

Solid Waste Composting Requirements & Comparison

2/20/2020

The Numbers at a Glance:

- Approximately 18,000 cubic yards of food residuals were managed by 12 permitted composters in 2019. This does not account for food residuals brought to poultry farmers or to exempt composting activities.
- The Program has historically used a conversion factor of 1 ton equals 2 cubic yards for food residuals.

Solid Waste Composting Categories:

A tiered regulatory structure increasing with facility size and volumes managed in conjunction with potential for public health impacts, environmental risks and nuisance conditions.

<u>Small (Registration)</u>	<u>Medium (Categorical Cert)</u>	<u>Large (Full Certification)</u>
<ul style="list-style-type: none">• Less than 4 acre compost management area (not total property)• Up to 5,000 total cubic yards (up to 2,000 c.y. food residuals)• Must follow prescriptive Accepted Compost Practices	<ul style="list-style-type: none">• Less than 10 acre compost management area• Up to 40,000 total cubic yards (up to 5,000 c.y. food residuals)• More design and operational flexibility	<ul style="list-style-type: none">• Over 10 acre compost management area• Over 40,000 total cubic yards and/or 5,000 cy food residuals• More design and operational flexibility
<u>Notes:</u> <ul style="list-style-type: none">• Liquids managed via vegetated treatment area.• Subject to restricted input lists (i.e. no animal offal or slaughterhouse wastes)	<u>Notes:</u> <ul style="list-style-type: none">• Leachate collected in lined pond• All liquids collected and treated either onsite or at WWTP• May accept any pre-approved organic feedstocks	<u>Notes:</u> <ul style="list-style-type: none">• Leachate collected in lined pond• Liquids collected and treated either onsite or at WWTP• May accept any pre-approved organic feedstocks

Regulatory Assurances – All Solid Waste Composting Facility Types:

1. No compost liquids may discharge to groundwater or surface water.
2. All compost must successfully achieve PFRP Time & Temperature requirements for pathogen reduction.
3. All finished compost must pass metals and bacteriological quality testing prior to distribution or sale.
4. All finished compost must be tested and proven to be mature and stable prior to distribution or sale.
5. Compost operator training is required.
6. All incoming feedstocks are immediately mixed into a recipe or covered and incorporated within a few days.

Applicable Proposed Changes to the SWMR Compost Regulations:

- New exemption for feeding livestock solid waste that meets AAFM's Commercial Feed Law requirements.
- Relaxed the frequency and descriptive linear spacing requirements for time and temperature recordkeeping for all facilities. Medium and large facilities with substantial windrow length, may now describe time and temperature recording frequencies and protocols in the facility management plan for Program approval during the permitting process. Will be more adaptable and flexible to meet each compost operator's specific needs.
- With the change to ANR's public noticing requirements we are now allowing farms that are exempt from Act 250 pursuant to 10 V.S.A. § 6001 (3)(D)(vii)(VI) to register as small compost facilities. Previously a medium categorical certification was required. This matches farms with the small registration the most logical pairing.

What Would A Composter Have to Do To Go From a Small to a Medium:

Registration vs. Certification: A Small compost operator verifies compliance with the ACPs and receives a registration which has no expiration or renewal requirements. Medium and Large compost operations receive certifications and have to be renewed every five to ten years.

Public Notice: In accordance with [10 V.S.A. 170](#), registrations are a Type 5 process and are not subject to public notice during the registration process. They are only required to be noticed upon the issuance of the final decision. Medium Categorical certifications are a Type 4 process and are subject to a 14 day public comment period at the draft decision stage. Both processes are subject to a final decision 30 day appeal notice period.

Site Construction/Leachate Management: Small compost operations are required to be constructed to convey leachate and compost runoff to a vegetated treatment area with a slope less than 5% designed to promote nutrient uptake into vegetative matter and prevent groundwater contamination. Medium compost facilities due to their size, throughput and leachate generation potential are required to collect and treat leachate either at a WWTP, pumping back to piles or through another pre-approved on-site treatment method. Medium compost facilities are also subject to compost pad construction requirements designed to be less permeable and to convey leachate to the collection and treatment structures rather than allowing it to infiltrate. Upgrading from a Small to a Medium is a significant construction improvement and a substantial operational difference in this regard.

Feedstocks That May Be Accepted: Because of the prescriptive nature of the ACPs, Small compost operations are only allowed to accept feedstocks listed in the [Procedure: Approved Feedstocks for Small Facilities Registered to Operate Under Acceptable Composting Practices March 21, 2012](#) and [Procedure: Defining High Carbon Bulking Agents Used in Composting March 21, 2102](#). This prohibits Small composting operations from the importation and composting of some solid wastes such as slaughterhouse waste. (Note however, farms may compost their own mortalities, etc). Mediums can apply to compost any desired organic feedstocks during the application process and all approved feedstocks will be included in the certification.

Additional Siting Considerations: Under the current Rules all siting criteria are the same except Medium (and Large) composting operations are subject to the following additional siting requirement 6-1107(a)(6).

Siting criteria. A composting operation shall not construct the compost management area and area used to treat or infiltrate runoff to groundwater within the following siting minimum distances. The following siting distances shall not affect another property owner's ability to conduct activities not regulated by these rules:

(6) for compost facilities, a minimum of 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.