



# Biological Soil Amendments of Animal Origin (BSAAO) Outreach and Education Tools



NCR FSMA Meeting  
April 2, 2020



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These are the products of  
other people's work. They  
are...

Mariel Borgman  
Charles Gould  
Vivien McCurdy  
Alison Work



# WHAT IS A BSAAO?



A biological soil amendment which consists, in whole or in part, of materials of animal origin, such as manure or non-fecal animal byproducts, or table waste alone or in combination.



# TREATED VS. UNTREATED

## TREATED BSAAO

Treated BSAAOs have gone through a complete process to adequately reduce microorganisms of concern.

## UNTREATED BSAAO

Untreated BSAAO, such as raw manure, have not gone through an appropriate process to kill any potential pathogens.

## Video Link:

How FSMA  
Defines Treated  
vs. Untreated  
BSAAO



**[SCAN HERE]**



# SAFE AND SUCCESSFUL COMPOSTING

**Acceptable  
time and  
turning regimes  
outlined by  
FSMA:**

Static pile that reaches 131° F for 3 consecutive days

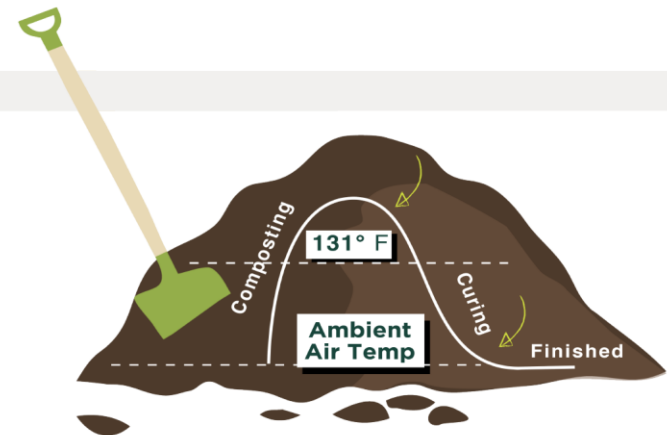
Active or turned pile that reaches 131° F for 15 non-consecutive days, with a minimum of 5 turnings

## Video Link:

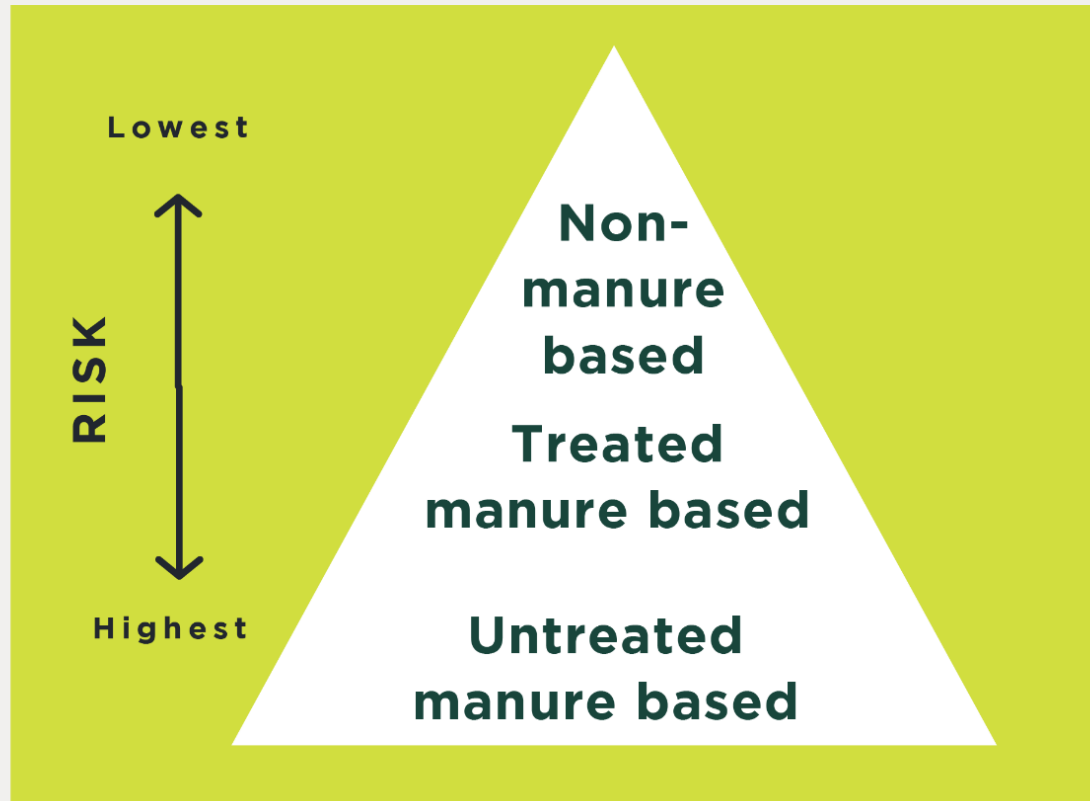
Safe &  
Successful  
Composting



**[SCAN HERE]**



## RISK MANAGEMENT



### Video Link:

Risk Management  
for BSAAO



[SCAN HERE]





## RECORDKEEPING

**For purchased compost,  
you need:**

- A Certificate of Conformance

**For BSAAOs produced on  
your own farm, you need:**

- Records outlining the scientific validity of the process used
- Time, temperature, and turning records showing the process was followed on the farm

**In the eyes of an inspector,  
if you didn't write it down,  
it didn't happen.**

### Video Link:

FSMA Recordkeeping  
Requirements for  
BSAAO



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# FARM FOOD SAFETY PLANS

## What is a Farm Food Safety Plan?

- Describes identified risks and corrective actions
- Defines your practices, policies, and SOPs (Standard Operating Procedures)
- Prepares you for buyer questions and third party audits

## What is an SOP?

- Created by writing down what you do and how you do it- EXACTLY!

**Food safety plans and most SOPs are NOT required for FSMA compliance.**



# Questions?

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