

## REQUEST FOR APPROVAL

**To:** Rachel Machi Wagoner  
Director

**From:** Zoe Heller  
Acting Deputy Director, Materials Management and Local  
Assistance Division  
  
Deputy Director, Policy Development and Analysis Office

**Request Date:** July 19, 2022

**Decision Subject:** Consideration of the Mattress Recycling Council's Amended Used  
Mattress Recovery and Recycling Plan

Action By: July 25, 2022

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### **Summary of Request**

The Mattress Recycling Council submitted its amended *Used Mattress Recovery and Recycling Plan* to the California Department of Resources Recycling and Recovery on April 25, 2022. This Request for Approval presents staff's analysis regarding the Mattress Recycling Council's amended *Used Mattress Recovery and Recycling Plan*.

### **Staff Analysis**

The Mattress Recycling Council's (MRC) *Used Mattress Recovery and Recycling Plan (2015 Plan)* was approved by the California Department of Resources Recycling and Recovery (CalRecycle) in 2015 prior to implementing the California mattress stewardship program. In 2020, pursuant to Public Resources Code (PRC) section 42987.1.5, MRC reviewed its *2015 Plan* and determined that amendments are necessary to reflect operational changes since the program's implementation in 2015. On April 25, 2022, MRC submitted its amended *Used Mattress Recovery and Recycling Plan (Plan)* to CalRecycle. CalRecycle determined the *Plan* was complete on May 17, 2022, pursuant to Title 14, California Code of Regulations (CCR) section 18962(c). Pursuant to PRC section 42987.3(a) and 14 CCR section 18962(g), CalRecycle shall approve, disapprove, or conditionally approve the *Plan* within 90 days of receipt (by July 25, 2022). CalRecycle reviewed the *Plan* to determine whether MRC met the requirements for approval described in PRC section 42987.1 and 14 CCR section 18962. Overall, staff found that MRC's *Plan* does not satisfy certain statutory and regulatory requirements in its current form. Below is a summary of staff's analysis of MRC's *Plan*, including sections which require additional information and the conditions MRC must meet for CalRecycle to approve the *Plan*.

## Goals and Activities

Requirements: *Plan* shall contain program goals, methods, and activities pursuant to 14 CCR section 18962(a)(2). Identify objectives and activities that will comply with the state mattress recycling goals pursuant to 14 CCR section 18962(a)(2)(G). Identify methods to increase the number of used mattresses diverted from landfills, reduce the number of illegally dumped used mattresses, and increase the quantity of used materials recovered through this process and recycled for other uses pursuant to PRC section 42987.1(d).

Result: Additional information from and additional actions by MRC are necessary. MRC must meet the conditions outlined below under the section titled “CalRecycle Condition 1.”

MRC’s *Plan* is required to contain MRC’s program goals, methods, and activities as well as identify objectives and activities that will comply with the state mattress recycling goals established by CalRecycle. MRC’s *Plan* does not clearly distinguish the goals contained within it, nor are the descriptions provided fully responsive to the statutory and regulatory requirements. MRC’s *Plan* includes a section titled “Program Goals, Methods and Activities” that lists seven items it refers to as “goals” described in MRC’s annual report, but those items are not the state mattress recycling goals established by CalRecycle pursuant to statute. For example, “Units collected” is not a current goal, and “Units extracted and reclaimed from discarded mattresses (Yield)” is inconsistent with the “Efficiency rate” goals set by CalRecycle. MRC’s *Plan* then states it will use tactics including mattress collection, transportation, and recycling to meet the goals, but these basic programmatic components lack sufficient detail to demonstrate that MRC’s objectives and activities will comply with the state mattress recycling goals. For example, MRC includes “Statewide units renovated” in its list of goals but does not mention renovation in its description of its tactics to meet the goals. Accordingly, MRC has not demonstrated that its objectives and activities, as described in its *Plan*, will comply with the state mattress recycling goals.

CalRecycle Condition 1: Pursuant to 14 CCR section 18962(d), MRC must revise and resubmit its *Plan* to CalRecycle within 60 days of signature of this Request for Approval, and the resubmitted plan must meet the following condition:

- a. Identify objectives and activities that will comply with the state mattress recycling goals pursuant to PRC section 42987.5. The requirements necessitating this condition appear in 14 CCR section 18962(a)(2)(G).

## Program Convenience

Requirements: Describe how the program will provide convenient mattress collection and drop-off services pursuant to 14 CCR sections 18962(a)(2)(E), consistent with the convenience goals established pursuant to PRC section 42987.5(a)(1)(D). Describe how consumers of mattresses will have a convenient opportunity to recycle and properly

manage their used mattresses, including the number, location, and type of collection points in the program pursuant to 14 CCR section 18962(a)(2)(F).

Result: Additional information from and additional actions by MRC are necessary. MRC must meet the conditions outlined below under the section titled “CalRecycle Condition 2.”

MRC’s *Plan* describes multiple free options for California residents and businesses to recycle and properly manage their used mattresses. MRC’s collection network diverts mattresses from landfill disposal by collecting units and transporting them to recyclers to maximize material recovery. Pursuant to PRC section 42992, mattress retailers are required to offer consumers the option to have a used mattress picked up if a new mattress is delivered, and MRC offers retailers no-cost recycling of the units collected.

MRC has established a statewide network of no-cost collection sites located primarily at solid waste facilities, mattress retailers, renovators, and recyclers. MRC compensates participating collection sites and provides storage containers, transportation, and recycling for units they receive. MRC also offers collection site improvement funding, up to \$10,000 per site per funding cycle, to help increase the number of units a site can collect, increase recyclability, improve safety, and maximize units shipped in each container. Additionally, MRC partners with municipal bulky item collection programs that collect units from residents and transport the units to participating recyclers and holds periodic collection events to supplement its permanent collection options. MRC offers a financial incentive to encourage consumers to drop off their used mattresses at participating collection sites pursuant to PRC section 42987.1(k) and 14 CCR section 18962(a)(2)(B). MRC set its financial incentive at three dollars per unit, with a maximum of five units per vehicle per day, to reduce the number of mattresses illegally dumped by residents while not interfering with existing renovation and reuse operations. Additionally, as required by PRC section 42987.5(a)(1)(D)(i)(II), MRC’s Commercial Volume Program provides no-cost collection, transportation, and recycling for businesses and institutions with at least one hundred units to be picked up at one time.

MRC’s *Plan* does not include the number and location of each type of collection point pursuant to 14 CCR section 18962(a)(2)(F).

CalRecycle Condition 2: Pursuant to 14 CCR section 18962(d), MRC must revise and resubmit its *Plan* to CalRecycle within 60 days of signature of this Request for Approval, and the resubmitted plan must meet the following condition:

- a. Include the number, location, and type of collection points in the program. The requirement necessitating this condition appears in 14 CCR section 18962(a)(2)(F).

### **Waste Management Hierarchy**

Requirements: Identify program objectives consistent with California’s solid waste management hierarchy pursuant to PRC section 42987.1(a) and 14 CCR section

18962(a)(2)(A). Describe proper end of life management of used mattresses pursuant to 14 CCR section 18962(a)(2)(C).

Result: Met requirements.

The *Plan* describes MRC's program objectives, which are consistent with the state's solid waste management hierarchy, including source reduction, reuse and renovation, recycling, composting, biomass conversion, transformation, and landfilling.

The *Plan's* source reduction section is notable for its breadth of activities, some of which are clearly related to source reduction, while others describe efforts to support a circular economy in California more broadly. For example, to address source reduction, MRC's marketing team provides educational materials regarding how to maintain mattresses to increase the lifespan and reduce the frequency and number of units discarded. MRC also describes activities related to establishing a baseline, increasing efficiencies, and reducing other environmental impacts such as carbon emissions and energy use. MRC's Sleep Products Sustainability Program provides training and resources to assist mattress manufacturers in developing internal practices to reduce waste, increase operational efficiencies, and reduce energy use. Additionally, MRC describes how it performs research and funds projects to improve the efficiency of collection and transportation systems, conduct lean manufacturing assessments of recyclers to improve throughput and maximize efficiency, and perform a life cycle analysis to evaluate baseline performance that can be used to measure decreases in environmental impacts.

To fulfill its reuse objectives, MRC includes mattress renovators in its collection network and allows its contracted recyclers to sell units and components to renovators.

MRC's *Plan* focuses on recovering and recycling used mattresses. To accomplish this, MRC arranges for the transportation of units from collection sites to its contracted recyclers to be dismantled. MRC requires its contracted recyclers to recycle as much of each unit as possible, including maintaining at least 75 percent by weight recycling of total mattress materials. However, mattresses or foundations that are damaged, soiled, or contaminated can be unrecyclable and may need to be landfilled. MRC performs research to identify new uses for mattress materials to maximize recycling and move toward a circular economy for mattresses. MRC's *Plan* describes how composting and bio-mass conversion may be used at the discretion of MRC's recyclers. Additionally, MRC states that it may consult with CalRecycle regarding transformation if viable end markets do not exist for certain mattress materials. While the statute does not prohibit transformation of mattress materials, transformation is not recycling and would need to be reported accordingly in MRC's annual reports.

## **Illegally Dumped Mattresses**

Requirements: Ensure, to the maximum extent possible, that urban and rural local governments and participating solid waste facilities and authorized solid waste operations that accept mattresses are provided with a mechanism for the recovery of illegally disposed used mattresses that is funded at no additional cost to the local government, solid waste facility or operation pursuant to PRC section 42987.1(l) and 14 CCR section 18962(a)(2)(B).

Result: Additional information from and additional actions by MRC are necessary. MRC must meet the conditions outlined below under the section titled “CalRecycle Condition 3.”

MRC’s *Plan* describes its strategies to mitigate illegal mattress dumping through prevention, financial compensation, working with technical experts, education, and pilot projects. MRC’s collection network serves to prevent illegal dumping by providing California residents and businesses with options to properly dispose of their discarded mattresses at no cost. Additionally, MRC participates in conferences, coordinates with working groups, such as the Illegal Dumping Task Force, promotes resources to consumers, and engages in projects to expand outreach, which assist in combating illegal dumping.

MRC describes its Illegally Dumped Mattress Collection Initiative, which serves to collect data on the number and location of illegally dumped mattresses by providing compensation to eligible local governments, participating solid waste facilities, and authorized solid waste operations for tracking and reporting data about the collection of illegally dumped mattresses. While compensating entities for providing statistical information helps offset costs of managing illegally dumped units, the *Plan* does not adequately describe how participating entities are provided with a mechanism for the recovery of units that are illegally dumped that is funded at no additional cost to the local government, solid waste facility, or solid waste operation. For example, the *Plan* does not include the costs to collect illegally dumped units, nor the compensation rate MRC provides to eligible urban and rural entities for the recovery of illegally disposed mattresses. Therefore, MRC has not demonstrated that it is ensuring, to the maximum extent possible, that participating entities are provided with a mechanism for the recovery of illegally dumped mattresses at no additional costs.

CalRecycle Condition 3: Pursuant to 14 CCR section 18962(d), MRC must revise and resubmit its *Plan* to CalRecycle within 60 days of signature of this Request for Approval, and the resubmitted plan must meet the following condition:

- a. Describe how MRC will ensure, to the maximum extent possible, that urban and rural local governments, participating solid waste facilities, and authorized solid waste operations that accept mattresses are provided with a mechanism for the recovery of illegally disposed mattresses that is funded at no additional cost to

the local government, solid waste facility, or solid waste operation, including the cost to collect illegally dumped units and the compensation MRC provides to entities for the recovery of illegally disposed mattresses. The requirements necessitating this condition appear in PRC section 42987.1(l) and 14 CCR section 18962(a)(2)(B).

## **Financing Mechanism**

Requirements: Establish a means for funding the *Plan* in a manner that distributes the mattress recycling organization's costs uniformly over all mattresses sold in the state. Provide sufficient funding to carry out the *Plan*, including the administrative, operational, and capital costs of the *Plan* pursuant to PRC section 42987.1(e). Allocate revenues and expenses in accordance with Generally Accepted Accounting Principles pursuant to 14 CCR section 18962(a)(6).

Result: Additional information from and additional actions by MRC are necessary. MRC must meet the conditions outlined below under the section titled "CalRecycle Condition 4."

The *Plan* states that MRC's program is funded by a visible mattress recycling charge collected on all mattresses and foundations sold for use in California. MRC states that its mattress recycling charge distributes MRC's costs uniformly over all mattresses sold in the state and provides sufficient funding to carry out the *Plan* pursuant to PRC section 42987.1(e)(1). The *Plan* refers the reader to annual budgets that MRC submits to CalRecycle every July "...for the most current financial information related to the Program and the proposed recycling charge that it considers necessary to fund Program operations over a multi-year period in a fiscally "prudent and responsible" manner." Because the *Plan* does not (1) provide the amount of the mattress recycling charge and (2) describe the costs of the *Plan*, MRC has not adequately demonstrated that the financing mechanism provides sufficient funding to carry out its *Plan*, including the administrative, operational, and capital costs of the *Plan*. Accordingly, the *Plan* must include the established mattress recycling charge and anticipated revenues and expenses to carry out its *Plan*.

CalRecycle Condition 4: Pursuant to 14 CCR section 18962(d), MRC must revise and resubmit its *Plan* to CalRecycle within 60 days of signature of this Request for Approval, and the resubmitted plan must meet the following condition:

- a. Include MRC's established means for funding the *Plan* (mattress recycling charge amount), anticipated revenues, and proposed allocation of expenses to carry out the *Plan*, including the administrative, operational, and capital costs of the *Plan*. The requirements necessitating this condition appear in PRC section 42987.1(e) and 14 CCR section 18962(a)(6).

## Education and Outreach

Requirements: Provide and describe outreach and education to consumers, manufacturers, and retailers, including methods of distribution pursuant to PRC section 42987.1(n) and 14 CCR section 18962(a)(7).

Result: Additional information from and additional actions by MRC are necessary. MRC must meet the conditions outlined below under the section titled “CalRecycle Condition 5.”

The *Plan* describes the purpose of MRC’s industry and consumer education and outreach efforts and methods. MRC states that it works with mattress manufacturers and retailers to provide education about the legal obligations the industry must fulfill, share research and resources, and promote how and why to work with MRC. MRC’s consumer-facing brand, “Bye Bye Mattress,” seeks to educate California residents and businesses about the program, including the mattress recycling charge, nearby free mattress drop-off locations, and the retailer take back obligation. The *Plan* also describes that MRC performs targeted outreach in areas where mattress recycling opportunities are less accessible and that experience high rates of illegal mattress dumping. Additionally, MRC states that it provides educational materials to consumers regarding increasing the useful life of mattresses, and to participating solid waste facilities to prevent bed bug contamination. MRC states that it uses a variety of outreach methods, including advertising, public relations, digital and social media, direct marketing, and event sponsorships. MRC monitors the effectiveness of its outreach and adjusts its communication plan as necessary but does not describe how it measures or determines the effectiveness of its efforts. MRC’s *Plan* does not include information regarding how MRC distributes materials to consumers, manufacturers, and retailers.

CalRecycle Condition 5: Pursuant to 14 CCR section 18962(d), MRC must revise and resubmit its *Plan* to CalRecycle within 60 days of signature of this Request for Approval, and the resubmitted plan must meet the following condition:

- a. Describe methods of distribution of education and outreach materials to consumers, manufacturers, and retailers. The requirements necessitating this condition appear in PRC section 42987.1(n) and 14 CCR section 18962(a)(7).

## Research

Requirement: Conduct research, as needed, related to improving mattress collection, dismantling, and recycling operations, including pilot programs to test new processes, methods, or equipment pursuant to PRC section 42687.1(g) and 14 CCR section 18962(a)(2)(B). Describe how the program will increase the quantity of materials recovered and recycled, and market development activities that will be conducted to ensure these materials will be used pursuant to 14 CCR section 18962(a)(2)(D).

## Result: Met requirements

MRC's *Plan* describes research and market development efforts to improve the efficiency of used mattress collection, transportation, and recycling processes. MRC describes the types of research topics it pursues, including more efficient collection containers, developing markets for mattress materials, and increasing separation and recycling of pocketed coil innersprings. For example, MRC funded a prototype to separate steel coils from fabric pockets to increase the recovery of steel from pocketed coil mattresses, and increase recycler revenue, and intends to continue researching alternative solutions. MRC states that it supports research efforts to identify new end-uses for materials by partnering with universities, government agencies, industry groups and individual companies. The research described in MRC's *Plan* meets the statutory and regulatory requirements.

## Consultation with Mattress Advisory Committee

Pursuant to PRC section 42987.1(q) and 14 CCR section 18962(a)(8), the *Plan* includes a report from the MRC Advisory Committee (Advisory Committee). The report includes a summary of the consultative process between the Advisory Committee and MRC during the development of MRC's *Plan* and any other information deemed pertinent by the Advisory Committee to maximizing the recovery and recycling of used mattresses in the state. As described in PRC section 42987(a)(3)(C)(ii), the Advisory Committee prepares specific written recommendations that are approved by a majority of the Advisory Committee's members pursuant to a rollcall vote and included in the official approved minutes of the meeting.

MRC consulted with the Advisory Committee on March 31, 2022, regarding the development of the *Plan* and implementation of MRC's *2015 Plan*. The Advisory Committee prepared written recommendations at the meeting, including that MRC post on its website the questions received and answers provided during MRC's two stakeholder webinars, and requested a discussion with MRC at the next Advisory Committee meeting about how future annual reports can better measure the recycling rate. Additionally, the Advisory Committee recommended that CalRecycle share experiences with Oregon Department of Environmental Quality and that MRC's *Plan* include more language about designing for recyclability and reducing discarded mattresses. It is unclear how some of the Advisory Committee's recommendations are relevant to the consultative process with MRC during *Plan* development, the *Plan* itself, or deemed pertinent to maximizing the recovery and recycling of used mattresses in the state.

## Stakeholder Feedback

In addition to MRC's consultation with the Mattress Advisory Committee, MRC held two public webinars on March 24 and March 28, 2022, where stakeholders had the opportunity to share feedback and suggestions regarding a draft of MRC's *Plan*.



Additionally, CalRecycle solicited public comments regarding the *Plan* from April 25, 2022, through May 9, 2022, and received one comment letter from California Product Stewardship Council articulating support for approval of MRC's *Plan*.

### **Summary of Staff Analysis**

CalRecycle staff reviewed MRC's *Plan* and identified deficiencies that necessitate additional information from and additional actions by MRC. MRC's *Plan* contains many components from its *2015 Plan* that have been effectively implemented since the program started, as evidenced by CalRecycle's annual determinations of program compliance. Operating under its *2015 Plan*, MRC has provided convenient access to mattress recycling opportunities for residents and businesses, increased mattress collection, achieve high recycling rates, educated Californians about the program, and engaged in research and market development activities. Changes in MRC's *Plan* compared to its *2015 Plan* include a discussion of MRC's research to improve its collection, transportation, and recycling systems, funding to improve mattress collection sites, and updated methodology for better determining mattress sales and estimating the number of mattresses available for collection.

Although MRC's *Plan* includes information relevant to the statutory and regulatory requirements, additional information from and additional actions by MRC are necessary for CalRecycle to determine if the *Plan* is compliant and can be approved.

### **Options**

1. Conditionally approve MRC's *Plan*, contingent upon MRC providing a revised plan, within 60 days of signature on this Request for Approval, that includes the additional information to meet the conditions specified in the Staff Analysis section of this Request for Approval.
2. Disapprove MRC's *Plan*. MRC shall submit a revised plan within 60 days of signature on this Request for Approval and CalRecycle will review the revised plan within 90 days of resubmittal.

**Action:** Based on the analysis in this Request for Approval, I hereby conditionally approve the Mattress Recycling Council's amended *Used Mattress Recovery and Recycling Plan*, contingent upon MRC revising and resubmitting its *Plan* within 60 days as described in the Staff Analysis section above. This Request for Approval shall serve as CalRecycle's notice to MRC of the deficiencies in the *Plan* and the conditions of approval that CalRecycle is required to identify pursuant to 14 CCR section 18962(d).

**Dated:** July 22, 2022

**Signed by:** Mindy McIntyre

Chief Deputy Director on behalf of Rachel Machi Wagoner, Director

**Attachments:**

Documents listed below are posted to CalRecycle's website. To request documents that are referenced in this Request for Approval but are not listed below, please submit a Public Records Act request

(<https://www2.calrecycle.ca.gov/Forms/ContactUs/PublicRecordsRequest>).

1. *Mattress Recycling Council's Used Mattress Recovery and Recycling Plan*,  
<https://www2.calrecycle.ca.gov/Docs/Web/121251>