Act 148 & Composting:

Managing Food Waste in the Workplace

2019 Workplace Wellness Conference Strategies for a Greener Business

March 21, 2019

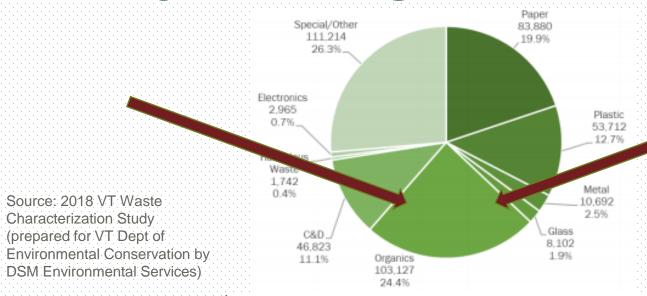
ETHAN HAUSMAN
CSWD BUSINESS OUTREACH







Why do "organics" matter?



	Estimated		Estimated
Material	Percent	+/-	Tons
Organics	24.4%	1.9%	103,127
Food Waste - Contained in Packaging	7.3%	1.0%	30,653
Food Waste - Loose	12.1%	1.5%	50,974
Leaves/Grass/Brush >1"	0.1%	0.4%	300
Leaves/Grass/Brush <1"	0.7%	0.8%	3,082
Pet Waste	2.9%	0.7%	12,089
Other Organics	1.4%	0.6%	6,028

They represent a quarter of what Vermonters sent to landfill in 2018!

Why Should We Care Where Organics Wind Up?

Landfill Impacts

- Landfill gas emissions. Methane, a potent greenhouse gas, is one of the primary outputs of a landfill.
- Leachate (AKA "garbage juice") is another undesirable landfill output.
- Leachate must be pumped out, transported to a WWTP in tankers, and treated at a cost of approximately \$.08 per gallon.
- Very little decomposition takes place in the tomb-like environment of a landfill; organic material remains in place for decades.





The alternative to recycling and composting



These carrots turned up in an excavated landfill—they'd been there for 10 years!



Why Else Do We Care?

- Transportation impacts of moving the material to landfill
 - thousands of miles of unnecessary trucking and wasted diesel fuel
- Food is a resource, even when no longer suitable for human consumption
- Food waste diversion is becoming the law!





Act 148

Vermont's universal recycling & composting law

- Passed unanimously by the Vermont Legislation in 2012
- 2014: beginning of phased-in ban on landfilling organics
 - Initially applied only to generators of 104 or more tons of food waste per yr
- 2015: statewide mandatory recycling goes into effect
- 2016: statewide ban on landfilling leaves or yard debris



Act 148's Phased In Food Waste Requirements

Where We Are Now

- July 2017: Mandatory food scrap diversion for generators of 18 or more tons of food waste annually
 - currently applies to most large institutions, groceries, and food processors
 - many restaurants and food service establishments are already composting
- July 2020: All Vermonters individuals, households, businesses will be REQUIRED to keep food waste out of the trash.



Composting is not required; there are other options...

...but composting is often the most convenient way of managing food scraps that must be kept out of the trash.











What is composting?

Nature's recycling system:

transformation of organic materials into a nutrient-rich, biologically stable soil additive.



Facilitated aerobic decomposition:

giving microbes what they need to thrive, including plenty of oxygen.





The Equivalent of Reduce, Reuse, Recycle for Organics

VERMONT FOOD RECOVERY HIERARCHY

TRANSLATION

Source Reduction

Food for People

Food for Animals

Composting & Anaerobic Digestion

> Energy Recovery

Reduce the amount of food scraps & residuals (i.e. leftovers) being generated in the first place - shop with a list, strategically plan meals, etc.

Feed people by giving high quality food to food shelves and other organizations with similar strategies.

Use lower quality food waste for agricultural uses, such as food for animals.*

Use food waste in compost, anaerobic digestion, and land application.

Process food waste for energy recovery.

*See the Vermont Agency of Agriculture's **Swine Feeding Policy** before feeding scraps to pigs.

1) Consider Your Participants

- Will your stream be accessible to the general public or only (trainable) staff?
- Are employees experienced composters or newbies?
- How big a barrier is the "ick" factor?
- Will anyone want the finished product?





2) Understand Your Stream

- How much food waste is being produced at your workplace daily or weekly?
- Hoping to include any non-food organics or "compostables" in your program?
- Restroom hand-drying paper towels?





3) Evaluate Your Options

- farm partnership
- employees take home
- on-site composting
- commercial composting
 - pick-up service OR drop-off program







4) Estimate the Costs & Impacts

- On-Site: staff time or property management expenses
- Pick-Up Service: hauler charges
- Drop-Off Program: staff time & tip fees (disposal charges at facility)
- Other Options





5) Choose a strategy for managing your food waste

6) Decide what items & materials can go in the stream

7) Educate your participants and provide staff training





····COMPOST····

FOOD —— & scraps





NAPKINS —

& uncoated paper





CERTIFIED

compostable products







NO PLASTIC BAGS

Unless certified compostable Instead: Put in trash or take back to grocery store.



NO UTENSILS

Unless certified compostable Instead: Put in trash.



NO STICKERS

Remove produce stickers

MORE INFO (802) 872-8111 www.cswd.net/composting





Thank You

Contact CSWD with any questions Ethan Hausman

ehausman@cswd.net

(802) 872-8100 x208

