Proposed 2020 State Mattress Recycling Baseline & Goals
Workshop Discussion Document

By July 1, 2020, CalRecycle is required to review, including reviewing for consistency with Public Resources Code (PRC) Section 41780.01, and update as necessary, the state mattress recycling baseline amount and goals. This document outlines the requirements of the statute, including the requirements established by Assembly Bill (AB) 187 (Garcia, Chapter 673, Statutes of 2019), as well as the proposed goals, and is intended to guide the discussion at CalRecycle’s March 9, 2020 workshop.

The statewide recycling rate and recycling efficiency rate baseline amounts and goals include mattresses that are managed as part of the mattress recycling organization’s program and mattresses managed outside of the program. The consumer and retailer access baseline amounts, goals, and requirements, however, apply solely to the mattress recycling organization’s program.

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

Proposed Statewide Recycling Goals and Baselines:

1. Statewide Recycling Rate
   a) Baseline- 81% recycling rate using data reported to CalRecycle for calendar year 2018 based on the following formula:

   \[ \frac{\text{units recycled statewide} + \text{units renovated statewide}}{\text{units recycled statewide} + \text{units renovated statewide} + \text{units disposed statewide}} \]

   b) Goal- X% for each year from 2020 to 2024 (e.g., 81%, a percentage range, an annual percentage increase of X%)

2. Recycling Efficiency Rate
   a) Baseline- 65% of materials recycled from collected mattresses using data reported to CalRecycle for calendar year 2018

   b) Goal- X% annual increases from the 65% baseline from 2020 to 2024 in materials recycled from collected mattresses (e.g., 2%)

Table 1. Example of Potential Recycling Baseline and Goals

<table>
<thead>
<tr>
<th></th>
<th>2020 Baseline</th>
<th>2021 Goal</th>
<th>2022 Goal</th>
<th>2023 Goal</th>
<th>2024 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling Rate</td>
<td>81%</td>
<td>81%</td>
<td>81%</td>
<td>81%</td>
<td>81%</td>
</tr>
<tr>
<td>Recycling Efficiency Rate</td>
<td>65%</td>
<td>67%</td>
<td>69%</td>
<td>71%</td>
<td>73%</td>
</tr>
</tbody>
</table>
The statewide recycling rate is derived from dividing the number of units recycled and renovated by the number of units recycled, renovated, and disposed in landfills. Staff propose a baseline of 81% that is calculated using the statutorily required annual report data submitted to CalRecycle from mattress recyclers, renovators, and solid waste facilities for 2018. Annual report data submitted to CalRecycle will also be used to monitor progress toward achieving this goal.

The statewide recycling efficiency rate is derived from the amount of material recycled from mattresses collected statewide. The baseline for the statewide recycling efficiency rate of 65% is derived from statutorily required annual report data submitted to CalRecycle from mattress recyclers, renovators, solid waste facilities and the mattress recycling organization. Annual report data submitted to CalRecycle will also be used to monitor progress toward the recycling efficiency goals.

The proposed goals will provide a consistent measurement mechanism since variability in sales and other economic factors would affect both the numerator and denominator. Including renovated mattresses in the statewide recycling rate is consistent with PRC Section 42987.5 (a)(2) which requires the department to include renovated mattresses when calculating the state mattress recycling goals.

Questions
- For the statewide recycling rate, should the goal remain constant (e.g., 81% from 2020 through 2024), should a range of recycling rates be considered (e.g., 81%-83%), or should annual percentage increases be considered (e.g. 1% increase each year)?
- For the recycling efficiency rate, what annual percentage increases are reasonable and appropriate?
- For the recycling efficiency rate, is using the data from 2018 the best baseline to continue to monitor statewide progress in mattress recycling? Or should we use 2016 data?
- Are there limitations of the proposed recycling goals that warrant a different approach? If so, is there another type of goal with associated data sources that could better address recycling?

Statewide Renovation (PRC Section 42987.5 (a)(2))

Proposal: Remove and do not replace the existing renovation baseline and goal.

Staff propose to eliminate the current renovation goal and incorporate renovation in the statewide recycling rate goal and the recycling efficiency rate goal in order to assess whether or not the chapter undermines existing used mattress recycling, resale, refurbishing, and reuse operations that are in compliance with state and federal law. Through improvements in the quality and quantity of annual data received from mattress renovators, stakeholder engagement including in-person site visits to mattress
renovators statewide, and significant written and verbal communication with the mattress recycling organization and with renovators regarding annual reporting, CalRecycle now has a better understanding of mattress renovation in the state than when the goal was originally established in 2018. There are a variety of factors unrelated to the chapter or the mattress recycling program that impact renovation rates including variability in markets, changing economic conditions, low-cost new mattresses being imported from international markets and changing consumer preferences to these mattresses whose price points compete with renovated mattresses, and individual business decisions made by renovators (e.g., only renovating certain size mattresses). The current renovation goal does not account for these factors and is not the ideal mechanism for determining if the chapter or the program are undermining renovation operations. Staff have and will continue to closely monitor renovation activities for trends and impacts through analysis of mattress renovator annual reporting data and as part of overall program oversight.

Questions

- Are additional goals or metrics needed to assess if the program is undermining existing used mattress reuse, refurbishing, and renovation activities?
- How can a renovation goal be structured to take into account variability in sales trends, and other economic factors over time?

Consumer Convenience (PRC Section 42987.5 (a)(1)(C)-(D)(i)(I))
(Statutorily effective July 1, 2020 or January 1, 2022, as noted below)

Proposed Consumer Convenience Goals, Baselines and Requirements:

(Statutorily effective July 1, 2020)

1. Convenient Access to Collection Sites
   a) Baseline- 89.6% of CA residents live within 15 miles of MRC’s collection network (includes curbside collection, excludes collection events), using data reported in MRC’s 2018 Annual Report
   b) Goal- X% annual increases from the 89.6% baseline from 2020 to 2024 in consumer access to mattress recycling opportunities, including permanent collection sites and curbside collection (e.g., 0.2% increases)

2. Number of Collection Sites
   a) Baseline- 190 permanent collection sites (excludes curbside collection, collection events, and retailer take-back), using data reported in MRC’s 2018 Annual Report
   b) Goal- X number of additional permanent collection sites from the 190 permanent collection site baseline added annually from 2020 to 2024 (e.g., 3 sites)
(Statutorily effective January 1, 2022)

1. **Additional Sites in Areas with High Population**
   a) **Baseline**- No data available to establish baseline (requirement is not currently effective)
   b) **Goal**- X number of additional permanent collection sites from 2022 to 2024 in densely populated areas (e.g., one additional site in areas with a population greater than 100,000)

2. **Counties with Permanent Collection Sites**
   a) **Requirement**- One permanent collection site in each county (with the exception of counties with a population less than 2,000 residents). If unable to establish one permanent site, the mattress recycling organization may fulfill this goal by hosting a minimum of two events per year and/or offer curbside pickup.

3. **Events in Counties with Low Population**
   a) **Requirement**- Two events per year in counties with less than 2,000 residents (unless county has a permanent site)

### Table 2. Example of Select Potential Consumer Access Goals

<table>
<thead>
<tr>
<th></th>
<th>2020 Baseline</th>
<th>2021 Goal</th>
<th>2022 Goal</th>
<th>2023 Goal</th>
<th>2024 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Collection Sites</td>
<td>89.6%</td>
<td>89.8%</td>
<td>90%</td>
<td>90.2%</td>
<td>90.4%</td>
</tr>
<tr>
<td># of Collection Sites</td>
<td>190</td>
<td>193</td>
<td>196</td>
<td>199</td>
<td>202</td>
</tr>
</tbody>
</table>

Staff propose two consumer convenience goals in 2020. The first is an annual percentage increase based on how many residents live within 15 miles of the MRC’s collection network, starting with a baseline of 89.6%. The second goal is an annual increase in the number of collection sites, with a baseline of 190 collection sites. The proposed baselines are based upon data reported by the MRC in its 2018 Annual Report.

Staff propose one consumer convenience goal that goes into effect in 2022. This goal is meant to address areas that do not meet the following requirements pursuant to PRC Section 42987.5 (a)(1)(D)(i)(I). The goal requires the mattress recycling organization to establish additional permanent collection sites in densely populated areas. This goal does not have a proposed baseline associated with it because it is not currently effective, but may be established in future years.

The next two statutory requirements related to consumer convenience in 2022 are listed as specified in PRC Section 42987.5 (i)(I). The first statutory requirement is that every county with a population greater than 2,000 residents shall have at least one permanent mattress collection location, and if one permanent collection site cannot be established,
the mattress recycling organization must host a minimum of two events per year and/or offer curbside pickup. For reference, 52 out of 58 counties had a permanent collection site using data from the MRC’s 2018 Annual Report. The last statutory requirement is that two events must be held annually in counties with less than 2,000 residents.

Meaningful convenience goals are important to monitor the success of the program and ensure that convenient recycling options are available to consumers throughout the state. An increase in access to disposal, recycling, and collection opportunities typically corresponds with a decrease in illegal dumping and increases in collection and recycling, thereby improving the management of mattresses in the state.

Questions
- Are the consumer convenience goals reasonable?
- Should the increase in the total number of sites per county be based on population or another metric?
- What percent annual increase is reasonable?
- Are there other aspects of convenience that should be considered?

Retailer Access/ Large Volume Service (PRC Section 42987.5 (a)(1)(D)(I)(II)-(ii))
(Statutorily effective January 1, 2022)

Proposed Retailer Access/Large Volume Service Goals, Baselines and Requirement:
1. Urban Retailer Access
   a) Baseline- 50% of retailers in urban counties are located within 15 miles of a permanent collection site that accepts units from retailers using data reported in MRC’s 2018 Annual Report
   b) Goal- X% annual increase from 2022 to 2024 in access to a permanent collection site for retailers in urban counties (e.g., 0.2%)

2. Rural Retailer Access
   a) Baseline- 59% of retailers in rural counties are located within 20 miles of a permanent collection site that accepts units from retailers using data reported in MRC’s 2018 Annual Report
   b) Goal- X% annual increase from 2022 to 2024 in access to a permanent collection site for retailers in rural counties (e.g., 0.1%)

3. No-Cost Freight Service
   a) Requirement- 100% of retailers, health care facilities, educational facilities, military bases, and lodging establishments that have at least 100 used mattresses to pick up at one time will have access to no-cost freight services provided by the mattress recycling organization in 2022 and each year thereafter.
### Table 3. Example of Select Potential Retailer Access Goals

<table>
<thead>
<tr>
<th></th>
<th>2020 Baseline</th>
<th>2022 Goal</th>
<th>2023 Goal</th>
<th>2024 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Retailer Access</td>
<td>50%</td>
<td>50.2%</td>
<td>50.4%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Rural Retailer Access</td>
<td>59%</td>
<td>59.1%</td>
<td>59.2%</td>
<td>59.3%</td>
</tr>
</tbody>
</table>

Staff believe that the proposed goals will improve access to available mattress collection sites for retailers who are obligated to pick-up used mattresses from customers when delivering a new mattress. These goals will help to increase the number of available sites that accept units from retailers, thus reducing the burden on retailers to transport mattresses long distances to collection locations or obligating retailers to pay to recycle the units collected. Staff propose setting the urban and rural retailer access baseline amounts based on the information provided in the MRC’s 2018 Annual Report. Additionally, the statutory requirement for a mattress recycling organization to provide no-cost freight services to retailers, health care facilities, educational facilities, military bases and lodging establishments will help increase program convenience by providing direct pick-up to entities that have more than 100 mattress units. Increased convenience for these entities will likely lead to an increase in good quality units entering the program for recycling.

**Questions**

- Are there other considerations of retailer access that should be considered?
- Should there be separate goals for urban and rural retailers or just one goal for all retailers?
- What percent annual increase is reasonable?

**General Questions**

In addition to the goal-specific questions noted above, CalRecycle requests feedback from stakeholders, including but not limited to the following:

- Are there other goals or metrics the department should consider for 2020? If so, what are they and what are their data sources?
- Are there goals listed above that the department should not consider for 2020? If not, why?
- Are there limitations do the proposed goals pose that the department should be made aware?
## Current State Mattress Baseline Amount and Recycling Goals
*(Statutorily effective January 1, 2018)*

<table>
<thead>
<tr>
<th></th>
<th>2016 Baseline</th>
<th>2017 Goal</th>
<th>2018 Goal</th>
<th>2019 Goal</th>
<th>2020 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renovation goal (units)</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Recycling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase annual collection (units)</td>
<td>955,000</td>
<td>1,242,000</td>
<td>1,428,000</td>
<td>1,557,000</td>
<td>1,697,000</td>
</tr>
<tr>
<td>Percent of materials recovered from recycled mattresses</td>
<td>64%</td>
<td>66%</td>
<td>69%</td>
<td>72%</td>
<td>75%</td>
</tr>
</tbody>
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