



Connecticut Department of Energy and Environmental Protection



Food Scrap Collection and Processing Initiatives

Presented by: Frank Gagliardo, Supervising Environmental Analyst; Kevin Barrett, Supervising Environmental Analyst; and Abigail Ellert, Environmental Analyst (CTDEEP, Waste Engineering & Enforcement Division)
SWAC – April 2021



Connecticut Department of Energy and Environmental Protection

Connecticut Coalition for Sustainable Materials Management (CCSMM)

CCSMM was developed to explore ways to reduce the amount of waste that is generated in our state, improve reuse, recycling, organics collection, and other innovative solutions.

- Food Scraps / Organics Collection & Diversion working group launched an *Organics Infrastructure Initiative*.
 - Action Step #16 from CCSMM December 2020 report.
 - Goal: Improve the transparency, predictability, and efficiency of DEEP permitting for organics infrastructure.
- Outcome: DEEP has developed a table “*Current Authorization Pathways for Food Waste Management*”



Current Authorization Pathways for Food Waste Management

Key aspects of the table:

- 2 divisions based on what you are looking to accomplish
 - *Collection and Transfer*
 - *Processing and Composting*
- Facility and Authorization Type
- Authorizing Pathway
- Capacity Limitations
- “How to / Getting Started”



Demonstration Authorizations – Regulatory Authority

CGS § 22a-208a(j): provides Commissioner the authority to approve demonstration projects

- Approval contains conditions necessary to protect human health and the environment
 - Adherence to O&M Plan
 - Implementation of Vector and Odor Control Plans
 - Specific conditions based on each request
 - Final Report (detailed evaluation of the initiative)
- Valid for up to two (2) years
- Renewable for up to five (5) years



Demonstration Project Approval – SCRRRA

Southeastern CT Regional Resource Recovery Authority (SCRRRA): requested approval for a food scrap and ground wood chip composting pilot study.

- Stonington Transfer Station – Leaf Compost Area
 - Feedstock from pre-selected commercial haulers and other sources
- 2 Batches: Approx. 70 tons/batch ($V_{fs} : V_{wc}$ ratio = 1 : 2.5-4)
- Forced-air (controlled by temp. & oxygen monitoring)
- Piles turned: 28 days; 14 days and 14 days
- If successful, SCRRRA to consider permanent composting operation



Demonstration Project Approval – Town of Mansfield

Town of Mansfield: requested approval to assess the viability of adding food scraps (in limited quantities) to its leaf composting operation.

- Mansfield Transfer Station – Leaf Compost Area
 - Feedstock from elementary and middle schools, as well as residential sector
- Food scraps immediately mixed with absorbent material (sawdust, wood shavings...) then mixed with leaves for composting
 - Food scraps mixed with leaves by COB each day; ($V_{fs} : V_l$ ratio = 1 : 3)
- Demonstrate the value of this process, as it relates to diversion/recycling of food scraps within the local community
- If successful, initiative will provide an economical and environmentally sound model for managing food scraps



Request to Establish a Satellite Drop Site for Food Scrap Collection – City of Middletown

- Two collections bins currently available at the transfer station.
- Requested authorization per the MTSGP Appendix O&MP, General Operating Conditions to establish a satellite collection point at the city Emergency Management Building.
 - City of Middletown requested placement of one 35-gallon Blue Earth toter.
- DEEP concerns: nuisances such as vectors and odors, hot weather that could lead to less than desirable conditions.
- Approval requires adherence to the management conditions as outlined in the MTSGP, Appendix Part II, Management Requirements for food scraps.



Request to Establish a Satellite Drop Site for Food Scrap Collection – City of Middletown (cont.)

- Based on DEEP concerns, additional management requirements were added:
 - Signage to instruct users about acceptable & banned food scraps.
 - No pet waste.
 - Toter shall be cleaned after each pickup from May 1 – Oct 31, then 1x/wk. rest of year.
 - Pick-up every 48 hrs. May 1 – Oct 31, then 1x/wk. rest of year.
 - Monitoring & inspection 2x/wk. by PW staff.
 - Location of container to be in shaded or sheltered location out of direct summer sun.



Other Proposed Municipal Food Scrap Projects

- Greenwich – through the MTSGP, propose a satellite collection for the collection of food scraps at a church location.
- Litchfield – propose adding food scraps to their windrows at their registered leaf compost facility collected from restaurants and residents.
- Salisbury/Sharon – propose food scrap collection pilot with bins placed at their new transfer station.



Demonstration Project Proposal – City of West Haven

Propose to examine methods to shorten the time it takes to compost and increase compost quality through the addition of food scraps.

- City of West Haven Composting Facility
 - Currently operates a registered leaf composting facility with the addition of grass clippings
- Propose to investigate the use of 2 low technology approaches
 - Aerated Static Piles (ASPs) and Machine Turned Windrows
- Submitted *detailed Operations and Management Plan*
 - Introduction, Methods of Composting, Overall Process, Testing & Monitoring, Site Controls, Emergency Response Protocols, Schedule & Participants
 - Included supplemental information on proposed cover material



Useful Links

[Municipal Transfer Station General Permit \(MTSGP\)](#)

[Pre-application questionnaire](#)

[Current Authorization Pathways for Food Waste Management](#)



DEEP Contacts

Frank Gagliardo

Supervising Environmental Analyst – Western Division

Frank.P.Gagliardo@ct.gov

860-424-3130

Kevin Barrett

Supervising Environmental Analyst – Eastern Division

Kevin.Barrett@ct.gov

860-424-3697

Abigail Ellert, Environmental Analyst

Abigail.Ellert@ct.gov

860-424-3460

