C Feature: Too Much Waste

Mattress Waste Solution: Recycling vs. Dumping

Michael J. Daley

You, gentle reader, may be as appalled as this writer was to learn that our society is stuffing Mother Earth full of discarded mattresses, an item that when deconstructed is nearly 95% recyclable according to Joshua Costa, owner and founder of Sleep Well Recycling of Burlington, Vermont. Only four states prohibit the practice of dumping mattresses in landfills --- California, Connecticut, Rhode Island and Oregon, soon to be joined by Massachusetts, where over 600,000 are disposed of each year.

When I expressed my dismay to Costa, he said "I have been in the waste business so long, I don't get so upset about that as much anymore. What's needed is people taking initiative to divert valuable materials from disposal, then things change."

Costa is that kind of person. He's 30 years old now and those years in waste management engendered a passion for reducing the waste stream. Land-filling mattresses is a prime example of a really bad thing to do. They are bulky, do not compress well, don't readily decompose and take up an enormous amount of space in the ground.

The other aspect that made them a prime target for his notice and a successful business model: "the high gate fee and high recyclability."



Mattresses are broken down to recycle the different components properly. (Flickr/ Springback Mattress Recycling, City of Fort Collins / John Robson)

Typical disposal fees are \$25 to \$30 depending on the mattress size.

"I give people the choice. Twenty-five to thirty dollars to do it wrong or the same to send it to me," Costa said. "It's a no-brainer. So many people want to do the right thing these days, and this one is a really easy choice for individuals and businesses to make."

He started Sleep Well Recycling in 2020 with 3 employees and the ambitious goal of ensuring that every discarded mattress in New England would be recycled by 2024. Today, with those same three and occasional hires, he is well on his way to recycling over 10,000 mattresses per year. In less than a

quarter hour, Costa can render the typical mattress into several income-generating components. All Metals Recycling in Williston, Vermont buys the spring assemblies. Foam padding is shipped off to become new products like underlayment padding for carpets. Wood scraps are hauled to the nearby

McNeil power plant to be burned as fuel. Intact pinewood box-spring frames seem to be a popular reusable item that people snap up whenever he offers them on Facebook marketplace. Fabric scraps and what he calls "mystery stuff" — a black waterproof lining of indeterminate composition --- are the most difficult to market.

Asked how his plans to become Mattress King of New England are coming along, Costa laughed. "I've cut back on that ambition a bit. Other states, like California, set up centralized recycling. But it just doesn't make a lot of sense to haul hundreds of mattresses hundreds of miles. For now, I'm content to be an intermediate recycler."

UTEC is another great business that recycles mattresses throughout northern New England. UTEC is a Lowell-based youth services organization that picks up, deconstructs, and recycles mattresses. The UTEC contracts with municipalities, hotels, schools, universities, assisted living facilities and hospitals.

Young adults involved with this organization participate with the pick-ups and deconstruct the mattresses at the Lawrence facility while learning valuable workplace skills.

We at *G.E.T.* certainly hope that Costa's and UTEC's successful example will inspire many more entrepreneurs across our region, so that we can all sleep a little more soundly knowing the ultimate fate of our mattress will no longer befoul our precious Earth.

The Sleep Well Recycling website is sleepwellrecycling.com. The UTEC website is https://utec-mattress.org/.

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PREVENTING CONTAMINATION AND THE FOOD WASTE STREAM

Michael J. Daley

You would not use compost with ground glass in it, or shreds of food service gloves, or fragments of deli containers, would you?

Unfortunately, these are just three of many types of contamination commercial composters struggle with in the food waste stream, posing a threat to the success of large-scale food recovery efforts.

To research this article, I reviewed a June 2022 webinar on source contamination of food wastes hosted by Better Earth. This Chicago and Clarkston, Georgia-based company is dedicated to fostering a circular economy providing products, sustainability services, and expertise for the food industry from farm-to-plate to compost. A1 Organics is a commercial composter in Colorado that handles hundreds of thousands of tons of food waste each year. Marketing manager, Clinton Sander represented A1 at the webinar and graphically illustrated the many ways that food wastes arrive at their facility contaminated.

I quickly learned commercial composting is not an endeavor for the fainthearted or those with weak stomachs. Confronted with image after image of collection bags full of the vomit of our convenience-based food system, I was humbled by the sheer volume and mess of the wastes and sincerely grateful that there are people passionate about preventing this waste from ending up in a landfill or incinerator. They are dedicated to keeping those precious organics from falling out of the web of life --- and of course, running profitable composting businesses.

The problem in a nutshell – or I should say (plastic) clamshell – is much the same as faced by all-in-one recycling models: contamination ruins otherwise reclaimable materials forcing them to be disposed of conventionally, that is, to trash Mother Earth. There are compostable packages and food containers, but how is the average person to sort through it all as they face the food collection bins, especially in situations where there may be a mix of standard plastic containers and utensils as well as some compostable things like cups?

Better Earth strives to convince food providers to use 100% compostable containers, but this can be a hard sell as many competing issues drive choice. For example, many compostable plastics

are not clear so people can't see the food inside the way those oh-so-familiar black deli containers allow them to. There are always simply mistakes, inattention, and haste which in this case does indeed make waste.

Sander showed what a nightmare it is on the receiving end to have to open bags of food waste suspected of contamination. Sorting is tedious, gruesome, costly and sometimes dangerous. And mistakes there lead to entire piles of compost contaminated by things like one missed bottle smashed to a thousand smithereens that cannot be sifted out. That leads to entire batches of finished compost having to be disposed of.

Mitch Hedlund, founder of Recycle Across America, participated in the webinar. She created the first and only society-wide standardized recycling bin labeling system. Her amazing contribution resulted in over nine million



The use of compostable cups and other dinnerware helps to eliminate the compost material from being contaminated with items that are not biodegradable. (chaf.haddad/Flickr)

> standardized labels in use leading to 50 to 400% increase in recycling levels while significantly reducing people's mistakes at the bins. She spoke with the authority of lessons learned suggesting that food collection for compost efforts failed to benefit from first establishing universal standards for the packaging and for public education. She felt that the composting industry would benefit from regrouping and resetting its efforts to focus on "food first". After all, in our school cafeterias, we all learned the basic skill of scraping the leftovers off our trays before handing them to the dishwashers.

Hedlund emphasized the need for unity in the compost industry to promote standards of compostable packaging and universal usage, public education, and uniform labeling. In a sobering moment, she reminded participants that some powerful forces would like to see the food recovery movement FAIL – such as the virgin plastics industry losing market share to biodegradable containers and landfill operators losing tonnage from the diversion.

There was broad agreement on how to tackle the problem: reduce contamination at the source with recurring training for food service staff, standardized sorting and signage, use of 100% certified compostable packaging materials, continual public education, and legislation such as extended product responsibility laws to help fund these efforts.

Almost one year later, how are things going? A glimpse of the answer comes full circle to A1 Organics, which just announced that as of April 2023 they will no longer accept any type of mixed food waste. They will ONLY be accepting food scraps, yard wastes, and three-gallon certified bags of food waste to protect the quality and integrity of their finished compost product. So, it looks as though Hedlund called it right: "food first" and more work to be done.

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Sourc links: • The Better Earth Webinar: What is one of the biggest challenges to composters and scaling the composting industry? (www. becompostable.com)

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