



May 9, 2023

Connecticut General Assembly Environment Committee
Co-Chairs Senator Rick Lopes and Representative Joseph Gresko
Legislative Office Building, Room 3200
Hartford, CT 06106

In late January 2023, Connecticut's Department of Energy and Environmental Protection (DEEP) submitted to the Connecticut General Assembly its *Evaluation of Connecticut's Mattress Stewardship Program* (the *Evaluation*), which focuses on the Mattress Recycling Council Connecticut, LLC's (MRC) statewide mattresses and box-springs recycling program (the program). (For ease of reference, we collectively refer to mattresses and foundations as simply "mattresses" or "units.") The *Evaluation* acknowledges important successes that MRC has achieved, including that "over 1.2 million mattresses have been recycled" since the program's 2015 launch (the number today is nearly 1.5 million) and the fact that the program has saved Connecticut municipalities and towns "over \$12 million in avoided in disposal costs." *Evaluation* at 5. It also recommends several changes to the program.

Over the past two years, MRC has responded to a letter from DEEP and reviewed a draft of the *Evaluation* and provided detailed feedback to DEEP (in January 2021 and October 2022), noting that many of the draft recommendations are based on opinions without factual or analytic support, would impose significant and impractical financial costs on MRC and Connecticut residents, would increase environmental burdens on state residents or are based on erroneous facts. In issuing the *Evaluation*, DEEP has corrected some of the identified errors, but a number remain. The purpose of this document is to explain for the record the significant problems with DEEP's recommendations and to correct several factual errors in the *Evaluation*.

MRC does support the following recommendations:

- MRC agrees with DEEP's Recommendation #4, that a regional approach to recycle mattresses from Connecticut and its neighboring states could achieve important economies of scale and efficiencies (although we do not necessarily endorse DEEP's suggestion that NEWMOA should administer such a regional program).
- MRC supports DEEP's Recommendation #6, to the extent that it would result in amendments to Connecticut's bedding law to allow cleaned post-consumer materials (that is, material that is hygienically comparable to all new material) to be used in a mattress that is labeled as "new" or as "containing clean recycled materials."

MRC looks forward to working with the Environment Committee and DEEP as we continue to serve the residents, municipalities and towns of Connecticut by providing convenient, cost efficient and environmentally

beneficial options for recycling discarded mattresses.

BACKGROUND

As of December 31, 2022, MRC has recycled nearly 1.5 million mattresses in Connecticut since the program launched in 2015. That equates to nearly 48 million pounds of material diverted in just eight years from the state's waste stream and sent to companies that will use those materials to make new products.

To make mattress recycling convenient for all Connecticut residents, MRC currently offers residents of 153 Connecticut communities several no-cost options for recycling their discarded mattresses. Depending on where they live, residents may discard mattresses through municipal curbside pick-up programs or take their old mattresses to transfer stations, public works yards and collection events. In addition, over 350 other public and private entities, including apartment complexes, hotels, universities, military installations and junk haulers participate in the program.

Many mattress retailers also remove a customer's old mattress when they deliver a new unit. MRC works with mattress retailers to process those units free of charge at MRC-contracted recyclers. In fact, retailers provide nearly 1 of 5 (19%) discarded mattresses collected and recycled through the program. (Retailers collect far more units than are diverted through MRC's program because many of them resell better quality discarded units to mattress renovators in New York.) By making mattress recycling easy for retailers, MRC makes mattress recycling even more convenient for residents.

MRC is committed to seeking new ways to improve its service to Connecticut residents, municipalities and towns. For example, MRC continues to expand participation by municipal transfer stations, as well as increase the number of mattresses collected for recycling from retailers, hotels and educational facilities throughout Connecticut.

ANALYSIS

MRC has a number of concerns with the DEEP's recommendations:

Recommendation #1: Expand curbside collection (*Evaluation at 9*):

To increase program convenience, DEEP recommends:

The greatest room for improvement with the program lies in providing greater convenience for our cities. MRC must develop a plan to provide curbside collection of mattresses to municipalities that rely on this type of collection. It is not realistic to expect residents in a city that are accustomed to disposing of an unwanted mattress by leaving it at the curb to change their habit and bring it to a transfer station. Possible solutions include contracts with private haulers for pick up by appointment or working with existing processors to develop and implement technology to recycle wet mattresses.

*Evaluation at 9.*¹

¹ For reasons we do not understand, DEEP's curbside collection recommendation also would require MRC to "work[] with existing processors to develop and implement technology to recycle wet mattresses." We address DEEP's more specific concerns regarding unrecyclable mattresses in more detail below under Recommendation #2.

DEEP supports its recommendation by comparing MRC collection data for municipalities that offer curbside mattress collection (Manchester and East Hartford) to one that purportedly does not (West Hartford).² Although not mentioned in the recommendation itself, DEEP also states in a footnote that it defines “reasonably convenient” access to mattress collection as “curbside collection for municipalities with a population over 100,000 and a transfer station drop site for all other towns.” *Evaluation* at 8, note 5. DEEP provides no factual or legal basis for this definition.

DEEP’s recommendation is fraught with several problems. First, it is not supported by facts, weighing the recommendation’s potential benefit against its costs, both environmental and financial. DEEP does not quantify either the number of mattresses that enter Connecticut’s waste stream today or the number of landfilled units that are available for recycling in Connecticut.

Likewise, the report does not consider the potential environmental, legal or cost impacts of its recommendation. Creating a dedicated curbside mattress collection system would create a substantial carbon footprint, potentially interfere with existing solid waste union contracts and be prohibitively expensive. It is unclear whether (and if so, to what extent) curbside collection would benefit the program or the state, or whether the generation of greenhouse gases (and the network’s associated costs) are justified given these unknown benefits.

In fact, comparing the operational data from MRC’s Connecticut and its affiliate’s California recycling programs suggests that DEEP’s curbside collection recommendation may have little impact on the number of units MRC recycles in Connecticut. Per capita mattress recycling in Connecticut is high at 5.4 units per 100 residents, compared to 3.6 units per 100 residents in California. In California, the state collects data which shows that over 80% of all mattresses discarded statewide are either recycled or renovated.³ This is a very high number and comfortably meets the carefully considered landfill diversion goals California set (based on input from multiple stakeholders) for its mattress recycling program. If renovation rates in Connecticut and California are comparable, it would be logical to conclude that Connecticut’s landfill diversion rate is similar (or perhaps better) than California’s, since Connecticut’s per capita recycling rate is 65% more than California’s.

Second, the recommendation illogically contemplates that MRC would establish a redundant mattresses-only collection system in “municipalities that rely on [curbside] collection” of residential waste, perhaps using MRC’s own fleet of private contract haulers to pick up discarded mattresses by appointment. In enacting Connecticut’s mattress recycling law (Public Act No. 13-42), however, the legislature expressed its clear intent that MRC’s mattress recycling plan would be guided by what is “technologically feasible and economically practical.”⁴ Thus, MRC’s goal from inception has been to establish a practical, effective and cost-efficient program to collect and recycle mattresses while minimizing our environmental impact. We have sought whenever possible to use existing solid waste infrastructure to collect discarded units, allowing MRC to

² According to DEEP:

For example, Manchester, with a population of 58,000, collected approximately 5,090 mattresses at curbside through the program in 2018. East Hartford, with a population of 50,000, also collects curbside and had 4,214 mattresses collected in 2018. West Hartford, with a population of 63,000, collected only 1,443 mattresses through drop-off only during the same time period.
Evaluation at 9.

³ See [2021 MRC California Annual Report](#) page 73, Table 24.

⁴ Section 2 of Public Act No. 13-42, codified at CGS Section 22a-905a(a).

control operating costs, maintain a reasonable recycling fee and minimize the environmental impacts of our collection and recycling activities. DEEP's recommendation, however, would be a radical departure from MRC's existing practice and instead would require MRC to establish a redundant and wasteful parallel collection network.

Third, DEEP provides no legal or factual basis for its statement that reasonably convenient access requires MRC to provide curbside collection in any municipality with a population of 100,000 or more. MRC is aware of no evidence that DEEP's access criteria would be practical to implement in a mattress collection network or would increase the number of units recycled.

Instead, MRC has demonstrated in the annual reports it files with DEEP that 97.7% of residents live within 15 miles of a collection point. The 15-mile metric is a common performance yardstick used to measure program accessibility for other product stewardship programs, including the California mattress recycling program. In arriving at this approach, California took into account stakeholders' views and recognized that the logistics of mattress collection requires an approach that is different from what might be appropriate for other products, such as paint. Rather than require MRC to establish a costly, wasteful and duplicative collection network to meet its arbitrary 100,000-resident accessibility rule, we urge DEEP instead to consider and follow California's well-reasoned approach.

It is important also to recognize that the 97.7% metric substantially understates Connecticut residents' ability to access the program, since it does not reflect the large number of mattresses that retailers already pick up from residents for recycling by MRC. As noted above, units from retailers account for nearly 20 percent of units recycled in Connecticut.

As an alternative to implementing DEEP's Recommendation #1, MRC proposes that:

- DEEP should survey solid waste collection services offered by Connecticut municipalities, requesting details about their solid waste collection contracts (including whether they offer bulky item curbside services) and evaluating whether current collection methods damage collected units to the point that they cannot be efficiently or safely recycled. This information would help identify where additional work may be needed to improve mattress collection.
- DEEP should collect the type of solid waste/landfill diversion and renovation data that California collects and estimate the financial and carbon cost associated with Recommendation #1. Only then can DEEP understand whether its recommendation has merit.
- As an interim measure, DEEP should consider requiring – or at least encouraging – municipalities that offer curbside service but currently landfill their mattresses to instead participate in the MRC program.

Recommendation #2: Address discarded, non-recyclable mattresses (*Evaluation at 12*):

DEEP objects that MRC does not accept wet or other non-recyclable mattresses for recycling. DEEP recommends that "MRC should be required to pay for a percentage of municipalities' costs to dispose of nonrecyclable mattresses." DEEP contends that under Connecticut's mattress recycling law, "all discarded mattresses are intended to be managed through the program, even if they are not recycled." Instead, the program currently "requires municipalities and other covered generators to separate out mattresses which are not recyclable due to condition. Municipalities are then responsible for financing the disposal of non-recyclable mattresses." *Evaluation at 12.*

Neither facts nor the law support DEEP's recommendation.

First, it is important to put the rejected units into perspective. The number of wet units rejected by MRC recyclers is small. Currently, MRC's Connecticut recyclers reject for any reason only 0.65% of the total units collected. These included units that were wet, otherwise contaminated, infested with bedbugs, etc. To the extent that solid waste entities may be reluctant to participate in the program because they are concerned that a recycler might reject their units, the recycling industry has made several technological improvements that have increased their ability to handle wet or otherwise previously unacceptable units. Mattress recyclers are in the process of adopting these technologies. MRC encourages our recyclers to reduce rejects further and increase mattress recycling.

Second, there is no legal basis for DEEP's position. The focus of Connecticut's mattress recycling law is clearly on efficient and practical mattress recycling. For example:

- The statute names the organization charged with administering this effort the "Mattress recycling council."⁵
- The program plan that the law requires the recycling council to propose must, among other things, "detail how the program will promote the recycling of discarded mattresses"⁶ and "establish performance goals for the first two years of the program."⁷
- The term "performance goal" is defined as "a metric proposed by the council to measure" the program's performance, "taking into consideration technical and economic feasibilities, in achieving continuous, meaningful improvement in the rate of mattress recycling in the state and any other specified goal of the program."⁸
- The program plan must "include a mattress stewardship fee that is sufficient to cover the costs of operating and administering the program."⁹
- In implementing each of these requirements, the legislature prudently provided that MRC's mattress recycling efforts be guided by what is "technologically feasible and economically practical."¹⁰
- Consistent with the legislature's intent that MRC be practical and cost efficient, the law likewise instructed DEEP to "tak[e] into consideration technical and economic feasibilities" when preparing this *Evaluation*.¹¹

Thus, Connecticut's legislature prudently decided that MRC's recycling fee was not intended to create a pot of money that municipalities could use to cover their mattress landfilling costs, expenses already funded through taxes or waste collection fees. Rather, the above provisions demonstrate that the legislature intended for MRC to recycle mattresses, dispelling any notion that MRC is obliged to fund non-recycling activities, as DEEP contends.

In fact, the legislature specifically authorized the exclusion of mattresses that were not suitable for recycling.

⁵ Section 1(10) of Public Act No. 13-42, codified at CGS Section 22a-905(10).

⁶ Section 2(b)(5) of Public Act No. 13-42, codified at CGS Section 22a-905a(b)(5).

⁷ Section 2(b)(3) of Public Act No. 13-42, codified at CGS Section 22a-905a(b)(3).

⁸ Section 1(14) of Public Act No. 13-42, codified at CGS Section 22a-905(14).

⁹ Section 2(6) of Public Act No. 13-42, codified at CGS Section 22a-905a(a)(6).

¹⁰ Section 2 of Public Act No. 13-42, codified at CGS Section 22a-905a(d).

¹¹ Section 4 of Public Act No. 13-42, codified at CGS Section 22a-905c.

The law clearly states that the “physical condition” of a mattress is among the factors to be considered in deciding which units to collect for recycling.¹² The authority to reject unrecyclable units is appropriate for several reasons:

- Protecting the health and safety of workers who dismantle mattresses is a high priority for MRC. A mattress that has been contaminated during the collection process by putrescible solid waste or infested with bedbugs, mold, bodily fluids or other contaminants, is unsafe for recyclers to process.
- Potential purchasers of recycled mattress materials (especially foam, fabric and fiber) will reject contaminated materials.
- If a mattress and its components are non-recyclable because they are wet, contaminated or otherwise damaged, requiring MRC to process that unacceptable unit or take even partial financial responsibility for it would be a waste of the recycling fees that MRC collects from consumers. It would also waste the fuel and other resources that MRC would need to expend in this wasteful activity. That in turn would contravene MRC’s obligations to promote mattress recycling in a “technologically feasible and economically practical” manner.

For these reasons, the Connecticut legislature did not require MRC to accept units that cannot be recycled and that potentially pose workplace risks.

Perhaps most importantly, mattress spoilage can often be prevented and landfill disposal avoided. Keeping mattresses dry, clean and in a condition that can be safely and productively recycled is important. We have also found that optimizing mattress recycling is a shared responsibility between industry, recyclers and collectors (including municipalities). To improve program performance, we educate mattress collectors on how to store and protect mattresses through training videos, newsletters and site visits. In addition, over the last several years we have worked with haulers that collect construction and demolition waste to segregate and protect the mattresses that they collect from becoming wet.

These efforts have produced concrete results. As DEEP recognizes, MRC has successfully worked with Volume Reduction Facilities (VRFs), upstream generators (like hotels, universities) and waste-to-energy facilities, as well as municipalities to preserve the recyclability of used mattresses. DEEP concludes: “Working with upstream generators and VRFs to divert mattresses [directly to recyclers and away from landfills] is the best strategy going forward.” *Evaluation* at 10.

Since mattress contamination can largely be prevented with appropriate precautions, MRC should not be required to pay disposal costs of municipalities or solid waste facilities that have not taken reasonable steps to mitigate the contamination problem, as so many others have done with success. Those that are experiencing abnormally high rejection rates because their collection approach contaminates or damages units should be motivated to consider alternatives. MRC is prepared to work with them to help protect the quality of units they collect and reduce their disposal costs.

In addition to these important improvements, MRC is prepared to work with DEEP to develop a plan to better understand and manage mattresses from the time they are discarded by the consumer until they arrive at the recycler. This approach could further reduce the number of mattresses that cannot be recycled due to contamination and damage.

¹² Section 3 of Public Act No. 13-42, codified at CGS Section 22a-905b.

Finally, DEEP's statement that "Correctional facility mattresses are made from textiles and have the potential to be recycled through textile recyclers" (*Evaluation* at 11) is incorrect. Safety and fire risks inherent in prison settings require that mattresses used in correctional facilities be made primarily of vinyl and non-woven polyester batting. Viable markets do not currently exist for either of these post-consumer materials. Although there is no point in MRC accepting such units now, we are prepared to periodically reexamine the business case for recycling prison mattresses if markets for their materials emerge.

Recommendation #3: Assess the ecofee based on the retail price of mattress (*Evaluation* at 14):

DEEP states that this approach would be more equitable and proposes that low-priced mattresses even be exempt from the fee, if economically feasible. DEEP bases its recommendation on several assumptions:

The eco fee is more of a burden for low-income residents who wish to purchase discount mattresses. Many lower income residents in the state have less convenient access to mattress recycling options. Thus, those lower income residents are effectively subsidizing program costs for residents that purchase higher cost mattresses and have more convenient recycling options.

Evaluation at 14.

DEEP's recommendation is speculative and provides no support for its assumptions that lower-income households lack access to recycling options. Furthermore, as explained further below, DEEP's recommendation could have the unintended impact of actually harming the very segment of society that DEEP seeks to benefit.

MRC has considered alternative formulas for calculating the mattress recycling fee. In approaching this issue, we concluded that the recycling fee should:

- Be simple and easy to understand and apply
- Be easy to verify whether the retailer has collected the fee correctly
- Approximate the cost to dismantle and recycle the mattress being discarded today and
- Allow MRC to budget revenues in a predictable manner

For these reasons, MRC collects a uniform recycling fee which is simple for consumers and retailers alike to understand and easy to collect (retailers need to program their invoicing and accounting systems to apply a single rate to each mattress sale). It is relatively easy for MRC or state authorities to verify whether a retailer has properly collected and remitted the fee to MRC by simply multiplying the fee by the number of units sold. Likewise, the per unit cost to collect, transport and dismantle all mattresses is approximately the same for all products, so a uniform fee equitably distributes the fee over all products. In fact, higher-priced mattresses tend to have more materials (such as steel and foam) that the recycler can sell to generate supplemental revenue meaning the net cost (that is, dismantling cost minus revenue earned from selling the recycled materials) to recycle is less for a more expensive mattress than it is for a lower priced mattress.

MRC has also considered a sliding fee but decided not to adopt that approach for several reasons. A sliding fee would be more cumbersome to administer and could be manipulated. For example, if a consumer bought multiple products, the parties could attribute more of the total price to the non-mattress to lower (or possibly eliminate) the recycling fee. Although mattress sales per capita remain relatively consistent over the long term, the per unit amount that consumers pay for new mattresses will vary more from year to year.

Therefore, a uniform fee allows MRC to budget with better accuracy based on annual unit sales forecasts.

A sliding fee would also increase MRC's cost to administer the program because that would require MRC to audit the prices retailers charge for selling new units, as opposed to just verifying the number of units sold. Higher costs will mean that MRC will need to either reduce some of the services it currently provides or raise the recycling fee. Such detailed audits could also result in retailers objecting to MRC accessing their highly confidential pricing and revenue data. At present, retailers have supported MRC's recycling program. We are reluctant to take action that might undercut such vital backing.

Finally, and perhaps most importantly, a sliding fee will result in three unintended consequences. First, better (and therefore more expensive) mattresses will tend to be more durable. A sliding fee will create a financial incentive for consumers to buy lower priced beds, thereby encouraging consumers to buy units that will not be as environmentally beneficial as more durable goods. Less durable mattresses will tend to be discarded more frequently, imposing higher costs on Connecticut's mattress recycling program and increasing the program's environmental footprint.

Second, a sliding fee will set higher fees on more expensive mattresses, thereby creating an incentive to buy more expensive beds in neighboring states to avoid paying the Connecticut recycling fee. DEEP has taken the position that Connecticut law cannot be interpreted to require out-of-state brick-and-mortar retailers to collect the fee on mattresses delivered to Connecticut residents (which is different from the approach that California for example has taken). As a result, MRC loses revenue when consumers go to another state to buy their mattresses, yet the program will likely need to recycle that unit when the Connecticut resident discards it. That, in turn, will ironically require residents who continue to buy their mattresses in Connecticut to pay more than their share of the recycling program's costs.

Third, if lower income residents are less likely to have the ability to travel outside of the state to buy their mattresses, then a sliding fee approach actually may be less equitable in terms of the costs that they would ultimately bear because they would need to pay more to support a program that incentivizes more affluent consumers to buy their beds in another state.

For these reasons, a value-based fee would be an ineffective and inefficient way to fund mattress recycling.

Recommendation #4: Support the mattress stewardship program to neighboring states and coordinate regional program administration, including covering the State's administrative fees (*Evaluation* at 15):

DEEP recommends:

If the MRC program were to expand to other states in the region, Connecticut could experience increased recycling investment, increased market opportunities, and innovation due to scale. MRC has supported legislative efforts in both New York and Massachusetts.

Regional administration through an organization like NEWMOA could create additional efficiencies for the program. MRC should cover the State's administrative fees, which could be passed on to a third-party for administration. In Oregon, MRC will pay state administration fees according to Oregon DEQ. *Evaluation* at 15.

MRC is committed to working with Connecticut's neighboring states to promote a regional approach to mattress recycling. MRC agrees that a regional approach should allow for better economies of scale in collecting, transporting and recycling mattresses. When Connecticut and Rhode Island enacted mattress recycling legislation in 2013, MRC's sister organization, the International Sleep Products Association (ISPA) (the trade organization for the mattress industry), lobbied for a provision included in each state's law that in the future could allow the states to participate in a multi-state regional approach to mattress recycling. To work toward that end, ISPA has subsequently worked with several of Connecticut's neighbors to enact mattress recycling laws there.¹³

MRC agrees and is interested in coordinating its work with Rhode Island and other neighboring states that could make regional mattress recycling feasible and efficient. In fact, MRC would appreciate any support that DEEP might provide in preventing free riders on MRC's Connecticut program trying to recycle their mattresses at the cost of Connecticut residents due to Massachusetts's landfill ban.

However, MRC is not persuaded at this time that NEWMOA would be an appropriate entity to oversee such a regional arrangement. For example, would NEWMOA have the legal authority to conduct such oversight? Which state(s) would oversee NEWMOA? MRC needs more information before it can decide whether to support that recommendation.¹⁴

Recommendation #5: MRC should own the materials recovered from mattresses (*Evaluation at 16*):

DEEP recommends:

The processor should be paid by the MRC as a service provider for collecting and processing mattresses. If the MRC were required to find markets for the commodities, they would be more actively involved in market development. This would encourage closer adherence to the state's statutory materials management hierarchy while also creating a financial incentive for cleaner streams and market development.

Evaluation at 16.

DEEP again provides no factual or logical support for its recommendation, and ignores important realities.

MRC contracts with recyclers whose business it is to dismantle mattresses and box-springs and sell the recovered materials into scrap markets, where they are bought and used to make new products. The retailers keep the materials revenue they generate. As a result, each recycler has a strong financial incentive to generate as much scrap revenue as possible by supplying clean, high-quality materials that command good prices and by properly managing their materials inventories. In Connecticut, MRC-contracted recyclers

¹³ For example, ISPA devoted substantial resources to working with New York legislators and stakeholders since 2020. We expect to pursue this effort again in 2023. Likewise, we have supported legislation in Massachusetts for the last several years to encourage mattress recycling there and expect those efforts to intensify in 2023.

¹⁴ DEEP erroneously states that "Several states, including New York, Maryland, Missouri and Maine have considered mattress stewardship legislation." *Evaluation at 14.* For the sake of accuracy, MRC is unaware of any mattress stewardship legislation introduced in Missouri. Perhaps DEEP intended to refer to Minnesota, which did consider mattress recycling legislation in 2022.

In addition, DEEP inaccurately states that "Massachusetts is proposing a disposal ban for mattresses designed to invite investment in recycling." *Evaluation at 14-15.* In fact, Massachusetts' landfill ban went into effect on November 1, 2022.

achieved a 72% recycling rate in FY 2022. This means that recyclers are succeeding both in generating clean saleable materials and in selling the materials they extract from mattresses to customers without MRC taking ownership of those materials.

DEEP recommends MRC own the recycled material “to create[e] a financial incentive for cleaner [materials] streams and market development.” Not only will maintaining material quality be more challenging if MRC owns the materials, but MRC’s costs will rise, which will likewise increase the mattress recycling fee that consumers must pay. Recyclers would not only have substantially less incentive to generate saleable clean recyclable commodities, but they would lose the revenue they earn from selling the recycled materials. MRC would need to renegotiate its recycling contracts to provide that it owns the materials, pay the recyclers more to offset their lost materials revenue and make them legally and financially responsible for meeting quality requirements set by MRC-hired inspectors. Unlike the relatively simple MRC/recycler relationships that exist today, these steps will substantially complicate MRC’s efforts to manage its recycler relationships and will undoubtedly lead to contract and payment disputes over materials quality issues.

In addition to hiring inspectors to police quality, MRC would need to hire other staff to manage the sale of these materials and would incur additional costs to store and finance these materials prior to their sale. Each of these changes will raise MRC’s costs and in turn require MRC to increase the Connecticut recycling fee. It will also substantially increase MRC’s risks by requiring it to hold and sell recycled materials, an obligation that the recyclers currently bear.

DEEP also errs in claiming that MRC must own the recycled materials in order to be “more actively involved in market development.” In fact, MRC is vigorously working to find new, better and more profitable uses for recycled mattress materials. California’s mattress recycling law requires that MRC’s California affiliate spend part of the recycling fees it collects on such research. The goal of this work is to increase demand (and prices) for recycled mattress material, and if possible, increase the percentage of each mattress that can be recycled. That research program has funded over 20 projects, including:

- developing a prototype pocketed coil dismantling machine that is now commercially available,
- validating the feasibility of carbonizing post-consumer mattress mixed fibers to make low-cost, high performance battery components and
- a project to convert polyurethane foam into high value resilient materials that can be used in consumer products like shoe soles.

If these projects are fruitful, they will increase demand for all recycled mattress materials, including those generated by MRC’s Connecticut recyclers. Details about completed research projects are posted on MRC’s [website](#). We are prepared to update DEEP periodically on these research activities.

Therefore, DEEP’s recommendation should not be pursued because:

- the current system (whereby recyclers own and are responsible for selling the materials they remove from dismantled mattresses) already works well,
- achieving good quality recycle materials will be more difficult,
- requiring MRC to own the materials will increase its costs and risks and
- MRC is already actively working to develop new and better markets for the mattress materials its recyclers generate.

Recommendation #6: Seek clarification on the issue of recycled content in the manufacture of new mattresses

(Evaluation at 16):

DEEP recommends that:

If recycled fill material can be considered new it will create a closed loop market for foam and cotton.
Evaluation at 16.

Connecticut law currently prohibits the use of post-consumer materials in mattresses labeled as “new.”¹⁵ This requirement is intended to protect consumers from buying products that may be infested with bedbugs, mold, bodily fluids or other biological contaminants that could be harmful.

Recognizing those concerns, MRC is prepared to work with DEEP and Connecticut consumer protection authorities to develop criteria that would allow cleaned post-consumer materials (that is, material that is hygienically comparable to all new material) to be used in a mattress that is labeled as “new” or as “containing clean recycled materials.” ISPA has attempted to do this in other states, but so far without success. If Connecticut were to adopt this approach, it would be a national leader in this regard. MRC welcomes the opportunity to discuss this concept with DEEP in greater detail.

Goal for the number of discarded mattresses managed under the program (Evaluation at 17):

DEEP recommends:

The department believes the program can attain a goal of 250,000 mattresses managed per year by 2027.
Evaluation at 17.

As noted above, MRC anticipates that landfill diversion rates in Connecticut are already very high. There is also a strong correlation between new unit sales and generation of discarded units. In 2022, Connecticut unit sales were 14% below 2021 and there was a similar decrease in units recycled. A more meaningful goal would be the percentage of units that are diverted from Connecticut waste systems.

Goal for percentage of mattress weight recycled (Evaluation at 20):

DEEP recommends:

The department believes the MRC should be recycling no less than 90% of a mattress by weight by 2025.
Evaluation at 20.

In 2021, MRC commissioned a [composition analysis](#) of the residual materials generated at two mattress recyclers to identify which materials are going to landfills. That study indicated most landfilled material consists of mixed fibers (found in fabric and fiber materials). No market for recycled mixed fibers currently exists. By focusing our research efforts on these and other materials that our recyclers currently landfill, MRC hopes to increase its total recycling rates.

We also note that MRC’s 72% recycling rate is high compared to recycling rates achieved in several mattress

¹⁵ DEEP states that “MRC has expressed concern that foam and cotton from mattresses recycled through the program might be considered ‘secondhand,’” implying that MRC’s interpretation of Connecticut law may not be accurate. *Evaluation at 16.* In fact, existing Connecticut law (Public Act No. 04-22) clearly using post-consumer foam or fiber in a mattress labeled as “new.”

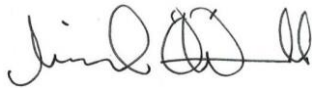
recycling programs in Europe. The primary objective for some of those programs is to recycle any steel in the products, and then burn the rest for fuel, which European regulators currently consider to be recycling. In the United States, steel accounts for [41%](#) of the weight of the units collected. In Europe, we understand that the steel percentage would be lower because all foam mattresses are more popular there. European programs are also experimenting with advanced recycling methods, like pyrolysis, chemolysis and other techniques to break polyurethane foam down to its building block chemicals.

The only way to satisfy DEEP's belief that a 90% recycling rate is achievable would be if Connecticut were likewise to allow MRC to consider waste to energy processes a type of "recycling" or if DEEP were to encourage MRC to use pyrolysis or other advanced recycling methods, all of which MRC anticipates would be unlikely.

* * *

Once again, I appreciate the opportunity to provide MRC's feedback on the recommendations and goals in the *Evaluation*. MRC looks forward to working with the Environment Committee and DEEP to identify ways to further improve Connecticut's already successful statewide mattress stewardship program.

Sincerely,



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