contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the PRO by the advisory board and the public as summarized by the PRO pursuant to subdivision (e) of section 18980.6.1 of these regulations, as well as any revisions by the PRO in response to those comments.
- (b) Conditional approval shall be granted if the Department determines that certain elements of the plan do not meet certain requirements of the Act or this chapter, but that if conditions identified by the Department are met, final approval will be warranted. Such conditions may include, without limitation, clarification to remove ambiguities or addition of information or data demonstrating that particular requirements have been met. While approval conditions are pending, the plan shall be considered approved for purposes of the Act and this chapter.
- (c) If the Department conditionally approves the plan, the PRO shall, until the conditions on approval have been met, submit the following information on or before the last day of every month, beginning the first full calendar month after conditional approval:
 - (1) Estimated date for resubmittal of the revised plan. Pursuant to paragraph (3) of subdivision (b) of section 42051.2 of the Public Resources Code, this date must be no

later than 12 months after conditional approval.

(2) Status updates addressing each approval condition, including a specific description of how it is being addressed.

(d) If the approval conditions are not met within 12 months after conditional approval, the conditional approval shall end, and the PRO shall be deemed not in compliance with the Act and this chapter.

(e) A plan approved by the Department is valid for five years from the date of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051.2, 42060, and 42063, Public Resources Code.

Section 18980.6.3. Review of Updated Producer Responsibility Plan

(a) A PRO shall submit a proposed updated plan to the advisory board as required in paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code at least 180 days before the expiration date of its producer responsibility plan.

(b) Upon submittal of the producer responsibility plan to the advisory board as required by paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code, the PRO shall make the proposed updated plan available for review and public comment by, at minimum, posting the plan to its internet website. No later than 60 calendar days after the PRO's submission of the proposed updated plan, the advisory board shall provide any written comments to the PRO.

(c) No later than 120 calendar days after receiving comments from the advisory board, the

PRO shall submit the updated plan to the Department. The updated producer responsibility plan submitted to the Department as required in paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code shall include a summary of all comments received from the advisory board and the public, and identify revisions, if any, made in response to the comments as summarized by the PRO. Additionally, the PRO shall make the plan available for public review by, at minimum, posting the plan to its internet website until an approved updated plan is posted.

- (d) In determining whether the updated plan contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the PRO by the advisory board and the public as summarized by the PRO pursuant to subdivision (c) of these regulation, as well as any revisions by the PRO in response to those comments.
- (e) The Department shall approve the updated plan if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. The updated plan is valid for an additional five years, beginning on the date of approval by the Department.
- (f) The PRO shall post the updated approved plan on the PRO's internet website within five calendar days of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051.2, 42060, 42063 and 42070, Public Resources Code.

Section 18980.6.4. Producer Responsibility Plan Amendments

- (a) If paragraph (1) of subdivision (e) of section 42051.2 of the Public Resources Code requires a PRO to submit a proposed plan amendment to the advisory board, the advisory board shall have no more than 60 calendar days to review the amendment and provide

comments to the PRO.

- (b) The PRO shall include, with the proposed plan amendment submitted to the Department as required in paragraph (1) of subdivision (e) of section 42051.2 of the Public Resources Code, a summary of all comments received from the advisory board, and identify revisions, if any, made in response to the comments.
- (c) The Department shall approve the proposed plan amendment if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. In determining whether the proposed plan amendment contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the PRO by the advisory board as summarized by the PRO pursuant to subdivision (b), as well as any revisions by the PRO in response to those comments. Approval does not alter the expiration date of the plan.
- (d) The PRO shall post the amended plan on the PRO's internet website within five calendar days of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051.1, 42051.2, 42060, 42063 and 42070, Public Resources Code.

Section 18980.6.5. Annual Reports

- (a) A PRO shall submit the annual report required by section 42051.3 of the Public Resources Code in two phases, as provided in this section.
- (b) The first phase shall be submitted no later than July 1 of each year after the Department has approved or conditionally approved a PRO plan pursuant to section 18980.6.2. In this phase, a PRO shall submit to the Department the information described in subdivisions (a)(2) and (a)(3)(B), (C), (D), and (E) of section 42051.3 of the Public Resources Code, as

well as any results of the independent audit described in subdivisions (b) and (c) of section 42054 of the Public Resources Code.

- (c) The second phase shall be submitted no later than October 1 of each year after the Department has approved or conditionally approved a PRO plan pursuant to section 18980.6.2. In this phase, a PRO shall submit to the Department the information described in (a)(3)(A) of section 42051.3 of the Public Resources Code.
- (d) Upon submittal of each phase of the annual report to the Department, the PRO shall make that phase of the report available to the public by, at minimum, posting it to its internet website until an approved annual report is posted pursuant to subdivision (f).
- (e) After submission of the second phase of an annual report, the Department shall approve the annual report if it meets the requirements of section 18980.9.1 and section 42051.3 of the Public Resources Code.
- (f) Within five calendar days after approval of the annual report by the Department, the PRO shall post the approved annual report on the PRO's internet website.

Authority: Sections 40401, 40502, 42060, 42063 and 42057, Public Resources Code.

Reference: Section 42051.3, Public Resources Code.

Section 18980.6.6. Document Submittals

- (a) A producer responsibility plan, updated producer responsibility plan, plan amendments, annual report, or any document associated with the preceding that is submitted to the Department by the PRO, shall meet all of the following requirements:
 - (1) The document shall be submitted electronically. The date of electronic submittal will be

considered the date of receipt by the Department.

(2) The document shall be complete and correct.

(A) The Department shall consider a document to be complete if it contains provisions intended to meet all requirements in sections 18980.6.1, 18980.6.3, 18980.6.4, 18980.6.5, 18980.8, 18980.8.1, and 18980.9.1, as applicable to each document, and if it contains sufficient detail for the Department to determine if the requirements in the referenced sections have been met.

(B) A document is correct if all information provided is accurate, exact, and is certified as specified in paragraph (3) of subdivision (a).

(3) The document shall be provided to the Department under penalty of perjury. An individual authorized to act on behalf of the person submitting the document, shall sign the document and provide the following certification statement: "I hereby declare, under penalty of perjury, that the information provided in this document is true and correct, to the best of my knowledge."

(b) Submittals are public documents subject to mandatory disclosure under the California Public Records Act (Division 10 of Title 1 of the Government Code (commencing with section 7920.000)) unless an exemption from such disclosure applies. The Department shall withhold from public disclosure records that the PRO appropriately identifies as trade secrets, subject to the requirements and limitations set forth in Article 14. In addition to identifying the particular content, as prescribed in Article 14, claimed to contain trade secrets and thus be non-disclosable, the PRO shall identify any portions of plans or other documents subject to this section submitted to the Department that it claims to be non-disclosable because they contain financial, production, or sales data, and shall include with the submission a cover letter setting forth its basis for all such claims.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 40062, 42051.1, 42051.3 and 42063, Public Resources Code.

Section 18980.6.7. Eco-Modulated Fee and Fee Schedule

- (a) Prior to approval of an initial plan and for the two years following that approval, a PRO shall charge all participant producers a fee based on the following items as set forth in subdivision (b) of section 42053 of the Public Resources Code:
- (1) Estimated costs of implementing the plan, including the costs to cover the environmental mitigation requirements of section 42064 of the Public Resources Code.
 - (2) Operating costs of the PRO.
 - (3) Costs of completing the needs assessment.
 - (4) Costs to reimburse the Department, including the full personnel costs related to the administration, implementation, and enforcement of this Chapter and the Act. Costs shall include labor, fringe benefits, travel, equipment, supplies, and contracts, as well as costs calculated using section 9213.1 of the State Administrative Manual, including for general administration, budgeting, accounting, business services, training, and legal.
- (b) Beginning two years following the approval of a PRO's plan, the PRO shall charge each participant producer pursuant to subdivision (a) of section 42053 of the Public Resources Code. Such fees shall be based on the fee schedule described in subdivision (c) of section 42053 of the Public Resources Code and eco-modulated as described in the plan. A PRO shall account for the costs to ensure covered materials and covered material categories meet the requirements of this chapter, including minimization of environmental and public health impacts of covered material and the end-of-life management of covered

material.

- (c) Notwithstanding subdivisions (a) and (b), the PRO may charge each participant producer annual fees pursuant to subdivision (a) of section 42053 of the Public Resources Code at any time following approval of the initial plan if the PRO determines it has sufficient data to establish a fee schedule described in subdivision (c) of section 42053 of the Public Resources Code and to eco-modulate fees as described in the plan.
- (d) If a PRO, pursuant to subdivision (f) of section 42053 of the Public Resources Code, charges a participant producer a special assessment, the PRO shall include the special assessment in the fee schedule for participant producers.
- (e) In setting the individual assessments pursuant to paragraph (1) of subdivision (c) of section 42053 of the Public Resources Code, a PRO shall:
 - (1) Determine the base fee rate for each covered material category.
 - (A) In setting the base fee rates, a PRO shall include a justification of each rate, or of the methodology used to derive rates. The justification shall address each factor specified in subdivision (d) of section 42053 of the Public Resources Code. The justification for fees shall be informed, at a minimum, by the relevant data, if any, in the most recent needs assessment, the most recent material characterization study conducted pursuant to subdivision (a) of section 42061 of the Public Resources Code, source reduction data, data pertaining to recycling rates, and data pertaining to the biodegradation or disintegration rates of compostable covered materials.
 - (B) If a PRO's justification contradicts the results of the most recent needs assessment or material characterization studies, the justification shall explain the discrepancy. The PRO shall provide evidence, such as records and data or other information, supporting the explanation.
 - (C) A PRO shall set base fee rates for covered material categories to account for

investments or other expenditures necessary to develop responsible end markets for such covered material categories, implement source reduction measures for such covered material categories, or shift to reuse and refill systems.

- (D) A PRO may set an alternative reduced base fee rate for a select covered material category if an alternative collection program is utilized. The alternative reduced base fee rate shall consider the measurable performance of the alternative collection program relative to the statewide performance of curbside collection for those same materials. Measurable performance factors to consider include, but are not limited to, the percentage of materials recovered by the program, contamination rate, recycling rate, and environmental impacts. The alternative reduced base fee rate shall only apply to producers who utilize an alternative collection program for a specific covered material category. If a PRO sets an alternative reduced base fee rate, the PRO shall in its justification, pursuant to subparagraph (A), explain how the alternative collection program's measurable performance warrants a reduced base fee rate.

(2) Calculate the total individual assessment.

- (A) A PRO shall first calculate the base fee for each covered material category applicable to the producer. The base fee for a covered material category shall be equal to the [base fee rate of a covered material category (BFRCMC) times the [weight of covered material of that covered material category sold, distributed, or imported in or into the state within the previous calendar year (WCMSDI)]:

$$\text{BFRCMC} \times \text{WCMSDI} = \text{Base Fee.}$$

- (B) The total individual assessment shall be the sum of the base fees of each covered material category.

- (f) In setting any adjustments pursuant to paragraph (2) of subdivision (c) of section 42053 of the Public Resources Code, which includes malus fees charged to a producer and credits

awarded to a producer, a PRO shall include a justification.

- (1) The justification shall be done by covered material category and shall address each factor specified in subdivision (e) of section 42053 of the Public Resources Code. The justification for malus fees and credits shall be informed, at a minimum, by the relevant data, if any, in the most recent needs assessment, the most recent material characterization study conducted pursuant to subdivision (a) of section 42061 of the Public Resources Code, source reduction data, data pertaining to recycling rates, and data pertaining to biodegradation or disintegration rates of compostable covered materials.
 - (2) If a PRO's justification for malus fees or credits is in contradiction with the results of the most recent needs assessment or material characterization studies, the PRO in its justification shall provide an explanation of the discrepancy. A PRO shall provide supporting documentation and any data to justify the discrepancy.
- (g) In assessing fees pursuant to paragraph (5) of subdivision (c) of section 42053 of the Public Resources Code, a PRO shall develop a formula to calculate each participant's market share and corresponding environmental mitigation surcharge assessment. Pursuant to section 42064(f) of the Public Resources Code, the formula shall be based on the number of plastic components and weight of plastic covered material a producer offers for sale, sells, distributes, or imports in or into the state. The weight of plastic covered material shall be measured in accordance with paragraph (15) of subdivision (a) of section 18980.1. The PRO shall provide the formula to the Department. The Department shall annually notify the PRO of the PRO's share of the annual environmental mitigation surcharge, accounting for any amount owed by Independent Producers.
- (h) For purposes of accounting for when recycling or composting is made "more difficult by incorporation of specific elements" pursuant to paragraph (2) of subdivision (d) of section 42053 of the Public Resources Code, the publications incorporated into a plan pursuant to

subdivision (j) of section 18980.8 shall apply. An element of covered material shall be considered to make recycling more difficult according to the design guide incorporated pursuant to paragraph (1) of subdivision (j) of section 18980.8 if, as described in the design guide, the element “requires test results” or otherwise prevents the covered material from being considered “preferred.”

- (i) Pursuant to paragraph (4) of subdivision (e) of section 42053 of the Public Resources Code, a PRO shall charge a malus fee to producers who use covered material that contains a chemical listed on the list established pursuant to section 25249.8 of the Health and Safety Code.
- (j) Pursuant to paragraph (7) of subdivision (e) of section 42053 of the Public Resources Code, a PRO shall provide a credit for producers who use plastic covered material derived from renewable materials.
 - (1) “Renewable materials,” for the purposes of paragraph (7) of subdivision (e) of section 42053 of the Public Resources Code, means materials that are wholly derived from natural resources that are not of mineral or fossil fuel origin, without resulting in the net depletion of any of the resources. Examples of potentially renewable material include those derived from wood, mycelium, algae, or plants such as cotton, corn, sugar cane, or wheat.
 - (2) When awarding a credit to participant producers, the PRO shall in its justification specify the feedstocks used to produce the covered material.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Section 25249, Health and Safety Code; Sections 42053 and 42064, Public Resources Code.

Section 18980.6.8. Recordkeeping and Reporting Requirements

(a) A PRO shall maintain records documenting the following:

- (1) For the previous calendar year, for each covered material category, disaggregated by each participant producer:
 - (A) The total weight of material sold, distributed, or imported in or into the state.
 - (B) The total number of plastic components sold, distributed, or imported in or into the state.
 - (C) The total weight of material that is recycled.
 - (D) The total weight of material that is disposed of.
- (2) For covered material collected and recycled or disposed of through a program other than curbside collection programs, for each covered material category:
 - (A) The total weight of material collected by the program.
 - (B) The total weight of material that is recycled.
 - (C) The total weight of material that is disposed of.

(b) A PRO shall maintain the following records:

- (1) Records kept pursuant to subdivision (a) of section 42054 of the Public Resources Code.
- (2) All contracts or agreements established with entities, including, but not limited to, end markets, recycling service providers and intermediate supply chain entities, during each contract's term and for at least three years thereafter.
- (3) Copies of supporting records that were used in creating those reports pursuant to section 18980.10.1.

- (4) Documentation of all information included in the verifications required pursuant to subdivision (c) of section 18980.4.2.
 - (5) Copies of audits and investigations undertaken pursuant to section 18980.4.2.
 - (6) Records required to be maintained pursuant to subparagraph (A) of paragraph (4) of subdivision (c) of section 18980.3.3, if any.
 - (7) Records of complaints received on responsible end markets pursuant to subdivision (f) of section 18980.8.
- (c) Notwithstanding the PRO's obligations with respect to record maintenance and implementation of a records maintenance protocol, each producer is responsible for ensuring that it complies with subdivision (d) of section 42052 of the Public Resources Code, either through records in its custody or records maintained by the PRO. Records in the producer's custody or the PRO's custody must be sufficient for the Department to determine whether the producer is complying with this chapter and the Act.
- (d) All records required to be maintained pursuant to this chapter or the PRO's record maintenance protocol shall be available for inspection by an authorized representative of the Department or other duly authorized regulatory agency and maintained for at least three (3) years.
- (e) An entity subject to requirements under this article or the Act shall, within 10 calendar days of receiving written request from the Department, provide to the Department records necessary for the Department to assess the entity's compliance. At the Department's option, records shall be provided either by allowing physical access during normal business hours to the Department or other duly authorized regulatory agency or by submitting them to the Department by electronic means.
- (f) For the purposes of this article, the weight of material recycled shall be determined according to paragraph (2) of subdivision (b) of section 18980.3.2.

- (g) For the purposes of this article, the weight of material disposed of shall be determined according to paragraph (3) of subdivision (b) of section 18980.3.2.

Authority: Sections 40401, 40502, 42057 and 42060, Public Resources Code.

Reference: Sections 42051.1, 42052 and 42054, Public Resources Code.

ARTICLE 7: Requirements for Independent Producers

Section 18980.7. Independent Producer Plan Submission

- (a) An Independent Producer approved by the Department pursuant to section 18980.5.1 shall, within six months, prepare and submit a producer responsibility plan to the advisory board pursuant to section 42051.2 of the Public Resources Code.
- (b) Upon submittal of the producer responsibility plan to the advisory board as required by subdivision (a) of section 42051.2 of the Public Resources Code, the Independent Producer shall make the plan available for review and public comment by, at minimum, posting the plan to its internet website.
- (c) The producer responsibility plan submitted to the Department as required in paragraph (1) of subdivision (b) of 42051.2 of the Public Resources Code shall include a summary of all comments received from the advisory board and the public, and identify revisions, if any, made in response to any comments. Additionally, the Independent Producer shall also make the revised plan available to the public by, at minimum, posting the plan to its internet website until an approved plan is posted pursuant to subdivision (c) of section 42051.2 of the Public Resources Code.
- (d) In the event of the termination of a plan by an Independent Producer, the entity shall submit a written notice of intent to terminate a plan to the Department. The effective date

of the termination shall be the date the Department receives such written notice, except that, if the written notice indicates that the termination of the plan is conditioned upon the Independent Producer becoming a participant producer, the termination shall only become effective as of the date the Department receives written notice that the entity has been accepted by a PRO as a participant producer.

Authority: Sections 40401, 40502, 42057 and 42060, Public Resources Code.

Reference: Sections 42051, 42051.1 and 42051.2, Public Resources Code.

Section 18980.7.1. Independent Producer Plan Approval

- (a) The Department shall approve an Independent Producer plan if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. In determining whether the plan contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the Independent Producer by the advisory board and public as summarized by the Independent Producer pursuant to subdivision (c) of section 18980.7 of these regulations as well as any revisions by the Independent Producer in response to those comments.
- (b) Conditional approval shall be granted if the Department determines that certain elements of the plan do not meet certain requirements of the Act or this chapter, but if conditions identified by the Department are met, final approval will be warranted. Such conditions may include, without limitation, clarification to remove ambiguities or the addition of information or data demonstrating that particular requirements have been met. While approval conditions are pending, the plan shall be considered approved for purposes of the Act and this chapter.

(c) If the Department conditionally approves the plan, the Independent Producer shall, until the conditions on approval have been met, submit the following information on or before the last day of every month, beginning the first full calendar month after conditional approval:

(1) Estimated date for resubmittal of the revised plan. Pursuant to paragraph (3) of subdivision (b) of section 42051.2 of the Public Resources Code, this date must be no later than 12 months after conditional approval.

(2) Status updates for each approval condition, including specific description of how it is being addressed.

(d) If the approval conditions are not met within 12 months after conditional approval, the conditional approval shall end, and the Independent Producer shall be deemed not in compliance with the Act and this chapter.

(e) A plan approved by the Department is valid for five years from the date of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051, 42051.2 and 42063, Public Resources Code.

Section 18980.7.2. Review of Updated Independent Producer Plan

(a) An Independent Producer shall submit a proposed updated plan to the advisory board as required in paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code at least 180 days before the expiration date of its producer responsibility plan.

(b) Upon submittal of the producer responsibility plan to the advisory board as required by

paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code, the Independent Producer shall make the proposed updated plan available for review and public comment by, at minimum, posting the plan to its internet website. No later than 60 calendar days after the Independent Producer's submission of the proposed updated plan, the advisory board shall provide any written comments to the Independent Producer.

- (c) No later than 120 calendar days after receiving comments from the advisory board, the Independent Producer shall submit the updated producer responsibility plan to the Department as required in paragraph (2) of subdivision (d) of section 42051.2 of the Public Resources Code, include summary of all comments received from the advisory board and the public, and identify revisions, if any, made in response to the comments as summarized by the Independent Producer. Additionally, the Independent Producer shall make the plan available for public review by, at minimum, posting the plan to its internet website until an approved updated plan is posted.
- (d) In determining whether the updated plan contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the Independent Producer by the advisory board and the public as summarized by the Independent Producer pursuant to subdivision (c) of these regulation, as well as any revisions by the Independent Producer in response to those comments.
- (e) The Department shall approve the updated plan if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. The updated plan is valid for an additional five years, beginning on the date of approval.
- (f) The Independent Producer shall post the updated approved plan on the Independent Producer's internet website within five calendar days of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051.2, 42063 and 42070, Public Resources Code.

Section 18980.7.3. Independent Producer Plan Amendments

- (a) If paragraph (1) of subdivision (e) of section 42051.2 of the Public Resources Code requires an Independent Producer to submit a proposed plan amendment to the advisory board, the advisory board shall have no more than 60 calendar days to review the amendment and provide comments to the Independent Producer.
- (b) The Independent Producer shall include, with the proposed plan amendment submitted to the Department as required in paragraph (1) of subdivision (e) of section 42051.2 of the Public Resources Code, summary of all comments received from the advisory board and identify revisions, if any, made in response to the comments.
- (c) The Department shall approve the proposed plan amendment if it contains all the elements required pursuant to the Act and meets all requirements of this chapter. In determining whether the proposed plan amendment contains all the elements required pursuant to the Act and meets all requirements of this chapter, the Department shall consider comments submitted to the Independent Producer by the advisory board as summarized by the Independent Producer pursuant to subdivision (b), as well as any revisions by the Independent Producer in response to those comments. Approval does not alter the expiration date of the plan.
- (d) The Independent Producer shall post the amended plan on the Independent Producer's internet website within five calendar days of approval by the Department.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 42051, 42051.1, 42051.2 and 42070, Public Resources Code.

Section 18980.7.4. Independent Producer Annual Reports

- (a) An Independent Producer shall submit to the Department an annual report that includes an annual budget pursuant to section 42051.3 of the Public Resources Code no later than October 1 of each year after the Department has approved or conditionally approved an Independent Producer plan pursuant to section 18980.7.1.
- (b) Upon submittal of an annual report to the Department, the Independent Producer shall make the annual report available to the public by, at minimum, posting the document to its internet website until an approved annual report is posted pursuant to subdivision (d).
- (c) The Department shall approve annual reports if they meet the requirements of section 18980.9.1 and section 42051.3 of the Public Resources Code.
- (d) Within five calendar days after approval of the annual report by the Department, the Independent Producer shall post the approved annual report on the Independent Producer's internet website.

Authority: Sections 40401, 40502, 42060, 42063 and 42057, Public Resources Code.

Reference: Sections 42051 and 42051.3, Public Resources Code.

Section 18980.7.5. Independent Producer Document Submittals

- (a) A producer responsibility plan, updated producer responsibility plan, plan amendments, annual report, or any document associated with the preceding that is submitted to the Department by an Independent Producer, shall meet all the following requirements:
 - (1) The document shall be submitted electronically. The date of electronic submittal will be

considered the date of receipt by the Department.

(2) The document shall be complete and correct.

(A) The Department shall consider a document to be complete if it contains provisions intended to meet all requirements in sections 18980.7, 18980.7.2, 18980.7.3, 18980.7.4, 18980.8, and 18980.9.1, as applicable to each document, and if it contains sufficient detail for the Department to determine if the requirements in the referenced sections have been met.

(B) A document is correct if all information provided is accurate, exact, and is certified as specified in subdivision (a)(3).

(3) The document shall be provided to the Department under penalty of perjury. An individual authorized to act on behalf of the person submitting the document shall sign the document and provide the following certification statement: "I hereby declare, under penalty of perjury, that the information provided in this document is true and correct, to the best of my knowledge."

(b) Submittals are public documents subject to mandatory disclosure under the California Public Records Act (Division 10 of Title 1 of the Government Code (commencing with section 7920.000)) unless an exemption from such disclosure applies. The Department shall withhold from public disclosure records that the Independent Producer appropriately identifies as trade secrets, subject to the requirements and limitations set forth in Article 14. In addition to identifying the particular content, as prescribed in Article 14, claimed to contain trade secrets and thus be non-disclosable, the producer shall identify any portions of plans submitted to the Department that it claims to be non-disclosable because they contain financial, production, or sales data, and shall include with the submission a cover letter setting forth its basis for all such claims.

Authority: Sections 40401, 40502, 42060 and 42063, Public Resources Code.

Reference: Sections 40062, 42051, 42051.1, 42051.3 and 42063, Public Resources Code.

Section 18980.7.6. Independent Producer Environmental Mitigation Surcharge

The Department shall determine the percentage of the total amount of plastic covered material produced and reported by all producers for which each Independent Producer is the producer, and the Independent Producer shall pay that percentage of the total environmental mitigation surcharge imposed by section 42064 of the Public Resources Code. The percentage share shall be the average of the percentage calculated using the weight of the plastic covered material and the percentage calculated using number of plastic components.

Authority: Sections 40401, 40502, 42060 and 42064, Public Resources Code

Reference: Sections 42051 and 42064, Public Resources Code

Section 18980.7.7. Independent Producer Recordkeeping and Reporting Requirements

(a) An Independent Producer shall maintain records documenting the following:

(1) For the previous calendar year, for each covered material category:

(A) The total weight of material sold, distributed, or imported in or into the state.

(B) The total number of plastic components sold, distributed, or imported in or into the state.

(C) The total weight of material that is recycled.

- (D) The total weight of material that is disposed of.
- (2) For each covered material collected and recycled through a program other than curbside collection programs, for each covered material category:
 - (A) The total weight of material collected by the program.
 - (B) The total weight of material that is recycled.
 - (C) The total weight of material that is disposed of.
- (b) An Independent Producer shall maintain the following records:
 - (1) Records kept pursuant to subdivision (a) of section 42054 of the Public Resources Code.
 - (2) All contracts or agreements established with entities, including, but not limited to, end markets, recycling service providers and intermediate supply chain entities, during each contract's term and for at least three years thereafter.
 - (3) Copies of supporting records that were used in creating the reports submitted pursuant to section 18980.10.1.
 - (4) Documentation of all information included in the verifications required pursuant to subdivision (c) of section 18980.4.2.
 - (5) Copies of audits and investigations pursuant to section 18980.4.2.
 - (6) Records required to be maintained pursuant to subparagraph (A) of paragraph (4) of subdivision (c) of section 18980.3.3, if any.
 - (7) Records of complaints received on responsible end markets pursuant to subdivision (f) of section 18980.8.
- (c) The Independent Producer is responsible for ensuring that it complies with subdivision (d) of section 42052 of the Public Resources Code. Records in the Independent Producer's

custody must be sufficient for the Department to determine whether the Independent Producer is complying with this chapter and the Act.

- (d) All records required to be maintained pursuant to this chapter or by the Independent Producer's record maintenance protocol shall be available for inspection by an authorized representative of the Department or other duly authorized regulatory agency and maintained for at least three (3) years.
- (e) An entity subject to requirements under this article or the Act shall, within 10 calendar days of receiving written request from the Department, provide to the Department records necessary to assess the entity's compliance. At the Department's option, records shall be provided either by allowing physical access during normal business hours to the Department or other duly authorized regulatory agency or by submitting them to the Department by electronic means.
- (f) For the purposes of this article, the weight of material recycled shall be determined according to paragraph (2) of subdivision (b) of section 18980.3.2.
- (g) For the purposes of this article, the weight of material disposed of shall be determined according to paragraph (3) of subdivision (b) of section 18980.3.2.

Authority: Sections 40401, 40502, 42057 and 42060, Public Resources Code.

Reference: Sections 42051, 42051.1, 42052, and 42054, Public Resources Code.

ARTICLE 8: Producer Responsibility Plan Requirements

Section 18980.8. Producer Responsibility Plan

- (a) Subject to subdivision (b), all producer responsibility plans shall meet all of the

requirements outlined in section 42051.1 of the Public Resources Code and all other requirements set forth in the Act and this chapter.

- (b) For purposes of determining the required elements of Independent Producer plans, all references to a PRO in the Act with respect to plan requirements apply equally to Independent Producers, except for subdivisions (d) and (f), subparagraph (D) of paragraph (1) of subdivision (j), paragraph (3) of subdivision (j), and paragraphs (1) through (3) of subdivision (m) of sections 42051.1 of the Public Resources Code, and subdivision (d) of section 42051, section 42053, paragraph (2) of subdivision (a) of section 42053.5, and section 42056 of the Public Resources Code, which do not apply to Independent Producer plans.
- (c) Pursuant to paragraph (3) of subdivision (b) of section 42051.1 of the Public Resources Code, for each technology that will be utilized to achieve recycling requirements, the plan shall additionally include:
 - (1) An explanation of how the technology is employed in recycling.
 - (2) A specification of the materials that are recycled by utilizing the technology.
 - (3) A description of the level of contamination the technology is able to tolerate.
 - (4) A list of overall inputs, including chemicals, if applicable.
 - (5) An account of end products, including quantities of by-products or residuals produced by the technology, along with their disposition (for example, further processing or landfill disposal).
 - (6) Current operational status, including location of current and proposed sites.
 - (7) An assessment of potential public health and environmental impacts to disadvantaged communities, low-income communities, or rural areas.
 - (8) An evaluation of the efficiency of the technology in achieving recycling rates.

- (9) Information on financial viability, capacity, and cost-effectiveness.
 - (10) A demonstration that the means and technologies meet the conditions specified in the definition of “recycle” or “recycling” pursuant to subdivision (aa) of section 42041 of the Public Resources Code.
- (d) In addition to the examples provided in paragraphs (1) through (4) of subdivision (e) of section 42051.1 of the Public Resources Code, the plan shall include the following education and promotion efforts to educate ratepayers to improve the preparation and sorting, as needed, for covered material:
- (1) A description of performance measures, which shall evaluate performance of the comprehensive education and outreach program including, but not limited to, ultimate user awareness, program usage, and accessibility.
 - (2) Provision of educational and outreach materials for consumers that are accessible in languages suited to local demographics, consistent with section 7295 of the Government Code.
 - (3) A process for coordinating education and promotional efforts between entities including, but not limited to, the PRO, Independent Producers, local jurisdictions, recycling service providers, and alternative collection programs.
- (e) The plan shall include all information specified in subparagraph (A) of paragraph (4) of subdivision (a) of section 18980.4, subparagraph (1) through (3) of subdivision (a) of section 18980.4.1, subdivision (d) of section 18980.4.1, and subdivisions (a) and (d) of section 18980.4.3.
- (f) The plan shall include a process for implementing and maintaining a formal complaint process, specifically for addressing complaints related to responsible end markets utilized by the PRO or Independent Producers. The process at minimum, shall:
- (1) Clearly outline the steps and requirements for persons submitting a complaint.

- (2) Establish criteria for assessing the validity and seriousness of alleged complaints.
 - (3) Specify the process, including estimated timelines, for reviewing, processing, evaluating, investigating and resolving alleged complaints.
- (g) Pursuant to paragraph (1) of subdivision (g) of section 42051.1 of the Public Resources Code, the plan shall include a process for determining and paying costs that will be incurred, or otherwise would be incurred, by local jurisdictions, recycling service providers, alternative collection programs, and others due to requirements of the Act. For purposes of this subdivision, costs that the PRO and Independent Producers are obligated to pay are referred to as “covered costs.” The process for determining covered costs must satisfy the following criteria:
- (1) Costs incurred before January 1, 2023, are not covered costs.
 - (2) Any of the following costs incurred due to requirements of the Act are covered costs:
 - (A) A cost of the same nature as one that would ordinarily exist, or be expected to exist, but is greater due to the requirements of the Act. Only the amount of the increase caused by such requirements is a covered cost.
 - (B) A cost that would not reasonably have been expected to be incurred in the absence of the Act, such as a cost that is of a different nature than ordinarily expected costs and is incurred specifically for the purpose of complying with the requirements of the Act.
 - (C) A cost specifically approved in advance by the PRO or Independent Producer as a covered cost.
 - (3) For every cost identified by the entity, the PRO or Independent Producer shall determine the extent to which it is a covered cost. The PRO or Independent Producer shall notify the entity of all determinations in writing.

- (4) The process must establish reasonable periods for making determinations pursuant to paragraph (3) and issuing payments, if any.
- (5) An entity may seek a determination pursuant to paragraph (3) before it incurs costs it considers to be covered costs. The PRO or Independent Producer shall consider the expected costs that the entity identifies and determine the extent to which they are covered costs.
- (6) In addition to allowing identification of covered costs based on claims for certain amounts as described in paragraphs (3) through (5), the process may establish a performance-based approach (e.g., based on tons of covered material) for identifying covered costs. An entity that opts to have covered costs for certain activities determined in such a manner shall not also request that those covered costs for those activities be determined according to paragraph (3).
- (7) Subject to the dispute resolution procedure provided in subdivision (h), the PRO or Independent Producer shall not be required to pay costs that had been submitted to the PRO or Independent Producer for consideration before they were incurred and were determined not to be covered costs.
- (8) For costs determined to be a recycling service provider's covered costs, the PRO or Independent Producer shall first notify the local jurisdiction on whose behalf a recycling service provider provides solid waste handling services of such determination. The notice may be the same notice provided to the local jurisdiction pursuant to paragraph (3) and shall, at a minimum, describe the nature and amount of the covered costs.
- (h) Pursuant to paragraph (2) of subdivision (g) of section 42051.1 of the Public Resources Code, the plan shall include a dispute resolution process concerning determinations of whether and to what extent costs incurred by local jurisdictions and recycling service providers are covered costs.

- (1) The process must allow a local jurisdiction or recycling service provider to initiate the process after the PRO or Independent Producer has determined whether particular costs are covered costs or if the PRO or Independent Producer fails to make a determination or payment within the period established for doing so pursuant to paragraph (4) or subdivision (g).
- (2) The advisory board, when reviewing any plan submitted to it, shall review the process and consider whether to suggest changes to ensure that the PRO or Independent Producer covers costs related to the Act.
- (3) The process must avoid unnecessary burden on local jurisdictions and recycling service providers.
- (4) The process must provide the option for the local jurisdiction or recycling service provider to require the dispute to be submitted to mediation and, if no agreement is reached through mediation, binding arbitration. The PRO or Independent Producer plan shall include the express terms of an agreement that, upon the local jurisdiction or recycling service provider's exercise of its option, will govern mediations and arbitrations. The agreement's express terms must comply with the following restrictions:
 - (A) Each mediation or arbitration shall be administered by a nationally recognized service provider. The plan shall identify a mediation service provider and an arbitration service provider, or a single service provider for both, but the parties involved in the dispute may agree to utilize any other entity, subject to the other requirements set forth in this paragraph.
 - (B) Arbitration, if any, shall be conducted under rules and procedures deemed appropriate by the arbitrator or arbitration panel for resolution of the dispute, in consideration of the complexity of the evidentiary and legal issues involved in the matter, subject to the requirements of sections 1280 through 1294.4 of the Code of

Civil Procedure. To the extent the parties agree to any rules or procedures that comply with those sections, the arbitrator or arbitration panel shall adopt such rules or procedures.

- (C) Mediators and arbitrators or arbitration panels shall be agreed upon by the parties or shall be selected according to a process agreed upon by the parties. If the parties are unable to agree upon appointment of a mediator, one shall be assigned by the mediation service provider. If the parties are unable to agree upon appointment of an arbitrator, each party shall select one arbitrator, and the selected arbitrators shall then select a third arbitrator, who shall act as chair to the arbitration panel.
- (D) The decision of the arbitrator or arbitration panel shall be binding.
- (E) Unless the parties agree otherwise, arbitration and mediation fees shall be apportioned equally among the parties. Each party shall be responsible for their own attorney's fees.
- (F) The arbitrator or arbitration panel must be empowered to determine the reasonable costs, if any, for which the PRO or Independent Producer must pay the local jurisdiction or recycling service provider pursuant to subdivision (g) of section 42051.1 of the Public Resources Code. The arbitrator or panel shall apply that provision as follows:
 - (i) The determination shall be made in light of all provisions of the Act relevant to payment of such costs, including paragraph (1) of subdivision (a) of section 42060, paragraph (1) of subdivision (j) of section 42051.1, subdivision (l) of section 42051.1 of the Public Resources Code, and all provisions affecting the costs that local jurisdictions and recycling service providers may incur.
 - (ii) Cost determinations shall be subject to the limitations provided in subdivision

(b).

(G) The local jurisdiction or recycling service provider shall not be required to agree to submit a matter to binding arbitration as a precondition for submitting the matter to mediation.

(5) Notwithstanding the foregoing, the parties to any dispute may resolve the dispute in any manner mutually agreed upon, such as through mediation, non-binding arbitration, or arbitration without regard to the dispute resolution provisions of the plan.

(6) Nothing in this subdivision shall be construed as empowering the PRO or Independent Producers to require local jurisdictions or recycling service providers to submit any matter to mediation or arbitration.

(i) If the plan is a PRO plan, the plan shall establish the process required pursuant to paragraph (1) of subdivision (f) of section 18980.3. If the plan is an Independent Producer plan, it shall instead include the information required pursuant to paragraph (2) of subdivision (f) of section 18980.3 for any covered materials claimed to be recyclable pursuant to paragraph (4) of subdivision (d) of section 42355.51 or paragraph (5) of subdivision (d) of section 42355.51 of the Public Resources Code.

(j) The plan shall additionally include:

(1) In its entirety, the then-current version of the design guide referenced in subparagraph (A) of paragraph (3) of subdivision (d) of section 42355.51 of the Public Resources Code.

(A) Such version shall apply to determinations of recyclability of covered materials, as set forth in paragraph (1) of subdivision (b) of section 18980.3, and to the requirement under paragraph (2) of subdivision (d) of section 42053 of the Public Resources Code that the PRO's fees account for the difficulty of recycling covered material, as set forth in subdivision (g) of section 18980.6.7.

(B) In the event that an updated version of the design guide incorporated into the plan becomes available, the updated design guide may only become part of the plan through a plan updated pursuant to section 18980.6.3 or amended pursuant to section 18980.6.4. In an updated or amended plan, any changes to the design guide that would affect the recyclability of covered materials shall be identified and the impacts explained.

(2) Any other publications, in their entirety, that the PRO may rely on pursuant to paragraph (2) of subdivision (d) of section 42053 of the Public Resources Code to account for the difficulty of recycling or composting covered material caused by elements that are detrimental to recycling or composting.

(k) If the plan is a PRO plan, it shall include a description of how the PRO will coordinate with any Independent Producers. If the plan is an Independent Producer plan, it shall include a description of how the Independent Producer will coordinate with the approved PRO and any other Independent Producers.

Authority: Sections 40401, 40502, 42041, 42060 and 42063, Public Resources Code.

Reference: Sections 42041, 42051, 42051.1, 42051.2, 42060, 42063, 42080, 42081, and 42355.51, Public Resources Code; section 7295, Government Code.

Section 18980.8.1. Plan Requirements Specific to a PRO

(a) Pursuant to subdivision (f) of section 42051.1 of the Public Resources Code, the PRO's plan shall include a closure and transfer plan, as specified in section 18980.8.2.

(b) Pursuant to subdivision (d) of section 42051.1 and subdivision (c) of section 42053 of the Public Resources Code, the PRO's plan shall include a fee schedule. The fee schedule

shall be developed using the requirements specified in section 18980.6.7.

- (c) Pursuant to subdivision (m) of section 42051.1 of the Public Resources Code, the PRO's plan shall include procedures and methods for ensuring that all items claimed as the basis for source reduction through shifting to reusable or refillable items satisfy the requirements to be considered reusable or refillable. The plan shall explain, at a minimum, how the PRO will: confirm items are designed for durability; assess convenience, safety, and environmental risks; and determine the average number of uses or refills for packaging reused or refilled by producers.
- (d) Pursuant to paragraph (4) of subdivision (m) of section 42051.1 of the Public Resources Code, at a minimum, the plan's record maintenance protocol must include specific requirements to ensure that each producer provides records to the PRO that are sufficient to demonstrate that the producer has complied with the plan and the Act.
- (e) The plan shall authorize the Trustee or Agent for the Closure and Transfer Plan established pursuant to section 42056 and subdivision (f) of section 42051.1 of the Public Resources Code to develop and implement, subject to department approval and only after the Closure and Transfer Plan self-executes pursuant to section 18980.8.2, adaptive management strategies to ensure that the requirements of the Act are met if specific plan elements conflict with their achievement. Adaptive management authority shall include authorizing the Trustee or Agent to make changes to the fee schedule and all appropriate components thereof to ensure that the plan operates in a manner that does not conflict with the requirements of the Act.

Authority: Sections 40401, 40502, and 42060, Public Resources Code.

Reference: Sections 42051.1, 42053, 42056 and 42057, Public Resources Code.

Section 18980.8.2. Closure and Transfer Plan Requirements

(a) The Closure and Transfer Plan pursuant to subdivision (f) of section 42051.1 of the Public Resources Code shall be self-executing as of either the effective date of dissolution of a PRO or termination of its plan, as proposed in the notice provided to the Department pursuant to paragraph (7) of subdivision (b) of section 18980.8.2, or five calendar days after actual revocation. The Closure and Transfer Plan shall include the following:

(1) Information pertaining to the trustees or agents that will implement the Closure and Transfer Plan, if executed, including the following:

(A) Primary and secondary contact names, contact information, and affiliations for the Initial Trustee or Agent who will implement the Closure and Transfer Plan.

(B) Primary and secondary contact names, contact information, and affiliations for the Successor Trustee or Agent who will implement the Closure and Transfer Plan if the Initial Trustee or Agent is unable to serve.

(C) A statement acknowledging that the Department will serve as the Trust Protector or Escrow Account Protector and the Beneficiary of the Trust or Escrow Account, and may provide direction to the Trustee or Agent and may remove and replace a Trustee or Agent at its discretion.

(D) A description of the credentials, qualifications, requisite industry knowledge, financial expertise, and skill in contract administration necessary for the Trustees or Agents to fulfill all the duties required by the Act, these regulations, and the Closure and Transfer Plan and an indication of their consent to be appointed as a Trustee or Agent.

(E) Names and roles of key entities who may be affected by or have responsibilities pursuant to the initiation of the Closure and Transfer Plan. Such entities include, but are not limited to, participant producers, intermediate supply chain entities, local

jurisdictions, recycling service providers, responsible end markets, and any other entity contracted with the PRO.

- (F) A description of how the Trustee or Agent will receive payment for its services; for example, out of a specifically budgeted amount included in the Closure Fund.
- (2) An explanation of how the PRO will ensure that the Closure and Transfer Plan can be fully executed through a Trustee or Agent according to the requirements of this chapter, with the direction of the Department, including how the PRO will:
 - (A) Empower the Trustee or Agent to satisfy the obligations of the PRO and implement the Closure and Transfer Plan.
 - (B) Facilitate the Trustee's or Agent's transfer of administration to the successor PRO or PROs.
 - (C) Ensure that all contracts and other agreements are fully assignable to and assumable by the Trustee or Agent and fully assignable by the Trustee or Agent to the successor PRO or PROs, and assumable by the successor PRO or PROs.
- (3) Documentation that demonstrates the PRO has created and will maintain the Closure Fund, a trust fund or escrow account established pursuant to section 42056 of the Public Resources Code, separately from the PRO's other accounts:
 - (A) Providing at all times, from thirty-six months after the time at which the first PRO plan is approved, for the full funding of the activities necessary to perform all of the PRO's obligations during, at minimum, a six-month period, except for its obligations pursuant to paragraphs (1) and (2) of subdivision (e) of section 42064 of the Public Resources Code. Funding necessary to perform the PRO's obligations pursuant to paragraphs (1) and (2) of subdivision (e) of section 42064 of the Public Resources Code shall not be required as part of the Closure Fund, trust fund, or escrow account.

- (i) Until the Closure Fund is fully funded thirty-six months after the approval of the first PRO plan, the PRO shall also provide to the Department documentation of a letter of credit maintained by the PRO with a lending institution that would make whole the full funding obligation if the Closure and Transfer Plan is executed.
 - (B) Existing continuously through to the transfer to the Trustee or Agent in an account dedicated solely to satisfying the obligations of the PRO during the closure period.
 - (C) Into which the PRO will deposit moneys allocated to the payment of the PRO's obligations pursuant to paragraphs (1) and (2) of subdivision (e) of section 42064 of the Public Resources Code concerning the annual surcharge, as further specified by the PRO in its Closure and Transfer Plan and these regulations.
- (4) An explanation of how the PRO will ensure that, upon the self-execution of the Closure and Transfer Plan, adequate moneys will be available and deposited into the Closure Fund to satisfy its obligations pursuant to paragraphs (1) and (2) of subdivision (e) of section 42064 of the Public Resources Code concerning the annual surcharge, including the PRO's methodology for calculating the adequacy of the moneys.
- (5) An explanation of the following:
- (A) How the PRO will provide the Department and Trustee or Agent with all necessary documents and information pursuant to subdivision (b) of this section.
 - (B) The PRO's methodology for its financial computation and modeling assuring fund solvency, including how it calculates the cost of satisfying all of its obligations over a six-month period, except for those obligations specifically identified in paragraph (4) of this subdivision.
 - (C) The PRO's plans for communicating with Producers, responsible end markets, materials recovery facilities (MRFs), contractors, local jurisdictions, and other key

entities about the activation and carrying out of the Closure and Transfer Plan and directing communications to the Department.

(6) A description of how the Trustee or Agent will perform its tasks and receive payment for its services. The description shall include:

(A) The Trustee or Agent's scope of work.

(B) The process for revising a Trustee or Agent's scope of work.

(C) How the PRO and Trustee or Agent will independently confirm payment of the Trustee or Agent.

(7) Self-execute on the effective date of dissolution of a PRO or termination of its plan, as noticed to the Department pursuant to paragraph (7) of subdivision (b) of section 18980.8.2, or five calendar days after actual revocation.

(8) Authorization of the Trustee or Agent's development and implementation, subject to department approval, of adaptive management strategies to ensure that the requirements of the Act are met if specific plan elements conflict with their achievement, including those specific adaptive management authorities specified in subdivision (e) of section 18980.8.1.

(b) The PRO shall:

(1) Ensure that all its contracts and other agreements are assignable to and assumable by the Trustee or Agent, assignable by the Trustee or Agent to the successor PRO or PROs, and assumable by the successor PRO or PROs.

(2) Provide evidence that, at any given time, the contents of the Closure Fund can fully satisfy the PRO's obligations during a six-month period except those obligations specifically identified in paragraph (4) of subdivision (a) of this section. Such evidence shall:

- (A) Include financial modeling that assures fund solvency through Closure and Transfer Plan implementation, based on current program activity levels and most recent cost and revenue data.
- (B) Be provided to the Department in annual reports and at any time upon the request of the Department.
- (3) Notify the Department of any proposed change to its scope of work and seek the approval of the Department.
- (4) Notify the Department when changes to its scope of work are finalized.
- (5) Notify the Department of any of the following circumstances at the time specified:
 - (A) Immediately upon discovery that the current contents of the Closure Fund are insufficient to support the estimated cost to fulfill the PRO's obligations identified in paragraph (2) of this subdivision over the next six months.
 - (B) No more than five calendar days after the PRO determines that the Trustee or Agent is temporarily or permanently unwilling or unable to carry out its obligations under the Closure and Transfer Plan.
- (6) Immediately deposit an amount that will establish Closure Fund solvency if the PRO believes that the Closure Fund is underfunded or if the Department notifies the PRO that it lacks sufficient information to verify the Closure Fund is solvent. If directed by the Department, cease spending until the Closure Fund is solvent.
- (7) In the event of the dissolution of a PRO or termination of a PRO's plan, submit to the Department a written electronic notice of intent no fewer than 180 days prior to the PRO's proposed date of dissolution or termination. The notice shall include, at a minimum, the following information:
 - (A) The proposed effective date of dissolution or plan termination, including a

description of why the effective date is appropriate.

(B) The PRO's reason for proposing to dissolve or terminate its plan.

(C) A detailed description of how the PRO will implement the plan until the proposed effective date of dissolution or plan termination, and thereafter, how the Trustee or Agent shall meet the requirements pursuant to subdivision (f) of section 42051.1 of the Public Resources Code.

(D) An explanation of the PRO's outstanding obligations to the Department and key entities and how it will fulfill these obligations prior to the proposed effective date of dissolution or plan termination.

(E) If the Department does not approve the proposal, the PRO may revise its proposal addressing deficiencies identified by the Department and resubmit the proposal to the Department.

(8) The PRO shall notify the Department immediately in any of the following circumstances:

(A) The governing board or members of the organization serving as the PRO, by vote, consent, adoption of resolution, or any other method, take affirmative steps to dissolve the organization.

(B) In pursuit of dissolution, an organization serving as the PRO seeks a waiver concerning dissolution from the California State Attorney General or the Attorney General of the state in which the organization is incorporated or organized.

(C) In pursuit of dissolution, an organization serving as the PRO files documents related to dissolution with the California Secretary of State or any other governmental agency, including tax authorities providing tax clearances and governmental agencies in the state in which the organization is incorporated or organized.

- (9) Provide the Department and the Trustee or Agent with all records necessary to implement the Closure and Transfer Plan, including contract and agreement records, preliminary accounting of the Closure Fund, including its balance, and any other PRO accounts and assets, as well as all necessary contact information for Producers, responsible end markets, materials recovery facilities (MRFs), contractors, local jurisdictions, and other key entities.
- (A) Where the Closure and Transfer Plan is being activated due to plan revocation, these records must be provided no later than five calendar days after plan revocation.
- (B) Where the Closure and Transfer Plan is being activated due to dissolution or termination, these records must be provided no later than the established termination date.
- (10) Immediately upon self-execution of the Closure and Transfer Plan carry out all actions assigned to it under the Closure and Transfer Plan, unless directed otherwise in writing by the Department, including:
- (A) Deposit into the Closure Fund all moneys allocated to satisfy its obligations pursuant to paragraphs (1) and (2) of subdivision (e) of section 42064 of the Public Resources Code concerning the annual surcharge and any unexpended funds.
- (B) Transfer the Closure Fund, complete with all funds described in subparagraph (A) of this paragraph, on the execution date of the Closure and Transfer Plan and provide a complete accounting of the fund balance, along with accounts payable and receivable. Thereafter, the PRO shall provide to the Department and the Trustee or Agent any additional financial information received by the PRO concerning the plan.
- (C) Assign all third-party contracts to the Trustee or Agent contemporaneously with the

transfer of the Closure Fund.

(c) Annually and as otherwise directed by the Department, the PRO shall confirm the credentials of the Initial Trustee or Agent and Successor Trustee or Agent and their willingness and ability to carry out all duties required by the Act, these regulations, and the Closure and Transfer Plan. The PRO shall furnish the Department with this information. The PRO shall immediately notify the Department if the Initial Trustee or Agent or Successor Trustee or Agent becomes unwilling or unable to serve.

(d) The Trustee or Agent shall:

- (1) Notify the Department within five calendar days if it believes that the PRO has breached its contract.
- (2) Notify the Department of any proposed changes to its scope of work and seek the approval of the Department.
- (3) Receive the Closure Fund on the execution date of the Closure and Transfer Plan and administer it thereafter.
- (4) As appropriate, assume or accept the assignment of all PRO contracts and agreements.
- (5) Propose adaptive management strategies to the department for its approval and implement them once approved.
- (6) Implement the PRO's most recently approved PRO plan, as augmented by any adaptive management strategies necessary to meet the requirements of the Act, if applicable.
- (7) Upon written request, immediately provide to the Department records necessary to determine compliance with the Act and its implementing regulations. At the Department's option, records shall be provided either by allowing physical access

during normal business hours to the Department or other duly authorized regulatory agency or by submitting them to the Department by electronic means.

(8) Meet weekly to receive advice on the administration of the Closure and Transfer Plan, unless the Department determines that such meetings are not necessary for the Trustee or Agent to perform its obligations under this section.

(9) Submit an annual report to the Department that contains the information required by section 42063 of the Public Resources Code and Article 9 of this chapter.

(10) Oversee the dissolution of the trust or escrow account and settle the obligations of the trust or escrow account if the Trustee or Agent and the Department concur that funds are insufficient to continue the implementation of the Closure and Transfer Plan or if the Department exercises its discretion not to continue the Closure and Transfer Plan.

(11) Transfer all responsibilities to the Successor PRO or PROs, if directed by the Department to do so, and assign all contracts and agreements to the appropriate entity, if directed by the Department.

(e) The Department may:

(1) Direct the Trustee or Agent.

(2) Dismiss a Trustee or Agent.

(3) Appoint a Trustee or Agent upon its dismissal of a Trustee or Agent or the Trustee's or Agent's inability to serve.

(4) During the period from the self-execution of the Closure and Transfer Plan through the approval of a Successor PRO's plan, review and approve, if warranted, written requests from the Trustee or Agent to implement adaptive management strategies pursuant to the PRO's previously approved plan if the requirements of the Act cannot

be met without adaptive management.

Authority: Sections 40401, 40502, 42056 and 42060, Public Resources Code.

Reference: Sections 42051.1 and 42056, Public Resources Code.

ARTICLE 9: Source Reduction Baseline Report and Annual Reports

Section 18980.9. Source Reduction Baseline Report

- (a) On or before July 1, 2026, all reporting entities shall submit a source reduction baseline report to the Department. The source reduction baseline report shall be submitted electronically, and at minimum, include the total amount of plastic covered material, by weight and number of plastic components, for which they were the producer in the 2023 calendar year. The weight of plastic covered material shall be measured in accordance with paragraph (15) of subdivision (a) of section 18980.1.
- (b) The PRO must disaggregate the amounts specified in subdivision (a) by each participant producer.
- (c) The Department shall use the information reported pursuant to this section to update the source reduction baseline pursuant to subdivision (b) of section 42057 of the Public Resources Code by November 1, 2026.

Authority: Sections 40401, 40502, 42041, 42057 and 42060, Public Resources Code.

Reference: Sections 42041, 42051, 42052 and 42057 Public Resources Code.

Section 18980.9.1. Annual Reports

- (a) Subject to section 18980.6.5 and subdivision (b) of this section, all annual reports shall include the information specified in paragraphs (2) and (3) of subdivision (a) of section 42051.3 of the Public Resources Code.
- (b) For purposes of determining the required elements of Independent Producer annual reports, all references to a PRO in the Act with respect to annual reports apply equally to Independent Producers, except for the reference to the fee schedule in subparagraph (A) of paragraph (3) of subdivision (a) of section 42051.3 of the Public Resources Code and the requirements in subparagraph (B) of paragraph (3) of subdivision (a) of section 42051.3 of the Public Resources Code, which do not apply to Independent Producer annual reports.
- (c) The annual report shall include:
 - (1) All information on recyclability required pursuant to subdivision (f) of section 18980.3.
 - (2) Pursuant to subdivision (i) of section 42057 of the Public Resources Code, the recycling rate for all expanded polystyrene, as defined in subdivision (h) of section 18980.3.2, if relevant to the entity reporting.
 - (3) Information on responsible end markets utilized, as required pursuant to subdivisions (b) and (c) of section 18980.4.2.
- (d) For the PRO, the annual report shall additionally include:
 - (1) In the second phase of the annual report, as described in subdivision (c) of section 18980.6.5, fee schedule amendments pursuant to subdivision (e) of section 42053 of the Public Resources Code as a result of adjustments, including calculations for malus fees or credits.
 - (2) In its first phase of the annual report, as described in subdivision (b) of section

18980.6.5, the following information with respect to source reduction:

- (A) Percentage of reduction across all participant producers.
 - (B) A qualitative assessment of the successes and challenges achieving source reduction goals, delineated by plastic covered material category, which ranks the relative frequency of use of each source reduction strategy.
 - (C) A quantitative assessment of source reduction achieved through reuse and refill strategies. The assessment shall assess the percentage of reduction in new material produced, detailing the reduction in the number and weight of plastic components through shifting to reusable or refillable packaging or food service ware and elimination of plastic components.
 - (D) Source reduction percentage by weight achieved through an alternative compliance formula pursuant to subclause (i) of subparagraph (B) of paragraph (2) of subdivision (a) of section 42057 of the Public Resources Code and approved by the Department as part of the PRO's plan.
- (3) In the first phase of the annual report, as described in section 18980.6.5, information on the Closure and Transfer Plan as required pursuant to sections 18980.8.2(b)(2) and 18980.8.2(c).
- (e) Within 90 calendar days of receiving the second phase of an annual report submitted pursuant to subdivision (a) of section 42051.3 of the Public Resources Code, as described in subdivision (c) of section 18980.6.5, the Department shall review the annual report to determine if it is complete or incomplete.
- (1) After the annual report has been deemed complete, the Department shall review the annual report for compliance with applicable requirements of the Act and this article, as set forth in paragraphs (2) through (5) of subdivision (b) of section 42051.3 of the Public Resources Code.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42051, 42051.3, 42053, 42057, 42080 and 42081, Public Resources Code.

ARTICLE 10: Registration and Data Reporting Requirements

Section 18980.10. Registration and Maintaining Address on File

(a) Each producer, including producers of covered material seeking an exemption pursuant to sections 18980.2.3, 18980.2.4, or 18980.5.2, shall register electronically in a manner established by the Department. Retailers and wholesalers are not subject to this requirement if they are not the producer pursuant to subdivision (w) of section 42041 of the Public Resources Code of any covered material used by goods they sell, offer to sell, or distribute.

(1) To register, a producer shall file at least the following information:

(A) Contact information, including the name, title, email, and phone number, of a person authorized to act on behalf of the producer

(B) Legal entity name (a fictitious business name is not sufficient)

(C) All business names under which the producer transacts business (i.e., fictitious business names or “dba” names)

(D) Federal Employer Identification Number (or, for Importers of Record that do not have a Federal Employer Identification Number, a Customs Assigned Importer Number (also known as a “CBP-Assigned Number”))

(E) Business mailing address

(F) Primary business address (physical address; must not be a post office box)

(G) Business phone number

(H) Business email address

(2) A PRO shall register on behalf of each of its participant producers, except for those participant producers who choose to be reporting entities.

(3) A producer shall ensure that the contact information on file with the Department is current and accurate.

(A) Upon request by the Department, a producer shall resubmit the information required pursuant to paragraph (1) or verify that the information previously submitted remains accurate. Not complying with such a request or otherwise not cooperating with the Department's exercise of its investigatory authority under section 42080 of the Public Resources Code is a violation of the Act.

(B) The failure to notify the Department of a change in its primary business address within 30 days of the change is a violation of subdivision (c) of section 42051 of the Public Resources Code, regardless of whether the Department requests resubmittal or verification pursuant to subparagraph (A).

(C) A PRO may satisfy the requirement in subparagraph (B) on a producer's behalf by including the producer's primary business address in its PRO plan, plan update, annual report, or other written notification to the Department. The submission of a primary business address or other contact information by a PRO on behalf of a producer shall not relieve the producer of its obligation to ensure that the producer's contact information, including its primary address, on file with the Department is current and accurate.

(4) If an entity becomes a producer after January 1, 2027, and joins a PRO within six months, as required by paragraph (1) of subdivision (b) of section 42051 of the Public Resources Code, the PRO shall register the producer with the Department within 30

days of the producer being accepted as a participant producer.

(5) If an entity becomes a producer after January 1, 2027, and seeks to become an Independent Producer, the entity shall register with the Department when they apply to become an Independent Producer pursuant to Article 5.

(b) If a participant producer's activities have changed such that it is no longer subject to the reporting requirements of this chapter:

(1) If the participant producer is a reporting entity, the producer shall submit a request to the Department to inactivate its reporting system registration within 30 days of the change. Subject to subdivision (d), the Department shall inactivate the registration if the request describes changed business activities that render the producer no longer subject to the reporting requirements.

(2) If the participant producer is not a reporting entity:

(A) The participant producer shall notify the PRO within 30 days of the change.

(B) The PRO shall submit a request to the Department to inactivate the reporting system registration for the participant within 30 days of receiving notification from the participant producer. Subject to subdivision (d), the Department shall inactivate the registration if the request describes changed business activities that render the producer no longer subject to the reporting requirements.

(c) If an Independent Producer's business activities have changed such that it is no longer subject to the reporting requirements of this chapter, the Independent Producer shall submit a request to the Department to inactivate its reporting system registration within 30 days of the change. Subject to subdivision (d), the Department shall inactivate the registration if the request describes changed business activities that render the Independent Producer no longer subject to the reporting requirements.

(d) The Department shall not approve a request for inactivation pursuant to subdivision (b) or

- (c) until the requesting entity has submitted to the Department all outstanding reports required pursuant to section 18980.10.1 and the Department has deemed any such reports complete.
- (e) Once approved, the effective date of an inactivation pursuant to subdivision (b) or (c) shall be the date on which the producer's activities changed such that the producer became no longer subject to the reporting requirements of this chapter.
- (f) A producer whose registration status was inactivated pursuant to subdivision (b) or (c), or a PRO acting on such a producer's behalf, shall notify the Department if the producer's activities have changed such that it has become subject to the reporting requirements of this chapter. The producer or PRO shall notify the Department within 30 days of such a change, and the Department shall reactivate the producer's registration status upon receipt of the notice. Following reactivation, the producer, or a PRO acting on its behalf, shall resume reporting by July 1 of the following calendar year. The first report after reactivation shall include all applicable data pertaining to the calendar year in which the activities changed such that the producer became subject to the reporting requirements, beginning as of the date of that change.
- (g) No exemption from any other requirement of the Act or this chapter shall be construed as an exemption from the requirements of this section. In particular, the registration requirements and the requirement that producers maintain an address on file with the Department apply to all producers, even if they are granted an exemption from all other requirements of the Act and this chapter.

Authority: Sections 40401, 40502, 42051 and 42060, Public Resources Code.

Reference: Sections 42051, 42052 and 42060, Public Resources Code.

Section 18980.10.1. Data Reporting Submission

- (a) Reporting entities shall submit data reports to the Department annually starting in 2026. The reporting entity shall certify that the information it submits is accurate and complete.
- (1) A reporting entity shall use the most current information available at the time the report is due.
 - (2) If a reporting entity identifies an error in a previously submitted report, it shall notify the Department and correct the error within 14 calendar days.
 - (3) If the Department notifies a reporting entity in writing of an error in a previously submitted report, the reporting entity shall revise the report to correct the error within 14 calendar days.
 - (4) The reporting entity may notify the Department of the reasons why resolving the error cannot be completed within 14 calendar days, and the Department shall extend the deadline up to an additional 14 calendar days, if necessary to accommodate such reasons.
- (b) A participant producer shall notify the PRO of any reportable activities that it has reported or will report to the Department. Notwithstanding any other provisions in this chapter concerning reporting obligations, the PRO is not required to report such activities.
- (c) Reports shall:
- (1) Be due on July 1 of each year, except for the PRO's initial report, which shall be submitted with its producer responsibility plan when that plan is submitted pursuant to subdivision (a) or (b), as applicable, of section 18980.6.1.
 - (2) Be submitted electronically using the Department's online reporting system or in another manner established by the Department.
 - (3) Report data pertaining to the previous calendar year. The reporting entity shall use the

covered material category list that was current as of January 1 of the previous calendar year for purposes of reporting.

(d) A producer that has requested inactivation of its reporting system registration pursuant to paragraph (1) of subdivision (b) of section 18980.10 or subdivision (c) of section 18980.10, shall submit a report to the Department for activities conducted by the producer during the partial year preceding the date on which the producer's activities changed such that the producer is no longer subject to the reporting requirements of this chapter. A participant producer who has requested inactivation through its PRO pursuant to paragraph (2) of subdivision (b) of section 18980.10, shall provide the PRO with all information necessary for the PRO to report activities conducted by the participant producer during the partial year preceding the date on which the producer's activities changed such that the participant producer is no longer subject to the reporting requirements of this chapter.

(e) The data report shall contain the elements specified in section 18980.10.2.

Authority: Sections 40401, 40502, 42051 and 42060, Public Resources Code.

Reference: Sections 42051, 42052 and 42060, Public Resources Code.

Section 18980.10.2. Data Report Contents

(a) Reports submitted pursuant to section 18980.10.1 shall contain the following information for all covered material for which the reporting entity was the producer or, for a PRO, for which its participant producers were the producers:

(1) For the previous calendar year, for each covered material category:

(A) The total weight of material, sold, distributed, or imported in or into the state.

(B) The total number of plastic components sold, distributed, or imported in or into the state.

(C) The total weight of material disposed of.

(D) The total weight of material recycled.

(2) Pursuant to paragraph (3) of subdivision (a) of section 42052 and paragraph (4) of subdivision (a) of section 42052 of the Public Resources Code, for covered material collected and recycled through a program other than curbside collection programs, for each covered material category:

(A) Identification of each alternative collection program.

(B) The total weight of covered material collected by each program.

(C) The total weight of covered material that is recycled by each program.

(b) All data reported pursuant to this chapter shall be reported in annual increments.

(c) For the purposes of this article, the weight of material recycled shall be determined according to paragraph (2) of subdivision (b) of section 18980.3.2.

(d) For the purposes of this article, the weight of material disposed of shall be determined according to paragraph (3) of subdivision (b) of section 18980.3.2.

Authority: Sections 40401, 40502, 42041, 42057 and 42060, Public Resources Code.

Reference: Sections 42041, 42052 and 42060, Public Resources Code.

ARTICLE 11: Requirements, Exemptions, and Extensions for Local Jurisdictions

and Recycling Service Providers

Section 18980.11. Requirements for Local Jurisdictions and Recycling Service Providers

- (a) No later than the date the Department first approves a PRO's plan, local jurisdictions and recycling service providers shall satisfy the requirement of subdivision (a) of section 42060.5 of the Public Resources Code that their collection and recycling programs include all covered materials within the covered material categories included in the CMC list pursuant to subdivisions (c) and (d) of section 42061 of the Public Resources Code. For all purposes under the Act, the term "recycling programs" encompasses composting-related collection and processing.
- (b) Covered material is considered included in a local jurisdiction or recycling service provider's collection and recycling program if the local jurisdiction or recycling service provider collects the covered material and transfers it to responsible end markets directly or to intermediate supply chain entities. The local jurisdiction or recycling service provider shall not be required to establish the availability of a responsible end market to ultimately recycle the covered material. However, the absence of responsible end markets shall be deemed a local condition, circumstance, or challenge rendering inclusion of the covered material in the program impracticable for purposes of subdivision (b) of section 42060.5 of the Public Resources Code and paragraph (4) of subdivision (c) of section 18980.11.1 of this chapter.
- (c) As provided in subdivision (g) of section 18980.2.5, a change to the CMC list pursuant to subdivision (e) of 42061 of the Public Resources Code that imposes additional obligations on local jurisdictions or recycling service providers does not affect the obligations of local jurisdictions or recycling service providers under subdivision (a) of section 42060.5 of the Public Resources Code until one year after the change. If a local jurisdiction or recycling service provider submits a request to the Department for an extension or exemption

pursuant to subdivision (b) of section 42060.5 of the Public Resources Code before the end of that one-year period, the requirement of subdivision (a) of section 42060.5 of the Public Resources Code shall not take effect with respect to the additional obligations until the Department decides whether to grant or deny the request.

Authority: Section 42060, Public Resources Code.

Reference: Section 42061 and 42060.5, Public Resources Code.

Section 18980.11.1. Extensions or Exemptions for Local Jurisdictions and Recycling Service Providers

- (a) Pursuant to subdivision (b) of section 42060.5 of the Public Resources Code, a local jurisdiction or recycling service provider may apply for an extension of, or an exemption from, the requirements of subdivision (a) of section 42060.5 of the Public Resources Code. An application may be submitted regardless of whether the Department has issued a notice of violation alleging noncompliance with those requirements.
- (b) For purposes of this section, “exemption” also refers to an “extension.” An extension differs from an exemption only in that an exemption becomes effective upon approval and exempts the applicant from the requirement for two years, whereas an extension may be granted before the requirement has taken effect and results in delaying the requirement's applicability for two years beyond when it otherwise would have taken effect.
- (c) A local jurisdiction or recycling service provider seeking an exemption shall apply electronically in a manner established by the Department. The application shall include the following information:
 - (1) For each entity on whose behalf the application is submitted, the following contact

information:

- (A) The name, mailing address, and physical address of the entity.
 - (B) Name, title, phone number, and email address of the individual submitting the request.
 - (C) If different, the name, title, phone number, and email address of the individual to whom the Department shall direct all communications concerning the exemption.
- (2) If the applicant is a recycling service provider, it must notify each local jurisdiction to which it provides services that would be affected by the extension or exemption of its intent to request the exemption. The applicant shall obtain the following information and include it in the application:
- (A) Contact information (name, phone number, and email address) for an individual representing the local jurisdiction. The individual identified must be authorized by the jurisdiction to receive all communications regarding the request.
 - (B) A description of each local jurisdiction's involvement in the application process, including, at minimum, when the applicant notified the local jurisdiction of the intent to submit the application.
- (3) The specific covered materials or covered material categories that are the subject of the request.
- (4) A description, with supporting documentation, of the specific local conditions, circumstances, and challenges that make it impracticable for the local jurisdiction or recycling service provider to include the specified covered material or covered material categories in their collection and recycling programs. The description must demonstrate that the identified material cannot practicably be included in the collection and recycling programs. The description must also address, at a minimum, the necessity of the exemption with respect to the following considerations: program

efficacy; technological or economic limitations; legal restrictions or requirements; effects on the environment, environmental justice, worker health and safety; public health; hazardous waste generation; and transportation safety.

(5) Written notices and comments, if any, received pursuant to subdivision (d) and an explanation of how the applicant addressed them or why it did not do so.

(d) No exemption application or renewal request shall be submitted to the Department until after the local jurisdiction or recycling service provider has provided all PROs and Independent Producers the application or advance notice of the renewal request. All PROs and Independent Producers shall have 90 days to review an application, and 30 days to review a notice of a renewal request. During the review period:

(1) Each PRO and Independent Producer may submit comments to the applicant concerning the assertion that collection is impracticable and the relevant conditions, circumstances, and challenges.

(2) Each PRO and Independent Producer shall notify the applicant in writing whether they object to the exemption or extension sought. If a PRO or Independent Producer provides no such notice, they will be deemed not to object.

(3) The parties may agree to extend the 90- or 30-day period or come to an agreement concerning the collection and recycling or composting of the covered materials or covered material categories at issue.

(e) The Department shall approve the application if the application establishes that the identified material cannot practicably be included in the collection and recycling programs.

(f) If the Department denies the application, the applicant shall not submit a new application for the same material within 90 days of the determination by the Department to deny approval of the application. A new application shall not be submitted unless the specific local conditions, circumstances, or challenges alleged to justify the extension or

exemption have changed since submission of the previous application.

- (g) The Department shall repeal the extension or exemption if it determines that conditions, circumstances, or challenges no longer render compliance impracticable as described in the application.
- (h) An extension or exemption may be renewed by completing either of the following between 120 and 90 calendar days before the extension or exemption expires:
 - (1) If the information provided pursuant to paragraph (4) of subdivision (c) is no longer accurate or otherwise no longer establishes impracticability of complying with subdivision (a) of section 42060.5 of the Public Resources Code, the applicant shall submit a new application pursuant to subdivisions (c) and (d).
 - (2) If the local jurisdiction or recycling service provider maintains that local conditions, circumstances, and challenges described in the original application have not changed and continue to render compliance impracticable, a new application is not required, except that the local jurisdiction or recycling service provider shall:
 - (A) Notify all PROs and Independent Producers in writing that it intends to request renewal of the extension or exemption on the same basis asserted in the original application.
 - (B) Complete the procedure described in subdivision (d) and determine whether, considering the comments received, if any, the contents of the original application remain accurate and sufficient to establish impracticability.
 - (C) If the local jurisdiction or recycling service provider determines that the original application remains accurate and sufficient, it shall request renewal in a letter submitted electronically to the Department. The letter shall certify that all information in the application remains accurate and that the circumstances described in it continue to render compliance with section 42060.5 impracticable.

The letter shall include updates to the information previously submitted pursuant to paragraph (1) of subdivision (c), if necessary. The letter shall include or be accompanied by the comments received, if any, and an explanation of why the comments did not merit an update to the application.

(D) If the local jurisdiction or recycling service provider determines that the original application is no longer accurate or no longer establishes that compliance with section 42060.5 is impracticable, the local jurisdiction shall request renewal by submitting a revised application pursuant to subdivision (c), along with the comments received and an explanation of how the revisions address them.

(3) The Department shall grant renewal of the exemption unless it determines that the conditions, circumstances, or challenges described in the previously approved application no longer establish impracticability.

Authority: Section 42060, Public Resources Code.

Reference: Sections 42051.1 and 42060.5, Public Resources Code.

Section 18980.11.2. Exemption for Rural Counties and Rural Jurisdictions

(a) A rural county or rural jurisdiction that has adopted a resolution pursuant to subdivision (c) of section 42060.5 of the Public Resources Code shall notify the Department and provide a copy of the resolution within 14 calendar days of the adoption date.

(b) If the Department finds that the rural county or rural jurisdiction that has adopted a resolution does not meet the definition of “rural county” or “rural jurisdiction” pursuant to section 42649.8 of the Public Resources Code, the rural county or rural jurisdiction shall not be exempt from the requirements of subdivision (a) of section 42060.5 of the Public

Resources Code under subdivision (c) of section 42060.5 of the Public Resources Code.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 42041, 42060, 42060.5, and 42649.8, Public Resources Code.

ARTICLE 12: Requirements for the Advisory Board

Section 18980.12. Membership Terms and Appointments

- (a) Membership on the advisory board shall commence upon notice to the Department that an individual accepts an appointment by the director, unless otherwise specified by the Department.
- (b) Notwithstanding subdivision (a), an appointee's term shall be deemed to have commenced as of the beginning of the then-current fiscal year (*i.e.*, the most recent July 1) during which their membership commenced.
- (c) If a member is reappointed for an additional term, the additional term shall be deemed to commence upon expiration of the previous term.
- (d) The director shall revoke a member's appointment if: the member was nominated by an entity or otherwise appointed as the entity's representative for purposes of subdivision (a) of section 42070 of the Public Resources Code, but the entity no longer recognizes the member as its representative; the director determines that the member's conduct manifests a clear unwillingness or inability to serve as such a representative; or other circumstances establish that the member is manifestly unfit to be such a representative.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

ARTICLE 13: Enforcement Oversight by the Department and Administrative Civil Penalties

Section 18980.13. Compliance Evaluation and Determination

- (a) The Department may conduct investigations to examine operation activities and records, as it deems necessary to determine compliance with this chapter or the Act pursuant to subdivision (a) of section 42080 of the Public Resources Code. The investigation may require, for example, entities to produce records to the Department and to cooperate with onsite inspections by the Department. An authorized Department employee or agent shall be allowed to enter the premises of any entity subject to this chapter and the Act during normal working hours to conduct inspections. Methods may include, but are not limited to, the review and copying of any records required by this chapter. Notices of violation issued by the Department may identify additional records and information that the entity must produce regarding such noncompliance.
- (b) For purposes of assessing administrative civil penalties pursuant to paragraph (1) of subdivision (a) of section 42081 of the Public Resources Code, the Department shall determine the number of violations committed and the number of days on which the violations occurred as set forth in this section.
- (c) Except as specifically set forth in this section, for each discrete requirement of the Act, this chapter, or a Producer Responsibility Plan, each distinct condition, action, or course of action constituting or resulting in a violation of the requirement shall constitute a single violation of the Act.
- (d) Except as otherwise provided in this chapter, for purposes of assessing penalties, penalties shall accrue as follows:

- (1) For violations committed through discrete actions, such as an action prohibited under the Act, penalties shall accrue on each subsequent day on which the actions are committed following the thirtieth day after the Department issues a notice of violation for the initial violation.
 - (2) For continuous violations based on the persistence of a particular condition or course of action, such as an ongoing failure to satisfy reporting, plan implementation, source reduction, or other obligations under the Act, the violation shall be deemed to occur each day such conditions or courses of action persist after the thirtieth day after the Department issues a notice of violation.
- (e) If a PRO or producer fails to maintain records or other evidence sufficient to demonstrate compliance with any requirement of the Act or fails to provide such records upon demand by the Department, penalties for the absence of or failure to provide records shall accrue as follows:
- (1) Violations based on the failure to maintain records shall be deemed to have occurred on each day for which a PRO or producer failed to maintain sufficient evidence to demonstrate compliance. Each such day is subject to the per-day penalties set forth in section 42081 of the Public Resources Code, and such penalties shall not begin accruing until the thirty-first day following issuance of a notice of violation.
 - (2) Violations based on the failure to provide records to the Department upon request shall be deemed to begin on the date of the request. Penalties shall begin accruing as of the thirty-first day following issuance of a notice of violation, such that no penalties shall be imposed if the records demanded are provided before such date.
- (f) Except as provided in subdivision (g), if a PRO violates the Act or this chapter, such as by not implementing a discrete requirement of its plan, in a manner that results in particular producers being out of compliance with a discrete requirement of the Act or this chapter that the PRO otherwise would have satisfied on their behalf, each discrete instance of a

producer being out of compliance is a violation of the Act by the PRO, except for violations for which the Department has issued a notice of violation directly to such producers.

- (g) For requirements of the Act or this chapter that apply generally to participants in a PRO plan, such as the requirement to ensure that covered material sold, offered for sale, imported, or distributed in the state achieves the requirements set forth in sections 42050 and subdivision (i) of 42057 of the Public Resources Code, the failure to meet such requirements is a violation by the PRO for each plan participant that is a producer of the covered material at issue, except those to which the Department has issued an individual notice of violation for such failure. For example, if any participating producers continue offering for sale products that use covered material in a particular covered material category that does not meet the recycling rate requirements of subdivision (c) of section 42050 or subdivision (i) of section 42057 of the Public Resources Code, those producers of covered material in that category have violated their obligation under that section, and either the PRO or the individual participating producers may be penalized pursuant to section 42080 of the Public Resources Code for each such violation. Notwithstanding the foregoing, penalties shall not be imposed on the PRO for violations of subdivision (i) of section 42057 of the Public Resources Code that occur before approval of the PRO's plan.
- (h) For purposes of assessing penalties for violations of section 42050 of the Public Resources Code by a producer or PRO relating to non-compliant covered material used by a product:
 - (1) Each product that uses non-compliant covered material, without regard to the distribution or sales of discrete instances of the product, shall constitute a distinct violation. Each product shall be identified according to the characteristics listed in paragraph (2) of subdivision (a) of section 42081 of the Public Resources Code, using as many characteristics as necessary to uniquely identify it. In addition to those

characteristics, the Department may deem a unique stock keeping unit (SKU) or a global trade item number, such as a universal product code (UPC), to uniquely identify the product according to such characteristics. If the Department determines characteristics listed in paragraph (2) of subdivision (a) of section 42081 of the Public Resources Code are not sufficient to uniquely identify the product, other characteristics may be considered. Multiple variations of a product, such as those identified by multiple SKUs or UPCs, constitute the same product, provided that they use the same amounts and types of covered material but differ in trivial ways not affecting their end-of-life management.

- (2) The violation shall be deemed to occur on each day that the product using non-compliant covered material is in distribution or offered for sale in the state.
- (3) If a specific covered material satisfies the recycling rate requirement of subdivision (c) of section 42050 of the Public Resources Code, the producer of the covered material shall not be considered to violate that requirement solely because the covered material category encompassing the covered material does not meet that requirement. However, the producer must demonstrate in an annual report that the covered material continues to satisfy the requirement. Recycling rate shall be calculated as described in section 18980.3.2, applied solely to the covered material rather than to the covered material category.

(i) For violations of section 42060.5 of the Public Resources Code by a local jurisdiction:

- (1) The number of violations shall be the number of covered material categories contained on the lists identified in subdivision (a) of section 42060.5 of the Public Resources Code that are not included in their collection and recycling programs.
- (2) Penalties for each violation shall accrue on each day any covered material category is not included in their collection and recycling programs, except as described in sections 18980.11.1 and 18980.11.2, or unless the local jurisdiction is otherwise not required to

include the covered material category in its collection and recycling programs under section 42060.5 of the Public Resources Code.

- (3) No penalty may be imposed against a local jurisdiction during the pendency of a request for an extension for, or exemption from, a requirement of subdivision (a) of section 42060.5 asserting that compliance with the requirement is not practicable for a specific identified covered material.
- (j) The number of violations of section 42060.5 of the Public Resources Code by a recycling service provider and the accrual of penalties shall be calculated in the same manner as would apply under subdivision (i) for local jurisdictions committing the same violations. No penalty may be imposed against a recycling service provider during the pendency of a request for an extension for, or exemption from, a requirement of subdivision (a) of section 42060.5 asserting that compliance with the requirement is not practicable for a specific identified covered material.
- (k) Except as otherwise provided, all factual determinations pursuant to this chapter, including whether any conditions have been met or factual circumstances have been established or demonstrated, shall be made based on the preponderance of evidence, meaning that, in consideration of all relevant facts and circumstances, the facts to be determined must be shown more likely than not to be true.

Authority: Sections 40401, 40502, 42057, 42060 and 42080, Public Resources Code.

Reference: Sections 42050, 42057, 42060.5, 42080, 42081 and 42083, Public Resources Code.

Section 18980.13.1. Corrective Action Plan

- (a) Nothing in this section shall be construed as limiting the Department's authority to enter

into any agreement with any party, including a producer, local jurisdiction, or recycling service provider, to resolve violations identified in a notice of violation on any terms the parties mutually deem appropriate.

- (b) When issuing a notice of violation pursuant to subdivision (a) of section 42081 of the Public Resources Code or in response to a written request submitted to the Department after issuance of a notice of violation, the Department shall determine whether to permit an entity to propose a corrective action plan pursuant to subdivision (b) of section 42081 of the Public Resources Code. In determining whether to allow submission of a proposal, the Department shall consider the practicality of a corrective action plan and whether a corrective action plan is, compared to immediate imposition of penalties, likely to more effectively promote the achievement of the requirements of section 42050 of the Public Resources Code, the policy goal established in Section 41780.01 as it relates to covered material, and the intent of the Act as provided in section 42040.
- (c) In the notice of violation, the Department shall set forth specific elements that the proposal must contain, as the Department deems necessary for the corrective action plan to address the considerations identified in subdivision (a). Such elements may include: addressing specific matters related to compliance with the Act; sales and distribution data; consent to the imposition of certain penalties without an administrative hearing if the corrective action plan fails to result in compliance; disclosure of information related to noncompliance with the Act, including noncompliance not identified in the notice of violation; and identification of corrective action already taken or that will be implemented regardless of whether the Department approves the corrective action plan. The Department shall not review a proposed corrective action plan unless it contains the specified elements and satisfies all the requirements of this section.
- (1) A corrective action plan submission shall, at a minimum, satisfy the following requirements:

- (A) The requester shall provide the contact information described in paragraph (1) of subdivision (a) of section 18980.10.
 - (B) The requester shall indicate which of the violations cited in the notice of violation the entity will correct through the corrective action plan.
 - (C) The requester shall provide a description of the actions the entity will take to correct the violations and how the actions will facilitate resolution of the violations, including a proposed timeline, milestones, and a specific end date for the corrective action plan. This description must be sufficiently detailed for the Department to evaluate whether such corrective action is feasible and whether, if approved and complied with, it will result in full compliance with the Act.
 - (D) The requester shall state whether the requester consents to the imposition of penalties without an administrative hearing, and if so, the amount of such penalties, for past violations or for violations that may persist despite approval of the corrective action plan and full compliance with it. Such violations include, at a minimum, violations that the corrective action plan does not address or that may require more than 24 months to fully correct.
- (2) The Department's granting of permission to submit a corrective action plan proposal, the submission of such a proposal, and the Department's consideration of it, including the denial of it with permission to submit a modified one, shall not excuse any violation or otherwise affect the Department's authority to take enforcement action against any alleged violations, including those addressed in the proposed corrective action plan, except as specifically provided in the Act and this chapter.
- (3) After submitting a corrective action plan, the entity shall be bound by the corrective action plan upon approval by the Department. The entity further acknowledges that the

Department may, when approving the corrective action plan or at any other time, impose reasonable conditions for how the entity must demonstrate compliance with the corrective action plan. Such conditions may include, for example, document submittals and reporting related to the effectiveness of the corrective action plan. Such conditions shall be considered part of the corrective action plan.

- (4) If it approves a corrective action plan, the Department shall include a copy of the approved corrective action plan with written notification of approval. The copy included with the notice shall be the official governing document for the corrective action plan.
- (5) The Department shall approve the corrective action plan if, compared to immediate imposition of penalties, the plan is more certain to promote, and will be more effective at promoting the following:
 - (A) Achievement of the requirements of section 42050 of the Public Resources Code.
 - (B) The policy goal established in section 41780.01 of the Public Resources Code, as it relates to covered material.
 - (C) The intent of the Act, as provided in section 42040 of the Public Resources Code.
- (6) The approval of a corrective action plan does not excuse violations other than to the extent the corrective action plan precludes assessment of penalties pursuant to subdivision (b) of section 42081 of the Public Resources Code for the violations covered by the corrective action plan.
- (d) If, upon the corrective action plan's expiration, the corrective action plan has failed to resolve some or all of the violations identified in the notice described in subdivision (a), the entity may submit a written request for an extension pursuant to paragraph (2) of subdivision (b) of section 42081 of the Public Resources Code. Extensions shall be subject to the same conditions and limitations set forth in paragraphs (2) through (7) of subdivision (c) with respect to the initial submission and approval of the plan. Extension

requests shall include, at a minimum:

- (1) A description of the efforts made to comply with the corrective action plan's requirements and the extent to which such efforts will be continued or modified to comply with the corrective action plan.
 - (2) Explanation of extenuating circumstances, if any. At minimum, such explanation shall address whether the circumstances were beyond the control of the entity, whether they prevented compliance with the corrective action plan and the Act, and how they affect the extent to which penalties for the outstanding violations are appropriate.
 - (3) Updates, if any, to the content included in the original proposal for the corrective action plan pursuant to paragraph (1) of subdivision (b).
- (e) Subject to subdivision (f), accrual of penalties for the violations identified in a proposed corrective action plan shall be paused upon submission of the proposed corrective action plan to the Department and shall remain paused until either of the following, as applicable:
- (1) Department rejection of the proposed corrective action plan without allowing submission of a modified proposal.
 - (2) Violation of an approved corrective action plan.
- (f) Failing to comply with a corrective action plan is a violation of the Act subject to the penalty provisions of section 42081 of the Public Resources Code, and the Department may issue a notice of violation for any such violation, including during pendency of the corrective action plan.
- (1) A violation of the plan is subject to penalties regardless of whether the corrective action plan is terminated or necessarily will fail to resolve any underlying violation.
 - (2) For each violation of the corrective action plan, the notice shall identify whether the violation concerns requirements for resolving specific underlying violations of the Act

identified in the plan. Subject to paragraph (3) of subdivision (a) of section 42081 of the Public Resources Code, penalty accrual shall resume for those underlying violations, except as provided in subparagraphs (A) and (B).

(A) Unless the violation of the corrective action plan is resolved within 30 days after issuance of the notice, the Department shall deem the corrective action plan terminated, and penalties shall begin accruing for the underlying violations upon such termination. The violation of the corrective action plan shall not be considered resolved if it diminished the likelihood that the corrective action plan will result in resolution of the underlying violations.

(B) Termination and penalty accrual pursuant to subparagraph (A) shall be with respect only to the underlying violations identified in the notice for which the likelihood of resolution has been diminished. The corrective action plan shall remain in effect for purposes of the other underlying violations.

Authority: Sections 40401, 40502, 42060 and 42081, Public Resources Code.

Reference: Sections 42040, 42080 and 42081, Public Resources Code.

Section 18980.13.2. Administrative Civil Penalties

(a) Any entity, such as a PRO, producer, local jurisdiction, recycling service provider, retailer, or wholesaler, not in compliance with the Act or this chapter is subject to penalties pursuant to subdivision (a) of section 42081 of the Public Resources Code. If a PRO acting on behalf of its participants causes participants to be in violation of the Act or this chapter, such participants shall not be exempt from penalties on the grounds that their noncompliance was caused by the PRO's conduct.

(b) A penalty order shall be served in the manner as provided for accusations in subdivision (c) of section 18980.13.3.

(c) Subject to the procedural requirements in this chapter, and except in the event of a default or other waiver by the person alleged by the Department to have violated the Act, penalty determinations shall be made by the director or the director's designee based on evidence presented in hearings conducted pursuant to section 18980.13.4 addressing, at a minimum, the factual factors identified in subdivision (c) of section 42081 of the Public Resources Code.

Authority: Sections 40401, 40502, 42060 and 42081, Public Resources Code; Sections 11415.10 and 11440.20, Government Code.

Reference: Sections 42080 and 42081, Public Resources Code; Sections 11415.10, 11440.20 and 11505, Government Code.

Section 18980.13.3. Notices

(a) For persons that have filed a primary business address with the Department pursuant to subdivision (c) of section 42051 of the Public Resources Code, notices of violation, notices of disciplinary action, and all accompanying documents shall be delivered by one or more of the following means:

- (1) Delivery to the primary business address on file via first-class mail, registered mail, certified mail, commercial carrier, or personal delivery;
- (2) Email to the address on file with the Department pursuant to section 18980.10;
- (3) For entities known by the Department to have failed to maintain an up-to-date email address on file, email to any other email address, with written consent or written

acknowledgment of receipt.

(b) For persons not required to file a primary business address with the Department pursuant to subdivision (c) of section 42051 of the Public Resources Code or that have failed to do so, notices of violation, notices of disciplinary action, and all accompanying documents shall be delivered using any of the methods described in subdivision (a) to at least one of the following addresses:

- (1) The person's mailing address on file with the Secretary of State;
- (2) The person's last known business or mailing address.
- (3) The business or mailing address of the attorney, if any, who acknowledges in writing their representation of the person with respect to the Department's allegations, or any other party authorized in writing to receive notices on behalf of the person;
- (4) The person's email address, with written consent or written acknowledgment of receipt.

(c) An accusation commencing an administrative proceeding to impose administrative civil penalties shall be served on the person to be penalized using any of the following means:

- (1) For persons required to have an address on file with the Department pursuant to subdivision (c) of section 42051 of the Public Resources Code, by registered or certified mail.
- (2) By personal service in any manner as provided for service of summons pursuant to sections 413.10 through 416.40 of the Code of Civil Procedure,
- (3) By any other means, provided that the respondent subsequently files a notice of defense or otherwise appears in the administrative proceeding.

(d) For purposes of imposing penalties pursuant to section 42081 of the Public Resources Code, notices of violation are deemed to be issued on the fifth calendar day or, for notices delivered outside the State of California, the 10th calendar day, after the date on which the

Department deposits it with the United States Postal Service for delivery via certified mail, unless a notice is delivered by another method permitted pursuant to this section, in which case the notice is deemed to be issued upon delivery.

Authority: Sections 40401, 40502, 42060, 42080 and 42081, Public Resources Code; Sections 11415.10 and 11440.20, Government Code.

Reference: Sections 42080 and 42081, Public Resources Code; Sections 11415.10, 11440.20 and 11505, Government Code.

Section 18980.13.4. Procedure for a Hearing

- (a) Unless otherwise specified by the Department in a notice or accusation issued pursuant to section 18980.13.3, all administrative hearings shall be conducted by the Department as informal hearings and heard by the Director or a hearing officer designated by the Director according to Article 10 of Chapter 4.5 (commencing with section 11445.10) of Part 1 of Division 3 of Title 2 of the Government Code. Notwithstanding the foregoing, the procedures and requirements set forth in section 11505 and section 11506 of the Government Code shall apply to any hearing conducted under this division.
- (b) A respondent may submit to the Department a request for a hearing to contest the imposition of penalties or other disciplinary action within fifteen (15) days of being served an accusation pursuant to subdivision (c) of section 18980.13.3. Failure to submit a timely hearing request shall waive the right to a hearing.
- (c) Within fifteen (15) days of receipt of a respondent's written request for a hearing pursuant to subdivision (b), the director or hearing officer shall provide the respondent with a written notice setting forth the procedures that will govern the hearing, including, at a minimum,

procedures relating to the use and admissibility of oral and written testimony, depositions, subpoenas and witnesses, discovery, and other forms of evidence.

- (d) After conducting a hearing on the merits, or if no hearing is requested, the Department may take any disciplinary or remedial action authorized under the Act, including those described in section 18980.13.5.

Authority: Sections 40401, 40502 and 42060, Public Resources Code; Section 11415.10, Government Code.

Reference: Sections 42041, 42080 and 42081, Public Resources Code; Sections 11445.10, 11445.20, 11445.30, 11445.40, 11445.50, 11445.60, 11505 and 11506, Government Code.

Section 18980.13.5. Disciplinary Actions

- (a) If, after notice and hearing, if one is requested, the Department finds that a PRO or Independent Producer has failed to meet a requirement of this article or this chapter, the Department may, in addition to imposing any civil penalties or taking any other action authorized under the Act, take one or more of the following actions, as it deems necessary to effectuate the purposes of the Act:
 - (1) Revoke a previously approved plan.
 - (2) Revoke its approval of the PRO.
 - (3) Require additional reporting relating to compliance with the requirements of this Act or this chapter that were not met.
- (b) Pursuant to subdivision (b) of section 42056 of the Public Resources Code, five calendar days after the revocation of a previously approved plan or revocation of approval of the

PRO, the Trustee or Agent shall implement the Closure and Transfer Plan in the previously approved plan, pursuant to subdivision (f) of section 42051.1 of the Public Resources Code and as described in section 18980.8.2.

Authority: Sections 40401, 40502, 42056, 42060(a), 42061.5 and 42080, Public Resources Code; section 11445.20, Government Code.

Reference: Sections 42051.1, 42051.2, 42051.3, 42056, 42061.5, 42080 and 42081, Public Resources Code.

ARTICLE 14: Public Records

Section 18980.14. Designation of Trade Secrets and other Non-Disclosable Information

- (a) All records submitted to the Department pursuant to the Act or this chapter are subject to mandatory disclosure under the Public Records Act, Division 10 (commencing with section 7920.000) of Title 1 of the Government Code, unless an express exemption from mandatory disclosure applies under the Act or the Public Records Act.
- (b) Subject to the requirements of this section and subdivision (b) of section 18980.6.6, the Department shall not disclose information or records that constitutes a trade secret, as defined in subdivision (d) of section 3426.1 of the Civil Code, in response to public records requests.
- (c) For any information submitted to the Department that is claimed by the person submitting it to be partially or wholly exempt from disclosure under the Public Records Act, the person shall clearly identify such information and provide the legal basis for it being exempt. Where such basis is that the information constitutes a trade secret, the person shall:

- (1) Expressly designate as “trade secret” each portion of the submission containing such information. Such designation may be made by directly labeling the portion as such or, if direct labeling is impractical, by submitting written explanation clearly explaining what portions of the submission contain trade secrets.
- (2) At the time of submission, provide the name of the individual to be contacted regarding requests received by the Department for disclosure of the information. Unless already on file with the Department pursuant to section 18980.10 of this chapter, the individual’s address and telephone number shall also be provided.
- (d) Any portions of submissions that are not specifically designated as containing a trade secret shall be considered not to contain trade secrets and, unless some other express exemption or prohibition applies and is clearly identified as described in subdivision (c), shall be deemed subject to mandatory disclosure under the Public Records Act.
- (e) For information that a person was required to submit pursuant to this chapter or the Act, the Department shall follow the procedures set forth in section 40062 of the Public Resources Code when determining whether information has been properly identified a trade secret. The information shall be considered subject to section 40062 regardless of the form in which it is maintained by the Department, and sections 17044 through 17047 of Title 14 of the California Code of Regulations shall not apply to such information.

Authority: Sections 40401, 40502 and 42060, Public Resources Code.

Reference: Sections 40062, 42060 and 42080, Public Resources Code; Section 3426.1, Civil Code.

Chapter 11.5 Environmental Marketing and Labeling

ARTICLE 1: Approval of Certification Entities

Section 18981. Third-Party Certification Entity Criteria and Approval Process

(a) For purposes of this section:

- (1) "The Department" means the California Department of Resources Recycling and Recovery.
- (2) "ISO/IEC 17025:2017" refers to the publication, which is incorporated by reference in its entirety, titled "General requirements for the competence of testing and calibration laboratories," International Organization for Standardization/ International Electrotechnical Commission, November 2017.
- (3) "ISO/IEC 17065:2012" refers to the publication, which is incorporated by reference in its entirety, titled "Conformity assessment—Requirements for bodies certifying products, processes and services," International Organization for Standardization / International Electrotechnical Commission, September 2012.

(b) For purposes of approval pursuant to subparagraph (A) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code, a third-party certification entity must satisfy the following criteria:

- (1) It holds an ISO/IEC 17065:2012 accreditation and requires test results from an independent laboratory holding ISO/IEC 17025:2017 accreditation as a condition for certifying that a product complies with subparagraph (A) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code. The accreditations must be issued by an accrediting body that is a signatory member of either the International Accreditation Forum or the International Laboratory Accreditation Cooperation, or both, or is a signatory to a mutual recognition arrangement established by either organization.
- (2) Must be independent, impartial, and not have any conflict of interest with respect to

granting the certification required by subparagraph (A) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code. Without limitation, the entity shall be deemed not to satisfy this requirement if any of the following are true:

(A) It holds any ownership interest, whether direct or indirect, in any laboratory that conducts testing on which its certifications are based or in any entity that is the manufacturer, distributor, or seller of any product subject to the certification requirement.

(B) Other than for services related to verification or certification programs, market research, advocacy, scientific or policy research or studies, scientific testing, or industry development, it transacts business with any entity subject to the certification requirement, regardless of whether such business is with that entity directly or indirectly, such as through a subsidiary or parent company. Merely purchasing items for purposes unrelated to the activities identified in this subparagraph, without any further contractual or other relationship related to the purchase, shall not be considered transacting business with any person for purposes of this subparagraph.

(c) A third-party certification entity may request approval, or renewal of a prior approval, by submitting the following in a manner prescribed by the Department. Approval or renewal shall be granted if the submission includes all required elements.

(1) Contact information.

(2) Documentation of ISO/IEC 17065:2012 accreditation. An accrediting body's directory identifying the entity as holding the accreditation required under this section shall be deemed sufficient documentation.

(3) An affidavit, subject to the penalty of perjury, that the entity satisfies the requirements for approval pursuant to subdivision (b).

- (d) The Department's approval of a third-party certification entity shall expire on January 1 of the fifth calendar year following the calendar year in which the Department approved the entity, or as of the date the entity's accreditation expires or otherwise becomes invalid, whichever date is earlier.
- (e) No earlier than one year before expiration of the Department's approval, the entity may request renewal. Renewed approvals shall expire in the same manner as initial approvals, as described in subdivision (d).
- (f) The Department shall maintain on its website a list of currently approved third-party certification entities. Notwithstanding a third-party certification entity's presence on the list, it shall be deemed not approved as of the date it no longer holds a valid and unexpired accreditation as prescribed in paragraph (1) of subdivision (b). A person selling or offering for sale products labeled with terms restricted pursuant to section 42357 of the Public Resources Code shall be responsible for ensuring that a third-party certification entity held a valid accreditation as of the date it issued a certification.
- (g) For the purpose of determining whether there has been an approved third-party certification entity for at least one year pursuant to subparagraph (A) of paragraph (1) of subdivision (g) of section 42357 of the Public Resources Code, a third-party certification entity shall be deemed to have been approved as of the date it was added to the list. For all other purposes, however, regardless of when a third-party certification entity is added to that list, the Department's approval shall be retroactive as of the date the entity satisfied the requirements of subdivision (b) of this section.

Authority: Sections 40401, 40502 and 42060, Public Resources Code

Reference: Sections 42041, 42050, 42061, 42355, 42355.5, 42356, 42356.1, 42356.2 and 42357, Public Resources Code.

Appendix B Air Quality and GHG Model Reports

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Processing
Construction Start Date	1/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.57579060307032, -121.47864884609034
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	505
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	218	1000sqft	5.00	70,000	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.44	1.20	10.5	14.8	0.03	0.38	0.38	0.77	0.35	0.09	0.45	—	3,050	3,050	0.12	0.08	1.95	3,078
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.5	24.5	29.2	29.5	0.05	1.24	19.8	21.1	1.14	10.1	11.3	—	5,471	5,471	0.22	0.08	0.05	5,491
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	1.47	8.78	11.1	0.02	0.33	1.16	1.50	0.31	0.52	0.83	—	2,243	2,243	0.09	0.05	0.52	2,261
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	0.27	1.60	2.03	< 0.005	0.06	0.21	0.27	0.06	0.10	0.15	—	371	371	0.02	0.01	0.09	374

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.44	1.20	10.5	14.8	0.03	0.38	0.38	0.77	0.35	0.09	0.45	—	3,050	3,050	0.12	0.08	1.95	3,078

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.81	3.21	29.2	29.5	0.05	1.24	19.8	21.1	1.14	10.1	11.3	—	5,471	5,471	0.22	0.08	0.05	5,491
2027	24.5	24.5	10.1	14.3	0.03	0.34	0.38	0.73	0.31	0.09	0.41	—	3,000	3,000	0.12	0.08	0.05	3,027
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.18	0.99	8.78	11.1	0.02	0.33	1.16	1.50	0.31	0.52	0.83	—	2,243	2,243	0.09	0.05	0.52	2,261
2027	1.49	1.47	0.99	1.47	< 0.005	0.03	0.04	0.07	0.03	0.01	0.04	—	278	278	0.01	0.01	0.07	280
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.22	0.18	1.60	2.03	< 0.005	0.06	0.21	0.27	0.06	0.10	0.15	—	371	371	0.02	0.01	0.09	374
2027	0.27	0.27	0.18	0.27	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	—	46.0	46.0	< 0.005	< 0.005	0.01	46.4

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.93	2.75	4.10	12.3	0.02	0.16	0.31	0.47	0.16	0.08	0.24	253	3,778	4,031	15.1	0.36	20.3	4,537
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	2.25	4.17	9.14	0.02	0.15	0.31	0.46	0.15	0.08	0.23	253	3,752	4,005	15.1	0.36	18.3	4,510
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.55	2.30	2.56	8.78	0.03	0.26	0.26	0.53	0.26	0.07	0.33	253	5,661	5,914	15.1	0.37	19.0	6,423
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	0.42	0.47	1.60	0.01	0.05	0.05	0.10	0.05	0.01	0.06	41.9	937	979	2.51	0.06	3.14	1,063

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.07	1.18	1.04	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	851	851	0.05	0.11	2.04	888
Area	2.17	2.13	0.03	3.04	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.5	12.5	< 0.005	< 0.005	—	12.6
Energy	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,534	1,534	0.10	< 0.005	—	1,537
Water	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Waste	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Off-Road	0.09	0.09	0.97	6.39	0.01	0.02	—	0.02	0.02	—	0.02	—	913	913	0.04	0.01	—	916
Stationary	0.46	0.42	1.18	1.23	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	328	328	0.01	< 0.005	0.00	329
Total	2.93	2.75	4.10	12.3	0.02	0.16	0.31	0.47	0.16	0.08	0.24	253	3,778	4,031	15.1	0.36	20.3	4,537
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.07	1.27	0.90	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	838	838	0.05	0.11	0.05	873
Area	1.63	1.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,534	1,534	0.10	< 0.005	—	1,537
Water	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Waste	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Off-Road	0.09	0.09	0.97	6.39	0.01	0.02	—	0.02	0.02	—	0.02	—	913	913	0.04	0.01	—	916
Stationary	0.46	0.42	1.18	1.23	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	328	328	0.01	< 0.005	0.00	329
Total	2.39	2.25	4.17	9.14	0.02	0.15	0.31	0.46	0.15	0.08	0.23	253	3,752	4,005	15.1	0.36	18.3	4,510

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10	0.06	1.07	0.77	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	721	721	0.04	0.10	0.76	751
Area	2.00	1.97	0.02	2.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.57	8.57	< 0.005	< 0.005	—	8.61
Energy	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,534	1,534	0.10	< 0.005	—	1,537
Water	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Waste	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Off-Road	0.04	0.04	0.57	2.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	406	406	0.02	< 0.005	—	408
Stationary	0.32	0.19	0.16	2.46	0.01	0.19	0.00	0.19	0.19	0.00	0.19	0.00	2,852	2,852	0.06	0.03	0.00	2,864
Total	2.55	2.30	2.56	8.78	0.03	0.26	0.26	0.53	0.26	0.07	0.33	253	5,661	5,914	15.1	0.37	19.0	6,423
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.01	0.20	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.13	124
Area	0.37	0.36	< 0.005	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.42	1.42	< 0.005	< 0.005	—	1.42
Energy	0.01	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	254	254	0.02	< 0.005	—	255
Water	—	—	—	—	—	—	—	—	—	—	—	17.8	23.2	41.0	0.06	0.04	—	54.2
Waste	—	—	—	—	—	—	—	—	—	—	—	24.1	0.00	24.1	2.41	0.00	—	84.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.02	3.02
Off-Road	0.01	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.2	67.2	< 0.005	< 0.005	—	67.5
Stationary	0.06	0.03	0.03	0.45	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	472	472	0.01	0.01	0.00	474
Total	0.47	0.42	0.47	1.60	0.01	0.05	0.05	0.10	0.05	0.01	0.06	41.9	937	979	2.51	0.06	3.14	1,063

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.13	1.04	< 0.005	0.05	—	0.05	0.04	—	0.04	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm ent	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.10	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.02	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.81	0.81	< 0.005	< 0.005	< 0.005	0.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.0	17.4	0.03	0.65	—	0.65	0.59	—	0.59	—	2,960	2,960	0.12	0.02	—	2,970

Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.11	0.09	0.82	0.96	< 0.005	0.04	—	0.04	0.03	—	0.03	—	162	162	0.01	< 0.005	—	163
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.02	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.73	0.61	5.63	7.41	0.01	0.22	—	0.22	0.20	—	0.20	—	1,370	1,370	0.06	0.01	—	1,375
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.13	0.11	1.03	1.35	< 0.005	0.04	—	0.04	0.04	—	0.04	—	227	227	0.01	< 0.005	—	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	1.66	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	327	327	< 0.005	0.01	1.17	332
Vendor	0.03	0.01	0.56	0.21	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	325	325	0.02	0.05	0.78	341
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.10	1.22	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	291	291	0.01	0.01	0.03	294
Vendor	0.03	0.01	0.60	0.22	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	325	325	0.02	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.29	173
Vendor	0.02	0.01	0.34	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	186	186	0.01	0.03	0.19	195

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.2	28.2	< 0.005	< 0.005	0.05	28.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.8	30.8	< 0.005	< 0.005	0.03	32.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.57	0.78	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	146
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.1	24.1	< 0.005	< 0.005	—	24.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.10	1.14	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	285	285	0.01	0.01	0.03	289
Vendor	0.03	0.01	0.56	0.21	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	318	318	0.02	0.05	0.02	332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.03	18.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	0.02	20.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.94	2.94	< 0.005	< 0.005	< 0.005	2.98
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.79	0.66	6.09	8.83	0.01	0.24	—	0.24	0.22	—	0.22	—	1,350	1,350	0.05	0.01	—	1,355
Paving	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.04	0.04	0.33	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.0	74.0	< 0.005	< 0.005	—	74.2
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.3
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	< 0.005	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134

Architectural Coating	24.3	24.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	1.33	1.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.1	57.1	< 0.005	< 0.005	0.01	57.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	0.01	3.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	0.07	1.18	1.04	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	851	851	0.05	0.11	2.04	888
Total	0.12	0.07	1.18	1.04	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	851	851	0.05	0.11	2.04	888
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.12	0.07	1.27	0.90	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	838	838	0.05	0.11	0.05	873

Total	0.12	0.07	1.27	0.90	0.01	0.01	0.31	0.32	0.01	0.08	0.09	—	838	838	0.05	0.11	0.05	873
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	0.01	0.20	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.13	124
Total	0.02	0.01	0.20	0.14	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.13	124

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	646	646	0.02	< 0.005	—	648
Total	—	—	—	—	—	—	—	—	—	—	—	—	646	646	0.02	< 0.005	—	648
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	646	646	0.02	< 0.005	—	648
Total	—	—	—	—	—	—	—	—	—	—	—	—	646	646	0.02	< 0.005	—	648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	107	107	< 0.005	< 0.005	—	107
Total	—	—	—	—	—	—	—	—	—	—	—	—	107	107	< 0.005	< 0.005	—	107

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	887	887	0.08	< 0.005	—	890
Total	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	887	887	0.08	< 0.005	—	890
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	887	887	0.08	< 0.005	—	890
Total	0.08	0.04	0.74	0.62	< 0.005	0.06	—	0.06	0.06	—	0.06	—	887	887	0.08	< 0.005	—	890
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	147	147	0.01	< 0.005	—	147
Total	0.01	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	147	147	0.01	< 0.005	—	147

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	1.50	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.50	0.03	3.04	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.5	12.5	< 0.005	< 0.005	—	12.6
Total	2.17	2.13	0.03	3.04	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.5	12.5	< 0.005	< 0.005	—	12.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.50	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.63	1.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.42	1.42	< 0.005	< 0.005	—	1.42
Total	0.37	0.36	< 0.005	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.42	1.42	< 0.005	< 0.005	—	1.42

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Total	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Total	—	—	—	—	—	—	—	—	—	—	—	108	140	247	0.37	0.24	—	327
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	17.8	23.2	41.0	0.06	0.04	—	54.2
Total	—	—	—	—	—	—	—	—	—	—	—	17.8	23.2	41.0	0.06	0.04	—	54.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Total	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Total	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.5	0.00	—	509
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	24.1	0.00	24.1	2.41	0.00	—	84.3
Total	—	—	—	—	—	—	—	—	—	—	—	24.1	0.00	24.1	2.41	0.00	—	84.3

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.2	18.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.02	3.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.02	3.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tractors/Loaders/Backhoes	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Forklifts	0.01	0.01	0.08	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	152	152	0.01	< 0.005	—	153
Other Material Handling Equipment	0.03	0.03	0.17	2.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	347	347	0.01	< 0.005	—	348

Other General Industrial Equipment	0.02	0.02	0.58	0.86	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	123	123	0.01	< 0.005	—	124
Total	0.09	0.09	0.97	6.39	0.01	0.02	—	0.02	0.02	—	0.02	—	913	913	0.04	0.01	—	916
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tractors/ Loaders/ Backhoes	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Forklifts	0.01	0.01	0.08	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	152	152	0.01	< 0.005	—	153
Other Material Handling Equipment	0.03	0.03	0.17	2.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	347	347	0.01	< 0.005	—	348
Other General Industrial Equipment	0.02	0.02	0.58	0.86	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	123	123	0.01	< 0.005	—	124
Total	0.09	0.09	0.97	6.39	0.01	0.02	—	0.02	0.02	—	0.02	—	913	913	0.04	0.01	—	916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tractors/ Loaders/ Backhoes	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.4
Forklifts	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.0	18.0	< 0.005	< 0.005	—	18.0
Other Material Handling Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Other General Industrial Equipment	< 0.005	< 0.005	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Total	0.01	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.2	67.2	< 0.005	< 0.005	—	67.5

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergen cy Generat or	0.36	0.33	0.92	0.84	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	168	168	0.01	< 0.005	0.00	168
Fire Pump	0.09	0.08	0.27	0.30	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	42.0	42.0	< 0.005	< 0.005	0.00	42.1
Process Boiler	0.01	0.01	0.00	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	118	118	< 0.005	< 0.005	0.00	118
Total	0.46	0.42	1.18	1.23	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	328	328	0.01	< 0.005	0.00	329
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergen cy Generat or	0.36	0.33	0.92	0.84	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	168	168	0.01	< 0.005	0.00	168
Fire Pump	0.09	0.08	0.27	0.30	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	42.0	42.0	< 0.005	< 0.005	0.00	42.1
Process Boiler	0.01	0.01	0.00	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	118	118	< 0.005	< 0.005	0.00	118
Total	0.46	0.42	1.18	1.23	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	328	328	0.01	< 0.005	0.00	329
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	3.81	3.81	< 0.005	< 0.005	0.00	3.82
Fire Pump	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	0.95	0.95	< 0.005	< 0.005	0.00	0.96
Process Boiler	0.05	0.02	0.00	0.42	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	467	467	0.01	0.01	0.00	469
Total	0.06	0.03	0.03	0.45	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	472	472	0.01	0.01	0.00	474

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	1/29/2026	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2026	2/13/2026	5.00	10.0	—
Grading	Grading	2/14/2026	3/14/2026	5.00	20.0	—
Building Construction	Building Construction	3/15/2026	1/31/2027	5.00	230	—
Paving	Paving	2/1/2027	3/1/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	3/2/2027	3/30/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	29.4	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	11.5	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.88	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	105,000	35,000	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.50

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	2.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	375	0.01	< 0.005
2027	0.00	375	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	34.0	34.0	0.00	10,637	391	391	0.00	122,361

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	105,000	35,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	629,367	375	0.0129	0.0017	2,768,211

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	50,366,250	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	270	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Forklifts	Diesel	Tier 4 Final	1.00	8.00	82.0	0.20
Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	8.00	93.0	0.40

Other General Industrial Equipment	Diesel	Tier 4 Final	1.00	8.00	35.0	0.34
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	200	0.73
Fire Pump	Diesel	1.00	1.00	50.0	50.0	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Boiler - CNG (0–2 MMBTU)	Gasoline	1.00	1.00	1.00	8,760

5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.2	annual days of extreme heat
Extreme Precipitation	6.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	45.0
AQ-PM	39.3
AQ-DPM	64.4
Drinking Water	16.8
Lead Risk Housing	41.3
Pesticides	0.00
Toxic Releases	29.8
Traffic	53.1
Effect Indicators	—
CleanUp Sites	31.5
Groundwater	83.0
Haz Waste Facilities/Generators	86.8
Impaired Water Bodies	51.2
Solid Waste	55.5
Sensitive Population	—
Asthma	78.9
Cardio-vascular	71.3
Low Birth Weights	0.46
Socioeconomic Factor Indicators	—
Education	27.6
Housing	60.6
Linguistic	37.7
Poverty	56.1
Unemployment	17.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	41.55010907
Employed	73.4377005
Median HI	11.07404081
Education	—
Bachelor's or higher	65.18670602
High school enrollment	100
Preschool enrollment	79.27627358
Transportation	—
Auto Access	2.181444886
Active commuting	92.21095855
Social	—
2-parent households	99.56371102
Voting	72.56512255
Neighborhood	—
Alcohol availability	4.516874118
Park access	81.35506224
Retail density	97.02296933
Supermarket access	88.48967022
Tree canopy	93.76363403
Housing	—
Homeownership	3.977928911
Housing habitability	63.36455794
Low-inc homeowner severe housing cost burden	99.12742205
Low-inc renter severe housing cost burden	69.12613884

Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	50.93032208
Arthritis	48.2
Asthma ER Admissions	41.8
High Blood Pressure	47.4
Cancer (excluding skin)	30.9
Asthma	32.2
Coronary Heart Disease	51.0
Chronic Obstructive Pulmonary Disease	45.1
Diagnosed Diabetes	82.1
Life Expectancy at Birth	4.4
Cognitively Disabled	1.9
Physically Disabled	7.5
Heart Attack ER Admissions	15.7
Mental Health Not Good	49.5
Chronic Kidney Disease	64.9
Obesity	49.0
Pedestrian Injuries	88.2
Physical Health Not Good	62.9
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	7.9
Current Smoker	34.8
No Leisure Time for Physical Activity	74.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	98.6
Elderly	8.6
English Speaking	83.4
Foreign-born	9.9
Outdoor Workers	65.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	38.1
Traffic Density	65.7
Traffic Access	50.7
Other Indices	—
Hardship	34.7
Other Decision Support	—
2016 Voting	69.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0
Healthy Places Index Score for Project Location (b)	58.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Facility size assumption for Processing Facility
Construction: Paving	Assumption for paved area associated with Processing Facility (e.g., parking, loading, and sorting areas) - assume paved area is 100% asphalt.
Operations: Vehicle Data	Project specifications (Table 3.2-15 in PEIR) - total average of 34 trips/day for Processing Facilities (includes all truck trips and employee trips)
Operations: Fleet Mix	Project Specifications
Operations: Off-Road Equipment	Project specifications for three sets of operational equipment (<300 tpd material processing)
Operations: Emergency Generators and Fire Pumps	Project Specificaitons
Operations: Road Dust	—