



Subpart F: Biological Soil Amendments

The Food Safety Modernization Act (FSMA) Produce Safety Rule has certain requirements for covered farms. Subpart F focuses on the treatment, storage, and application of Biological Soil Amendments of Animal Origin (BSAAOs) and human waste. The Produce Safety Rule does not allow the application of human waste unless it meets the standard of 40 CFR part 503, subpart D.

Treatment Requirements

There are a variety of ways a BSAAO can be treated under the Produce Safety Rule. Some scientifically valid controlled processes for treatment include physical (thermal), chemical (high alkaline pH), or biological (composting).

Any of the previously treatment methods, or a combination of, may be used to meet the treatment requirements laid out in §112.55(a) and (b). Common treatments include:

- Static composting that maintain oxygenated conditions at a minimum of 131° for 3 consecutive days followed by adequate curing
- Turned composting that maintains oxygenated conditions at a minimum of 131° for 15 days with a minimum of five turnings and followed by adequate curing

Untreated BSAAOs

A BSAAO may be considered untreated and need special handling if it:

- Has not been processed in accordance with requirements of the Rule
- Has been contaminated after treatment
- Has been combined with an untreated BSAAO
- Contains a component that is contaminated
- Is an agricultural tea which contains an additive
- Is an agricultural tea made from untreated surface water or water which has detectable generic *E. coli* in 100 mL of water

Storage Requirements

If a BSAAO is treated, it is important to store and handle it correctly so as not to contaminate it. The rules requires you must store and handle treated BSAAOs:

- In a location so it does not become a potential contamination source for covered produce, food contact surfaces, water sources and distribution systems, and other soil amendments.
- In a location that minimizes the risk of it becoming contaminated

If it is suspected a BSAAO may have become contaminated during storage or handling, it must be handled as though it were untreated.



Application Intervals

If the BSAAO is:	BSAAO must be applied:	Application interval:
untreated	In a manner that does not contact covered produce during application and minimizes contact with covered produce after application	Reserved*
untreated	In a manner that does not contact covered produce during or after application	0 days
Treated by scientifically controlled process that meet the standard in 112.55(b)	In a manner that minimizes contact with covered produce after application	0 days
Treated by scientifically controlled process that meet the standard in 112.55(a)	In any manner	0 days

*currently under review by FDA

Record Requirements

For any BSAAO you use, a farm covered by the rule must keep a record of treatment. If BSAAOs are treated on your own farm, you must document the process controls (e.g. time, temperature, and turnings) reached for proper treatment. A supervisor must sign and date this record.

If you receive treated BSAAOs from a third party, you must annually obtain documentation that states the BSAAO:

- was treated with a scientifically valid process, and
- has been handled, conveyed, and stored in a manner that minimizes contamination by untreated or in-process BSAAOs.

BSAAOs for which no documentation is available can be used but only as if they are untreated.

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