

Reclaiming Organics For Good

January 12, 2018

Senate Natural Resources and Energy Committee
Re. S.285/287 –Acts relating to universal recycling requirements

Food Scraps - Too Valuable To Throw Away

The Composting Association of Vermont (CAV) advances the production and use of compost as vital to soil health through practices that contribute to water quality, plant vigor, and environmental resilience. CAV demonstrates the value of compost through education, policy, outreach, and partnerships to reduce waste, capture energy, and create jobs. We are a statewide 501(C) (3) not-for-profit organization. Our membership includes compost facility operators, concerned citizens, and solid waste management entities responsible for representing the interests of more than 75% of Vermonters.

CAV asks the Committee to consider the wide-ranging benefits of organics diversion in its review of Act 148, and that the 2020 ban remain unchanged. The following comments support this recommendation.

- Organics diversion and composting enhances soils health and protects water quality. Compost is the best way to quickly add organic matter to soils and improve soil function. A one percent increase in organic matter in the top six inches of soil can hold approximately 27,000 gallons of water per acre (USDA NRCS), about the amount that falls on one acre from a 1" rain event. When added to soil compost can filter out storm water pollutants by 60-95% (ILSR). This directly supports the mandate in Act 64, the Water Bill.
- Increasing organic matter improves farm sustainability and profitability. Compost breaks down more slowly and improves soil structure more quickly than other organic materials, such as manure. "Stabilized organic matter" or humus, acts like a sponge and can absorb six times its weight in water. It's also a reservoir for nutrient storage, sequestering carbon from the atmosphere and other sources (USDA NRCS).
- Composting creates jobs. Jobs are sustained in each stage of the organics recovery cycle. On a per ton basis,
 making compost employs twice as many workers than landfills. Using compost in green infrastructure, such as
 vegetated retaining walls, steep highway embankments to control erosion and storm water, and bioswales,
 creates even more jobs (ILSR).
- Residential organics diversion has grown since the law passed. Vermont communities have taken up this challenge as can be seen by the ever-increasing interest in both backyard and community-scale composting. SWMEs are promoting backyard, school, and community composting. CAV is responding to the increasing interest in community composting by developing resource materials and training for community composting

systems at community gardens, neighborhoods, and housing developments. These options often better address contaminants and with a lower carbon footprint from managing food scraps locally. For example, New York City has over 140 community composting sites and 45 drop off locations for residential food scraps. Master Composters volunteer at the Green Markets to ensure material is uncontaminated.

- Keeping organics out of the landfill is one of the few things all Americans can do to help mitigate near-term impact of climate change. Food scraps in landfills generate methane, but when converted into compost and applied to the land, compost sequesters carbon. The <u>USEPA cites landfills as the third largest emitters of GHG</u>, 50%~ methane a gas that is 28 to 36 times more damaging than CO₂, but remains in the atmosphere ~100 years rather than 500 1,000 yrs. for CO₂. It's the reason USEPA expended significant resources to <u>advance organics waste reduction</u>, food recovery, and composting. A recent evaluation reported in MSW Management magazine, found that "the diversion of food waste is likely to have a neutral or slightly positive impact on LFG (landfill gas) recovery rates. This is due to the fact that mixed waste decomposes more slowly than food waste, and therefore, the LFG generated by its decomposition is more likely to be captured...". One research project found that ½ inch of compost applied to California rangeland sequestered the equivalent of 1 metric ton of CO₂e/hectare over three years. This level of sequestration on half of California's rangeland would offset 42 million metric tons of CO₂e, which is equal to the amount of greenhouse gas emissions from California's commercial and residential energy sectors (<u>ILSR</u>). This directly supports the goals of the Climate Action Commission.
- Donations to Vermont's charitable food system have increased by over 40% since the unanimous adoption
 of Act 148 (Vermont Foodbank). According to the USEPA Americans throw out more food than any other type
 of waste, accounting for 21% of the American waste stream. The 2013 ANR Waste Characterization Study
 estimates an average of 16.7% for Vermont households (page 21). Removing the requirements for organics
 diversion at the 26 TPY, 18 TPY, and residential scales could negatively impact this trend. This unanticipated
 benefit from solid waste legislation is at no cost to the State.
- A growing number of Vermont businesses are adopting organics diversion as part of their sustainability policies, encouraged by Act 148 and supported by regional, national and global trends.
- Act 148 has a provision to adjust for the availability of processing infrastructure: A business is not required to divert if there is not a composting facility within 20 miles to process the material. The proposed amendments to eliminate the 26 TPY and 18TPY businesses would harm facilities that have been developing infrastructure and preparing their customers to meet this mandate. Even the smaller volumes of 26 TPY and 18TPY generators are important and provide critical volume for those communities who have already begun investing in infrastructure that supports organics diversion.

With landfill space steadily shrinking, the State unanimously passed Act 148 as a materials management system, where valuable resources are instead collected and marketed as commodities. With this, Vermont has become a leader in organics diversion. While CAV recognizes that there are some issues regarding implementation of the hauler requirements, we do not see this as reason for abandoning the 2020 organics ban.

Act 148 was passed without a funding mechanism. We understand there are real costs associated with implementing programs and systems to manage organics and that this is an obstacle in fully implementing Act 148. CAV recommends that the Committee consider ways for addressing this – especially because every dollar

spent on organics diversion positively achieves other state policy priorities such as farm viability, food security, stormwater management, and climate change adaptation.

We appreciate that the Committee is taking the time to check-in with stakeholders on the successes and challenges of implementing of Act 148. Thank you for considering CAV's concerns and recommendations. I am available to answer questions you may have.

Submitted January 12, 2018, on behalf of the CAV Board.

Natasha Duarte

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Director

802-373-6499