



End-use Application Development for Recovered Mattress Components

Request for Proposals



Issue Date: February 27, 2019
Pre-Application Submission Deadline: April 5, 2019
Full Proposal Submission Deadline: May 31, 2019

Mattress Recycling Council

Attn: Michael Gallagher

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www.mattressrecyclingcouncil.org

BACKGROUND

The Mattress Recycling Council (MRC) is a 501(c)(3) formed by the mattress industry to operate recycling programs (known as Bye Bye Mattress) in states which have enacted mattress recycling laws: California, Connecticut and Rhode Island. MRC educates the mattress industry and consumers about these mattress recycling laws and works closely with local governments, waste management professionals, recyclers and others to create an accessible and efficient mattress collection and recycling network.

As part of its mission, the [Mattress Recycling Council](#) (MRC) has established a Research program to increase the productivity and throughput of our contracted mattress recycling contractors and to develop new end uses for materials extracted from mattress recycling processes. Through both process efficiencies and expansion of the mattress recycling industry, the number of mattresses recycled per year is steadily growing. To sustain future growth, it is vital that new economically viable applications and products for recovered products be developed.

MRC is seeking creative proposals which demonstrate the potential to use hard-to-recycle mattress components in new applications and products as well as in reformulated products. In this solicitation, MRC is seeking to fund development of innovative ideas to develop new markets for the following materials:

- Topic Area 1 – Polyurethane Foam
- Topic Area 2 – Memory Foam Latex (Visco Elastic foam)
- Topic Area 3 – Quilt Panels (the top layer of a mattress)
- Topic Area 4 – Shoddy Pads (mixed fiber insulating felt layer)
- Topic Area 5 – Cotton (mote cotton)
- Topic Area 6 – Coconut Fiber

Information on existing applications for each of these components is provided in MRC's [2017 California annual report](#). Proposals which explore further development of existing applications or end uses that already include mattress components will not be considered. Waste-to-energy or incineration solutions are also not eligible.

ELIGIBLE APPLICANTS

- Public and private businesses. Businesses from any state within the U.S. are eligible to apply, but must be in good standing with all applicable federal, state and local agencies.
- Universities and research institutions
- Nonprofit entities in good standing with all federal, state and local agencies.

PROJECT REQUIREMENTS

- Proposals must identify at least one target mattress component and at least one specific industrial/commercial scale application.
- Performance requirements for the targeted industrial/commercial application should be clearly stated.
- The proposal should detail the steps necessary to develop a proof-of-principle solution.
- The final report must contain an economic analysis and a preliminary business case to justify further development and/or a potential field study with selected component(s).
- Technologies that employ mechanical, chemical and/or thermal reprocessing of recovered materials are in scope.
- Waste-to-energy or incineration concepts will not be considered.

- Only one proposal per eligible applicant per topic area will be accepted.
- Applicants are encouraged, but not required, to provide matching funds to the project.
- The research project must be completed within one year of the funding award.

AWARDS

MRC anticipates making multiple awards from this RFP with maximum award sizes of \$100,000 per applicant. The objective is to evaluate the technical merit and feasibility of ideas that appear to have commercial scale application potential to support MRC’s objectives. Proposals should concentrate on research that will contribute to proving the technical feasibility of the approach or concept in the target end-use application.

FUNDING

- Estimated total funding: \$600,000
- Anticipated number of awards: 6-10
- Maximum individual award: \$100,000

PRE-APPLICATION SUBMISSION

MRC will use a two-stage process to identify projects for award. First, interested parties will submit a non-confidential concept paper for internal review by MRC. The pre-application template can be found on the [MRC Research Program](#) website.

Based on merit and alignment to our research strategy, the proposers of selected concept papers will be contacted for further discussion. Based on the outcome of these discussions, the applicant may be invited to submit a full proposal for review by MRC.

TIMELINE

Interested parties should email questions to Mike Gallagher at mgallagher@mattressrecyclingcouncil.org by March 22, 2019. The deadline for pre-proposal applications is April 5, 2019. The deadline for full proposals is May 31, 2019 if the project is selected to move beyond the pre-proposal phase. All projects must be completed by June 30, 2020.

Key Date	Actions Taken
February 27, 2019	RFP Release. Question period opens
March 22, 2019	Question period closes
April 5, 2019	Pre-application due date
April 15, 2019	Pre-proposal evaluations completed, invitations for full proposal sent
May 31, 2019	Full proposal due date
June 14, 2019	Notice of awards and contract execution begins

FULL PROPOSAL GUIDELINES AND FEEDBACK

Proposers that are invited to submit a full proposal will provide:

1. Applicant name
2. Applicant contact information — at least 2 contacts
3. A description of the applicant's industry history and experience with similar projects
4. A project description that clearly outlines the impact on program research objective
5. A project work plan and milestone plan
6. A project budget, which includes any matching funds from the applicant, and a clear request for a specific amount of MRC funding
7. Acknowledgement of any potential conflicts of interest with MRC leadership or former employment in the mattress industry
8. Notification of any pending or outstanding judgments or enforcement actions against the company or its products.

Full proposals must be sent in PDF format and not exceed 10 pages in length, including any attachments or letters of support. Pre-proposals must be submitted by April 5, 2019, no later than 5pm PST to Mike Gallagher mgallagher@mattressrecyclingcouncil.org. Full applications must be emailed by May 31, 2019 no later than 5 pm PST to Mike Gallagher. Proposals that do not follow application instructions may be considered non-responsive.

Award recipients will be required to agree to MRC's Project Terms as well as complete regular reporting requirements. MRC may also use research project documentation for California state reporting requirements and communication purposes. Confidential information must be clearly marked as such and may be subject to regulatory disclosure requirements of CalRecycle or other state entities.

Questions other information regarding this RFP may be emailed to Mike Gallagher, mgallagher@mattressrecyclingcouncil.org. Additional information is posted on the [MRC Research Program](#) website.