In its Request for Approval regarding the Mattress Recycling Council California, LLC’s (MRC) revised 2017 California Used Mattress Recovery and Recycling Annual Report (Revised Report), CalRecycle staff recommend that the Director conditionally approve the Revised Report pending submission by MRC of an addendum providing additional detail on the subject of abandoned mattress management.

MRC provides the following additional information in response to the issues that CalRecycle staff have raised regarding this subject:

1. **Establish an illegal dumping baseline to comply with the MRC’s approved Plan**

In 2016 and 2017, MRC collected data from participating entities in California, including counties, municipalities, solid waste companies and others, regarding the number of discarded mattresses that were illegally dumped in their respective communities (data collection effort). MRC intends to use this information to determine the location and extent of the state’s illegal mattress dumping problem.

Despite having promoted this effort extensively, participation and the data reported remains incomplete. As a result, MRC explained in the Revised Report its reluctance at this point to use partial data to estimate the baseline as contemplated in our Program Plan.

Nevertheless, as requested by CalRecycle, MRC has extrapolated the data it collected in 2017 (the first full calendar year of its data collection effort) to estimate that 97,518 mattresses were illegally dumped in California in 2017. MRC calculated this estimate as follows:

In 2017, 47 California entities representing 17,034,523 million residents reported collecting 42,016 illegally dumped mattresses in their jurisdictions. These entities represent approximately 43.1% of California’s 2017 population of 39,536,653 residents (US Census Bureau as of July 1, 2017). Therefore, assuming that the 56.9% of California’s population that resides in parts of the state that chose not to participate in MRC’s data collection effort experienced illegal mattress dumping to the same degree as the reporting entities, MRC estimates that approximately 97,518 mattresses were illegally dumped statewide on California roads and public areas in 2017.

MRC cautions, however, that while this figure provides a starting point for understanding the magnitude of the state’s illegal mattress dumping problem, its utility is limited as these 47 participating entities represent less than half of the state’s population. MRC does not know why the remainder of the state jurisdictions did not participate in its data collection effort. Entities may choose not to participate because they experience little or no illegal mattress dumping, because they lack the resources to devote to this effort, or because of other factors. For this reason, MRC does not know whether its assumption
that non-participating parts of the state experienced the same level of illegal mattress dumping as the other parts of the state is valid.

Therefore, given these limitations-in the data collected in 2017, MRC will seek to improve participation in its data collection efforts in 2018 and beyond. We will also seek additional information regarding the reasons why specific entities do not participate in this effort. In so doing, MRC hopes to obtain illegally dumped mattress data for a larger percentage of the state’s population so that extrapolations from the information offer a more reliable and useful statewide baseline.

2. Describe how the MRC plans to use the data collected to reduce illegal mattress dumping

Although the data MRC collected in 2017 was incomplete, it does provide detailed information for participating entities that MRC can use to address the illegal mattress dumping problem. For example, MRC can determine which participating jurisdictions have the worst mattress dumping problem, both in terms of the actual number of units dumped and the per capita dumping rate. This information will help MRC prioritize areas of the state in which it can implement alternative strategies for preventing or mitigating illegal dumping (specific strategies are discussed below in point 3). As MRC implements these alternative strategies, our continuing data collection effort will help us evaluate whether those strategies were successful in addressing this problem.

MRC also intends to use this information to evaluate issues that may contribute to the illegal dumping problem. As discussed in the Revised Report, MRC will evaluate whether a correlation exists between those areas of the state that have a significant illegal mattress dumping problem and whether a lack of access to curbside bulky item collection services is a cause of the problem. If mattress dumping is less prevalent in areas that have curbside bulky item collection services, MRC will seek to promote those services statewide as a means to expand program access and address the illegal dumping problem.

Similarly, MRC intends to use the data it has collected to determine whether a correlation exists between a low incidence of illegal dumping and access to a mattress collection site (discussed in more detail below). If such a connection exists, the data will help MRC identify areas in which it may establish additional collection sites and/or hold collection events in an effort to prevent or reduce illegal mattress dumping.

3. Describe alternative methods for addressing illegal mattress dumping if participation in MRC’s data collection effort remains low or the data is inconclusive

MRC is currently researching the following innovative approaches for addressing illegal mattress dumping:

- 2019 grant funding for adversely impacted communities that focus on education, eradication or enforcement of existing dumping laws. Eligible projects could include:
  - Purchase of surveillance equipment and signage to be installed in hotspot areas.
  - Specific clean-up project(s).
  - Community events or workshops to encourage residents to manage their discarded mattresses properly.
• Conduct two or three pilot projects in hotspot areas of the state in which MRC will experiment with different approaches for reducing and preventing illegal dumping. MRC strategies may include:
  o Develop a targeted education and outreach campaign specific to illegal mattress dumping.
  o Measure what impact the pilot has on the problem using information gathered from MRC’s data collection effort, as well as other data sources.
  o Working with relevant non-profits and other interested organizations to fund clean-up projects targeting illegally dumped mattresses.
• Fund a study that identifies the root causes of illegal dumping and recommends effective strategies for addressing the problem. MRC intends to include in this study recognized experts in fields relevant to this subject as well as a California-based educational institution. A summary of these findings will be included in future annual reports.
• Explore the feasibility of developing and implementing a grant program similar to CalRecycle’s Illegal Disposal Site Abatement Grants to fund local government’s project costs associated with illegally dumped mattresses.

4. Provide a timeline that includes a date when the MRC will shift to an alternative strategy if necessary

Although participation in MRC’s data collection effort was not as strong as hoped, it nevertheless accomplished several objectives. First, it provided data on which we have estimated a statewide baseline and allowed us to identify illegal dumping hotspots. Second, the compensation MRC provided to participating municipalities helped provide financial resources for cleaning up illegally dumped mattress units. Third, MRC’s efforts to promote participation in its data collection efforts has stimulated awareness of our efforts to address this problem, even among those jurisdictions that did not participate in the effort. For these reasons, MRC intends to continue to collect data on illegal mattress dumping and provide financial compensation to participating entities for the foreseeable future and to seek broader participation and other means for collecting data on this subject.

As stated in MRC’s Program Plan, data collection was intended to generate information that would describe the size and extent of the problem, and then provide data MRC could use to prioritize and evaluate the effectiveness of different strategies. As noted above in part 3, we are at a point where we intend to experiment with alternative strategies, a number of which we may deploy in targeted pilot projects. We also intend to consider several ways of identifying the underlying causes for illegal dumping and recommendations for addressing those causes. MRC intends to pursue these alternative strategies to further understand, deter, and clean-up illegally dumped mattresses in the state. MRC will launch several of these strategies and pilots in 2019 and will use the information obtained to evaluate the effectiveness of these efforts. MRC will continue to assess the utility of the data collection effort and will reevaluate its usefulness in the 2018, 2019 and 2020 Annual Reports. If MRC decides to discontinue the data collection effort after the 2020 Annual Report, we will continue to pursue alternative strategies at that point.
Timeline Summary:

- **2019**
  - MRC will launch alternative strategies and pilots similar to those described in #3.
  - MRC will continue assessing data collection effort and re-evaluate the usefulness of the Initiative.
  - July 1, 2019 – In the 2018 Annual Report, the MRC will report on the 2018 Initiative data, including an assessment of usefulness.

- **2020**
  - MRC will continue assessing data collection effort and re-evaluate its usefulness.
  - MRC will continue alternative strategies and pilots similar to those described in #3.
  - July 1, 2020 – In the 2019 Annual Report, MRC will report on the 2019 data collection effort and provide an initial assessment of the success of its alternative strategies/pilots.

- **2021**
  - July 1, 2021 – In the 2020 Annual Report, MRC will report on the 2020 data collection effort and provide an assessment of the success of its alternative strategies/pilots and determine whether the data collection effort will continue or if the MRC will shift to alternative strategies.

5. **Describe how the MRC will determine if there is a correlation between permanent collection sites and illegal dumping**

As described in the Revised Report, MRC is developing a Geographic Information System analysis tool that will analyze statewide consumer access to the Program’s no-cost collection network. With regard to illegal mattress dumping, MRC will use this tool by overlaying illegal dumping data with our collection network data to evaluate if there is a correlation between adversely impacted communities and a lack of permanent collection sites.

For example, if areas with high illegal dumping have limited access to mattress collection sites, MRC could establish additional collection sites and/or collection events in the area. If, however, areas with high levels of illegal dumping activity are already served by existing collection sites and curbside service, it may be necessary to experiment with alternative strategies.