

REQUEST FOR APPROVAL

To: Ken DaRosa
Acting Director

From: Matt Henigan
Deputy Director, Materials Management & Local Assistance
Division

Request Date: June 16, 2020

Decision Subject: Consideration of Proposed 2020 State Mattress Recycling Baseline
and Goals

Action By: June 30, 2020

Summary of Request:

The Used Mattress Recovery and Recycling Act of 2013 (Public Resources Code Sections 42985-42994) requires the Department of Resources Recycling and Recovery to review and update the state mattress recycling baseline amount and recycling goals as necessary on or before July 1, 2020, and every four years thereafter. This request is for approval of staff's proposed state mattress recycling baseline and goals for 2020 through 2024 that are effective on July 1, 2020.

Recommendation:

Staff recommend approval of the proposed state mattress recycling baseline amount and state mattress recycling goals listed on Tables 1 and 2.

Action:

On the basis of the information and analysis in this Request for Approval, I approve the proposed state mattress recycling baseline and goals contained in Tables 1 and 2. I direct staff to conduct additional consultations with the Mattress Recycling Council and stakeholders regarding consumer and retailer access to the program and ensure the department approves the program-specific convenience goals prior to January 1, 2021.

Dated: June 27, 2020

Signed by Ken DaRosa, Acting Director

Ken DaRosa, Acting Director

Table 1 – State Mattress Recycling Baseline and Goals (Effective July 1, 2020)

	Baseline	2021 Goal	2022 Goal	2023 Goal	2024 Goal
Recycling rate	81%	81% ± 5%	81% ± 5%	81% ± 5%	81% ± 5%
Efficiency rate	65%	65% ± 5%	65% ± 5%	65% ± 5%	65% ± 5%
Consumer convenience (number of collection opportunities)	120	212	215	218	221

Table 2 – State Mattress Renovation Baseline (Effective July 1, 2020)

	Baseline	2021	2022	2023	2024
Renovation (number of units)	225,000	225,000	225,000	225,000	225,000

Attachments:

1. [California State Auditor Report, dated August 2018:](https://www.bsa.ca.gov/pdfs/reports/2018-107.pdf)
<https://www.bsa.ca.gov/pdfs/reports/2018-107.pdf>
2. [State Mattress Recycling Baseline and Goals Request for Approval, dated December 5, 2017:](https://www2.calrecycle.ca.gov/PublicNotices/Details/2201) <https://www2.calrecycle.ca.gov/PublicNotices/Details/2201>
3. [The Mattress Recycling Council's 2018 California Annual Report:](https://www2.calrecycle.ca.gov/Docs/Web/115683)
<https://www2.calrecycle.ca.gov/Docs/Web/115683>
4. [Proposed 2020 State Mattress Recycling Baseline & Goals Workshop Discussion Document, as presented at the March 9, 2020 Workshop:](https://www2.calrecycle.ca.gov/Docs/Web/117153)
<https://www2.calrecycle.ca.gov/Docs/Web/117153>

BACKGROUND

The California Used Mattress Recovery and Recycling Act (Act) of 2013 [Public Resources Code (PRC) Sections 42985-42994] was enacted to reduce illegal dumping, increase recycling, and substantially reduce public agency costs for the end-of-life management of used mattresses. The Act follows producer responsibility principles that require mattress manufacturers to develop, implement, and administer a mattress recycling program under the Department of Resources Recycling and Recovery's (CalRecycle) oversight. CalRecycle certified the Mattress Recycling Council (MRC), a non-profit organization created by the International Sleep Products Association, as a mattress recycling organization (MRO) in November 2014 and approved the MRC's Used Mattress Recovery and Recycling Plan (Plan) in January 2016. The MRC is currently the only mattress recycling organization certified by CalRecycle and operating a used mattress recycling program in California. The MRC collects and manages the mattress recycling charge assessed on every mattress sold in California to implement its statewide program.

State Mattress Recycling Baseline Amount & Recycling Goal Requirements

At the time the initial state mattress recycling baseline amount and recycling goals were developed in 2017, PRC Section 42987.5 required CalRecycle to establish, in consultation with the MRO, the state mattress recycling baseline amount and state mattress recycling goals using the methodology contained in the MRO's plan and information contained in the MRO's first annual report. Per statute, the state mattress

recycling baseline and goals became effective January 1, 2018 and apply statewide (i.e., to mattresses that are managed as part of the MRO's program as well as those that are not) and are not specific to the MRO's program. However, beginning July 1, 2019, and annually thereafter, the MRO's annual report must demonstrate its good faith effort to comply with the statewide goals. Additionally, the Act requires CalRecycle, on or before July 1, 2020, and every four years thereafter, to review and update the baseline amount and goals as necessary, to ensure that the program advances these goals.

On January 30, 2018, the Joint Legislative Audit Committee directed the California State Auditor to review CalRecycle's oversight and the MRC's administration of the mattress recycling program. The California State Auditor concluded in its final report (Attachment 1) that CalRecycle did not provide the necessary oversight to ensure the mattress program fulfills its purpose and provided a number of recommendations to the legislature to amend the Act, including a recommendation to the Legislature to require CalRecycle to establish additional recycling goals such as increasing consumer convenience.

The Act was modified in October 2019 via Assembly Bill 187 (Garcia, Chapter 673, Statutes of 2019) and required CalRecycle to establish the following:

- On or before July 1, 2020, metrics and goals for increasing consumer convenience for used mattress drop-off, disposal, and recycling across the entire state, regardless of socioeconomic conditions.
- On or before January 1, 2021, convenience goals to be effective January 1, 2022, specific to each of the following:
 - Consumer access to the program, including at least one permanent mattress drop-off location in each county, except for counties with a population of less than 2,000 people as long as the MRO continues to provide at least two collection events in the county each year. The department may require additional drop-off locations to ensure consumers have sufficient convenient access to drop-off locations.
 - The MRO shall provide no cost freight services to any mattress retailer, health care facility, military base, or lodging establishment that has at least 100 used mattresses to pick up at one time.
 - Retailer access to the program.

2018 State Mattress Recycling Baseline & Goals

To establish the 2018 state mattress recycling baseline and goals, staff consulted with the MRC, conducted an extensive stakeholder engagement process that included a public workshop, a written public comment period on the proposed baseline and goals discussion document, and a staff presentation at a CalRecycle monthly public meeting before director approval on December 5, 2017 (Attachment 2). The state mattress recycling baseline and goals became effective on January 1, 2018. The 2018 state mattress recycling baseline and goals included annual increases in the number of mattress units collected for recycling, annual increases in the percentage of materials recovered from recycled mattresses, and maintenance of the number of units renovated to monitor if mattress renovation is impacted by the mattress recycling program.

CalRecycle used annual reports submitted by mattress renovators, recyclers, and solid waste facilities (referred to in this document as “reporting entities”) as one data source to develop the baseline amounts. Mattress recyclers and renovators are required to report the number of units (i.e., mattresses and foundations) received and identify from where they came, the quantities and weights of constituent parts recycled, and the number of units renovated and sold in California. Solid waste facilities must report the number of units received and the number of units landfilled or sent to another facility to be recycled or renovated.

When establishing the 2018 state mattress recycling baseline and goals, only one full calendar year of reports had been submitted by mattress recyclers, renovators, and solid waste facilities. As a result, CalRecycle identified data gaps, including potentially significant under-reporting from mattress renovators, and endeavored to improve the quality of the data through targeted education, outreach, and inspections.

Table 3, below, describes the state mattress recycling baselines and goals that became effective January 1, 2018, the statewide actuals for each year, and the status of the MRC’s progress towards meeting the goals to date. Table 4 describes the 2018 state mattress renovation baseline and actuals.

Table 3 – 2018 State Mattress Recycling Baseline and Goals

	2016 Baseline	2017 Goal	2018 Goal	2019 Goal	2020 Goal
Increase annual collection (units)	955,000	1,242,000	1,428,000	1,557,000	1,697,000
MRC actuals	1,043,247	1,362,235	1,430,363	TBD	TBD
Percent of materials recovered from recycled mattress	64%	66%	69%	72%	75%
MRC actuals	64%	59%	65%	TBD	TBD

Table 4 – 2018 State Mattress Renovation Baseline

	2016 Baseline	2017	2018	2019	2020
Renovation (number of units)	150,000	150,000	150,000	150,000	150,000
State actuals	150,124	263,646	226,000	TBD	TBD

As demonstrated in Table 3, the MRC has met and exceeded the collection goal each year. The MRC has not met the percent of materials recovered from recycled mattresses goal. The increase in mattresses renovated from 2016 to 2017 is largely due to an increase in the number of mattress renovators reporting to CalRecycle, from six in 2016 to 25 in 2017. The MRC must describe its good faith efforts to comply with the state mattress baseline and recycling goals in its annual reports. CalRecycle evaluates MRC's good faith efforts to comply with the baseline and goals as part of its annual report review process. To date, CalRecycle has determined that the MRC has made a good faith effort to comply with the baseline and goals.

2020 STATE MATTRESS BASELINE AND RECYCLING GOALS

PRC Section 42987.5(c) states that "on or before July 1, 2020, and every four years thereafter, the department shall review, including reviewing for consistency with Section 41780.01, and update as necessary, the baseline amount and goals to ensure that the program advances these goals." CalRecycle consulted with the MRC during the development of the 2020 proposed baseline and goals. Following the first series of discussions on the proposed goals the MRC submitted a comment letter that addressed many of the concepts, which we will address below. Staff conducted additional consultation with the MRC regarding the concerns expressed in their comment letter.

In March 2020, staff conducted a state mattress recycling baseline and goals public workshop to solicit feedback on concepts and metrics for the 2020 baselines and goals. A discussion document (Attachment 4) that included a broad list of goal concepts and metrics under consideration was released in advance of the workshop. Staff received 11 comment letters from stakeholders, discussed in more detail below.

State Recycling Rate

(PRC Section 42987.5(a)(1)(A)-(B), effective July 1, 2020)

Staff propose setting a statewide recycling rate, which includes mattresses managed both inside and outside of the MRO's program. The statewide recycling rate is calculated by dividing the number of units recycled and renovated by the number of units recycled, renovated, and disposed of in landfills, see equation below

$$\text{State Recycling Rate} = \frac{(\text{units recycled statewide} + \text{units renovated statewide})}{(\text{units recycled statewide} + \text{units renovated statewide} + \text{units disposed statewide})}$$

Data reported in 2018 to CalRecycle from mattress recyclers, renovators, and solid waste facilities, showed that 1,478,525 mattresses were recycled, 226,068 were

renovated, and 409,052 were disposed of in landfills. Staff used the formula above to calculate the baseline recycling rate of 81%.

During the department's consultation with the MRC, the MRC expressed a need for the statewide recycling rate goal to provide some flexibility to account for fluctuations in data reporting and the economy. Staff proposed a goal of 81% ± 5% for 2021-2024 to allow for some variance in data reporting from entities as well as account for potential changes in the economy (see Table 5). For example, fluctuations in data reporting such as failure of reporting entities to submit statutorily required annual reports to the department in a timely manner may impact the overall accuracy of the statewide recycling rate. Additionally, changes to the economy will impact the number of units sold and therefore the quantity of used mattresses available for recycling.

The MRC suggested this goal be re-named to the statewide diversion rate. CalRecycle chose not to revise the title as statute requires establishment of a recycling rate, not a diversion rate. This is also consistent with Assembly Bill 341 (Chesbro, Chapter 476, Statutes of 2011), which established a 75% recycling goal. Additionally, the MRC commented that it agrees with CalRecycle's proposed formula, but suggested using 2016 data for the baseline. CalRecycle chose to use 2018 data because, given the 2016 data gaps discussed above, it is the most complete data and provides a more accurate calculation of the current statewide recycling rate.

Table 5 – State Recycling Rate Goal

	Baseline	2021 Goal	2022 Goal	2023 Goal	2024 Goal
Recycling Rate	81%	81% ± 5%	81% ± 5%	81% ± 5%	81% ± 5%

State Efficiency Rate

(PRC Section 42987.5(a)(1)(A)-(B), effective July 1, 2020)

Staff propose setting a recycling efficiency rate, which is calculated based on the amount of material recycled and renovated from mattresses collected statewide, both inside and outside of the MRO's program. The efficiency rate is based on the pounds that are recycled and renovated divided by the total pounds recycled, renovated, and disposed of in landfills, see equation below.

$$\text{State Efficiency Rate} = \frac{(\text{pounds recycled statewide} + \text{pounds renovated statewide})}{(\text{pounds recycled statewide} + \text{pounds renovated statewide} + \text{pounds disposed statewide})}$$

The baseline efficiency rate of 65% is calculated using annual report data submitted by reporting entities to the department. In 2018, a total of 44,201,115 pounds of material from mattresses (including steel, foam, quilt panels, wood, cotton, other fiber, cardboard, plastics, and shoddy felt) was recycled. Renovation data is reported to CalRecycle in units, so a conversion factor of 55 pounds, the average weight of mattresses and foundations, was used to convert units renovated into pounds. On average 75% of a mattress is reused during the renovation process. In 2018, 9,325,305

pounds of material was reported as renovated. Mattress recycling and renovation resulted in the disposal of 28,449,634 pounds of residuals in 2018.

The MRC suggested setting the baseline at 64%, consistent with its 2016 Annual Report. However, the MRC's recycling rate is based on data from its contracted recyclers, and does not account for all activities that reporting entities conduct outside of its program. The proposed 2018 baseline is calculated using statewide data that includes recycling activities outside of the MRC's program and is not limited to data reported by the MRC's contracted recyclers. This is also consistent with the State Auditor's recommendations that CalRecycle set statewide goals that are not limited to the MRC's program.

The MRC also suggested the efficiency rate goal range from 60-75% to account for external events outside the MRC's control, such as global economic disruptions as a result of the COVID-19 pandemic. For example, there is a potential for secondary markets for used mattress materials to be negatively impacted by events such as a public health crisis. In response, staff proposed a goal of 65% ± 5% for 2021-2024 (see Table 6) to provide some flexibility to account for events outside of the MRC's control. In addition to this recycling efficiency rate goal, the MRC has a 75% recycling efficiency rate target for its contracted recyclers per the approved Plan. CalRecycle will continue to monitor the MRC's progress via annual report compliance reviews and consider MRC's good faith efforts to comply with the goal.

Table 6 – State Efficiency Rate Goal

	Baseline	2021 Goal	2022 Goal	2023 Goal	2024 Goal
Efficiency Rate	65%	65% ± 5%	65% ± 5%	65% ± 5%	65% ± 5%

State Renovation

(PRC Section 42987.5(a)(2), effective July 1, 2020)

During the 2020 public workshop, staff proposed removing the renovation baseline due to concerns that the metric is not an accurate way to monitor the program's impact on renovation. Staff also proposed including renovation in the formula to calculate the statewide recycling and efficiency rates, as required by statute. The MRC agreed with CalRecycle's proposal to include renovation data in the statewide recycling goals and the removal of the renovation baseline. However, stakeholders in the renovation community expressed opposition to the removal of the renovation baseline.

Staff considered the comments made by stakeholders and decided to retain the renovation baseline for the 2020 state mattress recycling baseline and goals. Staff have determined that a variety of factors unrelated to the mattress recycling program have the potential to impact renovation. The factors include importation of low-cost mattresses, consumer preferences for new mattresses whose price points compete with renovated mattresses, and individual business decisions made by renovators (e.g., only renovating certain size mattresses). The International Trade Commission (ITC) has

preliminarily determined that the U.S. mattress industry has been materially injured by imports of finished mattresses from eight countries with final determinations from the ITC coming later this year. Therefore, staff recognize that the renovation baseline is not an ideal metric to assess the impact of the MRC's program on renovation activities in the state. Staff and the MRC agree that the renovation baseline should not be the basis for concluding whether the MRC's program is undermining renovation activities and will therefore continue to utilize all available data to evaluate potential impacts on renovation.

In addition to including renovated mattresses in the calculations for statewide mattress recycling and efficiency rates, staff propose to update the renovation baseline of 150,000 units, which used 2016 data, to 225,000 units using 2018 data (see Table 7). The renovator data used in the 2018 state mattress recycling baseline and goal-setting process was limited as the total number of renovated mattresses was significantly under-reported. Staff conducted significant additional outreach to renovators through in-person site visits, phone calls, and database and email communication, which led to increases in both the number of renovators reporting and the quality of data reported by renovators.

Table 7 – State Mattress Renovation Baseline

	Baseline	2021	2022	2023	2024
Renovation (number of units)	225,000	225,000	225,000	225,000	225,000

State Consumer Convenience

(PRC Section 42987.5(a)(1)(C), effective July 1, 2020)

Staff maintain that to be convenient, consumer access to mattress drop-off, recycling, and disposal should be readily available to consumers without charging them an additional fee. Staff propose a goal to add three additional convenient collection drop-off, recycling, or disposal opportunities throughout the state per year, regardless of socioeconomic conditions.

During the 2020 public workshop, CalRecycle proposed setting the baseline at 190 collection sites as reported by the MRC in its 2018 Annual Report. After consultation with the MRC, CalRecycle adjusted the proposed baseline to 120 to reflect the number of collection sites in 2016 instead of 2018 and agreed to include in the metrics retailer take-back and curbside collection programs (see Table 8).

The metrics for monitoring achievement of this goal will include the number of sites in the MRC's collection network, disposal facilities that accept mattresses, curbside programs that accept mattresses, retailers that take-back old mattresses upon delivery of new mattresses, and recycling facilities operating both inside and outside of MRC's program that accept mattresses, provided they are at no cost to the consumer.

Table 8 – State Consumer Convenience Goal

	Baseline	2021 Goal	2022 Goal	2023 Goal	2024 Goal
Consumer convenience (number of collection opportunities)	120	212	215	218	221

STAKEHOLDER COMMENTS

CalRecycle received 11 formal comment letters from stakeholders regarding the proposed baseline and goals.

The California Product Stewardship Council expressed its support for the majority of CalRecycle’s proposed baseline and recycling goals. It also suggested a more substantial annual percentage increase for retailer convenience, expressed opposition to the removal of the renovation baseline, and stated that using renovated units in the statewide recycling rate is not an effective way to measure reuse.

Several stakeholders in the renovation community expressed opposition to removing the renovation baseline over concern that it would result in CalRecycle not monitoring the impact the program has on renovation activities in the state.

Lastly, one comment letter from a stakeholder involved in mattress handling and transportation expressed its support of the proposed baseline and goals.