## MICHIGAN STATE UNIVERSITY EXTENSION



## Agrifood Safety Minute

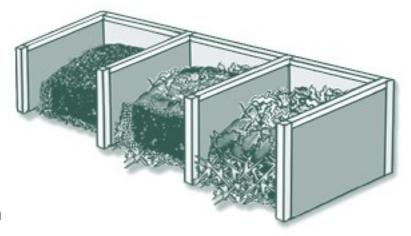


## **Food Safe Compost Use**

From an agronomic perspective, compost is unmatched as a soil builder and can greatly contribute to overall plant and soil health. From a food safety perspective, compost can be a hazard, especially if made with animal byproducts. Proper composting of animal byproducts is essential to ensure a reduced risk of contamination.

Improper composting can result in applying a product that could pose a food safety risk.

This guidance document and episode will walk you through the recommended steps for effective compost use while ensuring GAP and FSMA compliance. It will also provide a sample written policy for composting of waste and application of composted product to adapt to fit



your operation's use of compost. In addition, supplemental recordkeeping logs are provided as part of this episode's documentation.

To ensure a pathogen free product, compost piles must be treated in some fashion to reduce the microbes in them. One method is allowing the pile to heat with aeration to at least 131 degrees Fahrenheit for up to 15 days. If you produce the compost on site, there is an expectation that you will measure the temperature of compost piles on a daily basis and that the temperatures will be logged in your food safety manual. If you purchase compost, you need to include a Certificate of Conformance from the buyer to comply with FSMA.

For FSMA compliance, bacteriological testing of purchased compost is not required. When using purchased compost on a crop that is third party audited, verify with your auditor what records you will need from the supplier to ensure you meet audit requirements.

The first requirement of an effectively written compost policy is a statement about compost being safe in both how it will be produced and how it will be applied. This is not required under FSMA, but is something GAP auditors often require. The example introductory statement on the next page outlines this requirement.



## Composting Policy

All compost applied that comes into contact with the harvestable portion of the crops will be composted fully to finishing using a scientifically validated prior to use. [112.54(a)]

In the absence of both time and temperature treatment with verification through records, partially composted materials will be treated like manure. When the compost is applied risks are further reduced by minimizing contact with the harvestable portion of the crop.

The next requirement of a compost policy depends on whether the compost was bought or produced on-farm. Purchased compost must have a Certificate of Conformance [112.60(b)(1)] provided by the seller at least annually.

The Certificate of Conformance must contain:

- Assurance that the process is scientifically validated [112.60(b)(1)(i)]
- Assurance that the compost wasn't contaminated from making it to its arrival on-farm [112.60(b)(1)(ii)]

Compost made on the farm is acceptable to use under FSMA, provided the grower has a record outlining the scientific validity of the process used to make the compost [112.54], and records (such as time, temperature and turnings) showing the process was followed on the farm [112.60(b)(2)]

You will find sample time-temperature monitoring log sheets in the show notes. As always, you will want to alter these and the associated policies for the size and scope of your operation.

An auditor is looking for evidence of a system written in the Food Safety Manual to minimize incidence of foodborne illness, visual evidence that it is taking place and documentation that it has been taking place in the past. Writing the Composting Policy is the first step. Implementing the practices on your farm is the next step. Documenting that you have both a valid process in place and proof that it is being followed is the final step.



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