# The 'Musts' of the FSMA Produce Safety Rule

The following is intended to provide guidance for educators, researchers and other applicable person(s) to reference the Produce Safety Rule that correlates with the Produce Safety Alliance Grower Training Course developed by Cornell University's Produce Safety Alliance.

This document contains the 'musts' that are outlined in the PSA Grower Training slides supplied to attendees of the course. The 'musts' are organized by module followed with the coinciding slide number coupled with the correlating Produce Safety Rule § for further reference. Due to the context of this rule, throughout this document you will find various overlap in sections. It is essential that every 'must' is detailed per section of the rule. Some words may have been changed from the referenced slide to create an increased understanding of the requirement of the rule for the person(s) reviewing the document. The § is referenced to ensure complete clarity of the requirement set forth by the FDA Food Safety Modernization Act – Produce Safety Rule.

This guide was developed by Victoria Toney, Produce Safety Technician of Southwest Michigan and revised by Michelle Jacokes, Produce Safety Technician of Lower Northwest Michigan.

#### Published: July 2019





## Module 2: Worker Health, Hygiene and Training (Subpart C & Subpart D)

Slide 4: Workers <u>must</u> wash their hands at times where hands may have become contaminated.

Slide 4: Workers <u>must</u> know what to do if they are ill or injure themselves while working.

Slide 7: New workers <u>must</u> be trained, so it is best to plan for worker training before things get too busy.

Slide 10: All workers that handle or contact covered produce or supervise covered activities <u>must</u> be trained (§112.22(a)).

Slide 10: §112.22(c) requires that at least one supervisor from the farm complete food safety training at least equivalent to the standardized curriculum recognized by the FDA.

Slide 11: Growers <u>must</u> a.) make visitors aware of the farm's food safety policies b.) provide access to toilet and handwashing facilities. (§112.33)

Slide 11: Visitor is defined as any person (other than personnel) who enters the farm with permission (pick-your-own customers, agricultural tour groups or school groups. (§112.3(c)).

Slide 12: Training programs must include: principles of food hygiene and food safety, recognizing signs and symptoms of foodborne illness and the importance of personal hygiene for all personnel and visitors, other training relevant to the worker's job. (§112.22(a)).

Slide 13: Training programs must

1) be appropriate for the job and conducted upon hiring (112.21(a)).

2) include refresher training throughout season (at least annually) or when a problem arises (§112.21 (d)).

3) be easily understood by the employee(§112.21(c)).

4) be supervised by a qualified person (§112.23).

5) include a process for documenting the training (§112.30(b)).

Slide 14: §112.21(b) states All personnel (including temporary, part-time, seasonal and contracted personnel) who handle covered produce or food contact surfaces, or engaged in the supervision thereof, must have a combination of education, training and experience necessary to person the person's assigned duties in a manner that ensures compliance with this part.

Slide 15: Training workers to identify and reduce risks at harvest (§112.22(b)): evaluate contamination risks before and during harvest such as significant animal activity, presence of fecal matter, damaged crops, or extensive tracks, never harvest produce destined for the fresh market that is visibly contaminated with feces, never harvest dropped produce (§112.112 and §112.114), only use clean harvest and packing containers.

Slide 17: §112.129(a) requires that toilets be designed, located and maintained to: prevent contamination of produce, food-contact surfaces, areas used for a covered activity, water sources, water distribution systems with human waste, be accessible for cleaning and cleaned at a frequency sufficient to ensure use and be kept supplied with toilet paper and provided for the sanitary disposal of waste and toilet paper.

Slide 17: Handwashing facilities <u>must</u> have soap, running water, and adequate drying devices to dry hands (such as single-serve paper towels, electric hand dryers, etc.) and requires appropriate disposal of dirty towels and wastewater (§112.130(b)).

Slide 18: <u>Must have 1 toilet per every 20 workers and located within a ¼ mile a 5-minute drive</u> (requirement under OSHA).

Slide 19: No eating, chewing gum, or using tobacco products in an area used for a covered activity (drinking beverages is permitted in designated areas) (§112.32(b)(6)).

Slide 21: Workers <u>must</u> maintain personal cleanliness, avoid contact with animals (other than working animals), maintain gloves in a sanitary condition if used, remove or cover hand jewelry that cannot be cleaned, not eat, chew gum or use tobacco in an area used for a covered activity, notify their supervisor if they are ill and wash their hands (§112.32). Working with farm animals is allowed but worker must follow proper hygiene when moving between animal work and covered activity work.

Slide 22: Hands <u>must</u> be washed after using the toilet, before starting or returning to work, before or after smoking, before putting on gloves, after touching animals or animal waste, any other time hands may become contaminated (i.e. touching money & handling produce) (§112.32(b) and (§112.44(a)).

Slide 23: Hand sanitizers cannot be used as a replacement for washing hands (§112.130(d)).

Slide 24: Personnel <u>must</u> be provided with adequate, readily accessible toilet facilities (§112.129(a)) and a handwashing station must be sufficiently close proximity to toilet facilities (§112.129(c)).

Slide 25: Gloves, if used, <u>must</u> be in a sanitary and intact condition when handling covered produce or food contact surfaces (§112.32(b)(4)).

Slide 26: Workers who are sick or show signs of illness, <u>must</u> not come into contact with covered produce and notify a supervisor. (§112.31(a)) and (§112.31(b)).

Slide 30: Training records <u>must</u> include the date of training, topics covered, and individual(s) trained in accordance with Subpart O of the rule (§112.30(a)) and (§112.30(b)).

Slide 32: A grower <u>must</u> establish and keep records of training that document required training of personnel, including the date of training, topics covered, and the person(s) trained (§112.30(b)).

Slide 33: Visitors <u>must</u> be made aware of the farm food safety policies (*policies can be reviewed* with visitors through the use of posters, signage, handouts, short policy summaries, or verbally when they enter the farm) and know where to find the toilets and sinks (§112.33).

## Module 3: Soil Amendments (Subpart F)

Slide 8: §112.53 states that you may not use untreated human waste.

Slide 10: All biological soil amendments of animal origin (BSAAO), including mortality composting, <u>must</u> meet the microbial standards in §112.55(a) and (b) or <u>must</u> be considered untreated.

Slide 16 (optional): must use a scientifically valid process (§112.54(b)(1)) and (2):

- 1. Aerated static composting: aerobic, minimum 131°F for three days, followed by curing with proper management to ensure elevated temperatures throughout all materials.
- 2. Turned composting: aerobic, minimum of 131°F for 15 days, minimum 5 turnings, followed by curing.
- 3. Other scientifically valid, controlled composting processes (§112.55).

Slide 18: NOP (National Organic Program) regulation states that raw animal manure <u>must</u> be composted unless it is:

- a.) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or
- b.) Incorporated into the soil not less than 90 days prior to the harvest of a produce whose edible portion does not have direct contact with the soil surface or soil particles.

Slide 19: Handling recommendations: designate specific equipment and tools for handling soil amendments , develop SOP's to clean and sanitize equipment and tools that contact soil amendments and fresh produce, direct traffic (foot and equipment) around soil amendment storage or processing areas to reduce risk of cross-contamination (§112.123(b)(1)), §112.123(d)(2), §112.123(e), §112.52(a), §112.52(b), §112.52(c).

Slide 23: They <u>must</u> establish and keep records that document the process controls (for example, time and temperature and turnings) were achieved (§112.60(b)(2)).

Slide 24: Documentation must be collected from the supplier §112.52(a).

Slide 24: Documentation must be renewed at least annually §112.60(b)(1).

## Module 4: Wildlife, Domesticated Animals, and Land Use (Subpart I)

Slide 7: If a significant evidence of potential contamination is found (such as observation of animals, animal excreta or crop destruction), you <u>must</u> evaluate whether the covered produce can be harvested in accordance with the requirement of §112.112.

Slide 8: Farmers <u>must</u> address food safety requirements but should keep the conservation of natural resources in mind.

Slide 11: You must monitor wildlife activity -

During the growing season: monitor for feces and evidence of intrusion, evaluate the risk of fecal contamination on produce (e.g., tree vs. root crop) and consider past observations and wildlife attractants.

Immediately prior to harvest: monitor for fecal contamination, signs of animal activity (e.g., trampling, rooting, feedings, tracks) and assess the risks to decide if the crop or a portion of the crop can be safely harvested (§112.83(b)) and (§112.112).

Slide 17: Assess risks before planting: sewage systems or septic tanks on the farm <u>must</u> be maintained in a manner that prevents contamination of produce or food contact surfaces (§112.131(a) and (b)).

Slide 18: Working animals are allowed preventative measures <u>must</u> be taken to ensure prevention of contamination §112.83, §112.127 and §112.134 all apply to domestic and working animals.

Slide 18: Workers <u>must</u> wash hands after coming into contact with animals and prior to touching covered produce (§112.32(b)(2)).

Slide 19: Animals, including pets, <u>must</u> be excluded or separated from areas where covered produce activities are performed in full enclosed buildings (§112.127).

Slide 20: A pre-harvest risk assessment <u>must</u> be done prior to and during harvest activities, those subject to the rule <u>must</u> take all measures reasonably necessary to identify and not harvest covered produce that is reasonably likely to be contaminated with a known or foreseeable hazard, including steps to not harvest covered produce that is visibly contaminated with animal excreta (§112.112).

Slide 21: Employees <u>must</u> know what a contamination risk is and how to avoid contamination (§112.112).

Slide 23: Workers <u>must</u> receive training to recognize and not harvest contaminated produce, inspect containers for contamination and how to correct it, report issues to a supervisor, take measures to not harvest contaminated produce and wash hands after handling animal feces (§112.22(b)(1)) and (§112.32(b)(3)(vi).

## Module 5 Part I: Production Water (Subpart E)

\*Please note that Agricultural Water requirements are under enforcement discretion until 2022.\*

Slide 4: All agricultural water <u>must</u> be safe and of adequate sanitary quality for its intended use (§112.41).

Slide 18: A grower <u>must</u> inspect all of the farm's agricultural water systems to the extent they are under the farm's control to identify produce safety hazards (§112.41(a)(1) through (5), including:

- The nature of each agricultural water source (e.g., ground, surface water).
- The extent of the farm's control over each water source.
- The degree of protection from each water source.
- Use of adjacent and nearby land.
- The likelihood of introductions of food safety hazards to agricultural water by another user before it reaches the farm.

Slide 19: Growers <u>must</u> establish an initial microbial water quality profile (MWQP) for untreated water sources (surface or ground water) that are applied using a direct water application method during growing (§112.46(b)(1)).

Slide 21: Each source of production water <u>must</u> be tested to evaluate whether its water quality profile meets the following criteria: **126 or less** colony forming units (CFU) generic *E. coli* per 100ml water geometric mean (GM) <u>AND</u> **410 or less** CFU generic E. coli per 100mL water statistical threshold value (STV) (§112.44(b)).

Slide 23: If water is sourced from a public water source, the grower is not subject to testing and can obtain of copy of test results from the municipality (§§112.45(a)(1) and (a)(2)).

Slide 24: Ground water, such as a well, <u>must</u> be tested during the initial year 4 times during the growing season and 1 time in the subsequent years (§112.46(b)(1)(i)(B)).

Slide 25: Surface water, such as ponds, creeks and holding areas open to the outdoor environment, are more sample-intensive and <u>must</u> be tested initially 20 times in a 2-4-year period with annual testing 5 times to create a rolling data set (§112.46(b)(1)(ii)).

Slide 25: Growers who use multiple water sources <u>must</u> test each water sources to establish the initial profile and collect annual samples to update the profile for each source (§112.46(b)).

Slide 27: Follow the water labs protocol for testing and use clean, sterile bottles (§112.47).

Slide 28: Water testing facilities <u>must</u> use an acceptable method for testing, such as EPA Method 1603(§112.151). Labs using approved EPA methods in Michigan can be found through MSU Extension.

Slide 29: The grower <u>must</u> discontinue use of the water as soon as practicable and no later than the following year unless a corrective measure is implemented, such as a die-off period (§112.45(b)(1)).

Slide 29: Die-off can be achieved by applying a time interval for microbial die off: between last application and harvest, between harvest and the end of storage and/or removal during activities such as commercial washing (§112.45(b)(1). A grower is allowed to treat the water in accordance with §112.43.

Slide 29: A grower is allowed to re-inspect the entire affected agricultural water system to its extent and determine if changes were effective and adequately ensure that agricultural water meets the applicable microbial quality criteria (§112.45(b)(2)).

Slide 31: A grower <u>must</u> document all corrective actions to water treatment processes, wildlife and domestic animal exclusion, or other actions meant to control sources of contamination (§112.50(b)(6)).

Slide 32: A grower <u>must</u> keep records of all treatment monitoring done.

Slide 33: A grower <u>must</u> implement measures to reduce the potential for produce contamination as a result of contact with pooled water (§112.42(d)).

# Module 5 Part II: Postharvest Water (Subpart E)

\*Please note that Agricultural Water requirements are under enforcement discretion until 2022.\*

Slide 46: A grower <u>must know initial quality and intended use of its water (§112.41)</u>.

Slide 48: Untreated surface water must not be used during postharvest activities (§112.44(a)).

Slide 48: Water used for the following <u>must</u> have no detectable generic *E. coli* per 100mL (§112.44(a)):

- Direct contact with covered produce during or after harvest
- Direct contact with food contact surfaces
- To make ice
- For handwashing

Slide 48: Water must be treated in accordance with the requirements in §112.43

Slide 49: Ground water, such as a well, is untreated ground water and <u>must</u> be tested 4 or more times initially to establish a water quality profile and 1 time for subsequent years during the growing season (§112.46(c)).

Slide 49: Public supply water is not subject to the testing methods and a certificate of testing can be obtained from the municipality for recordkeeping (§§112.46(a)(1) and (2)).

Slide 50: Single pass water <u>must</u> have no detectable generic *E. coli* per 100 mL water sample (§112.44(a)(2)).

Slide 51: All recirculated and batch water <u>must</u> begin with a microbial water quality that has no detectable generic E. coli in 100 mL water sample (§112.44(a)) and is safe and of adequate sanitary quality for its intended use (§112.41).

Slide 51: Any antimicrobial product used in the water <u>must</u> be labeled for use with fruits and vegetables.

Slide 53: When modifying the pH be sure to use an approved food grade product such as citric acid or acetic acid.

Slide 54: Water temperature <u>must</u> be maintained and monitored that is appropriate for the commodity and operation (§112.48(c)).

Slide 56: Growers that are subject to the rule <u>must</u> visually monitor the quality of water that is used during harvest, packing and holding activities for covered produce (for example, water used for washing covered produce in dump tanks, flumes, or wash tanks, and water used for cooling covered produce in hydrocoolers) for buildup of organic material (§112.48(b)).

Slide 57: Growers <u>must</u> manage their postharvest water; including changing water when necessary. Water changing schedules should consider: organic load, turbidity measurements, volume of produce, type of produce, product flow and operating conditions, type of antimicrobial product, type of equipment (§112.48(a)).

Slide 58: Waste water from produce washing or cooling <u>must</u> be disposed of properly so that it does not serve as a source of contamination to covered produce and fields used for growing covered produce (§112.132 and §112.133).

Slide 58: Water used for washing hands <u>must</u> be disposed of by taking appropriate measures to reduce contamination to covered produce (§112.130(c)).

Slide 60: You must use the product only as labeled.

Slide 65: Records <u>must</u> be established and kept that are relevant to postharvest water, specifically:

- The findings of the inspection of the agricultural water system in accordance with the requirements of §112.42(a).
- Results of any analytical tests conducted on agricultural water to comply with FSMA PSR provisions.
- Scientific data or information growers rely on to support the adequacy of the methods used to satisfy §§112.43(a)(1) and (2) water treatment.
- Documentation of the results of water treatment monitoring as required by §112.43(b).

- Scientific data or information relied upon to support the microbial die-off or removal rate(s) that were used to determine the time interval (in days) between harvest and end of storage, including activities such as commercial washing, as applicable, used to achieve the calculated log reduction of generic *E. coli*, in accordance with §112.45(b)(1)(ii)).
- Documentation of actions taken in accordance with 112.45.
- Annual documentation of the results or certificates of compliance from a public water system as outlined in §112.46(a)(1) and (2).
- Scientific data or information relied upon to support any alternative established and used on the farm in accordance with §112.49.
- Any analytical methods you use in lieu of the method that is incorporated by reference in §112.151(a) (U.S. EPA Method 1603 modified mTEC).

#### Module 6: Postharvest Handling and Sanitation (Subpart K & Subpart L)

Slide 6: Workers <u>must</u> never harvest covered produce contaminated with feces.

Slide 6: Workers <u>must</u> never harvest or distribute dropped covered produce.

Slide 7: Buildings <u>must</u> be suitable side, construction, and design to facilitate maintenance and sanitary conditions. This includes providing adequate space for equipment and storage, keeping floors, walls, ceilings, fixtures, ducts, and pipes clean and in good repair, and taking precaution to separate produce and food contact surfaces from potential contamination (§112.126(a)).

Slide 11: Direct food contact surfaces are a Zone 1 and subject to §112.123(d)(1). It requires all food contact surfaces of equipment and tools used in covered activities be inspected, maintained and cleaned and when necessary and appropriate (switching from uncovered to covered produce), sanitized to protect against contamination of covered produce.

Slide 22: All equipment and tools <u>must</u> be of adequate design, construction, and workmanship to enable them to be adequately cleaned and properly maintained (§112.123(a)).

Slide 24: Seams on food contact surfaces of equipment and tools <u>must</u> be either smoothly bonded, or maintained of minimize accumulation of dirt, filth, food particles and organic material and thus minimize the opportunity for harborage or growth of microorganisms (§112.123(c)).

Slide 26: All workers <u>must</u> be trained so they know how to identify and reduce risks in the packing area.

Slide 26: Measures <u>must</u> be taken to prevent contamination of covered produce and food contact surfaces in buildings, as appropriate considering the potential for such contamination

through (1) Floors, walls, ceilings, fixtures, ducts, or pipes; and (2) drips or condensate (§112.126(b)).

Slide 26: Old or broken harvest containers or equipment might need to be replaced (§112.22(b)(3)).

Slide 27: Only new, single-use containers or cleaned, reusable containers <u>must</u> be used to pack produce (§112.116).

Slide 28: For fully enclosed buildings there <u>must</u> be measures in place to exclude pests (§112.128).

Slide 28: For partially enclosed buildings, growers <u>must</u> take measures to prevent pests from becoming established or remove them, when present (§112.128).

Slide 29: There <u>must</u> be routine monitoring for pests (§112.128).

Slide 30: Measures <u>must</u> be taken to prevent contamination from drip or condensate (§112.126(b)(2).

Slide 30: Tools used to measure, record, and regulate temperature or other conditions in order to prevent the growth of microorganisms <u>must</u> be kept (a) accurate and precise (b) adequately maintained, and (c) adequate in number for their designated uses (§112.124).

Slide 32: vehicles <u>must</u> be cleaned before hauling produce; a clean liner may be used as a barrier if adequate to prevent contamination (§112.125).

Slide 32: Equipment such as pallets, forklifts, tractors, and vehicles such that they are intended to, or likely to, contact covered produce, they <u>must</u> do so in a manner that minimizes the potential for contamination of covered produce or food contact surfaces with known or reasonably foreseeable hazards (§112.123(e)).

Slide 40: A record document <u>must</u> be kept for the cleaning and sanitizing of tools, equipment and containers (§112.140(b)(2)).

#### Referenced Sections for FSMA PSR Title 21 CFR Part 112 'Musts'

Subpart A- General Provisions	§112.31(a)
§112.2(b)(2)	§112.31(b)(1)
§112.2(b)(3)	§112.31(b)(2)
§112.2(ii)(B)(4)	§112.32(a)
§112.2(ii)(B)(6)	§112.32(b)(1)
§112.4(a)	§112.32(b)(2)
§112.7(a)	§112.32(b)(3)
§112.7(b)	§112.32(b)(4)
Subpart B- General Requirements	§112.32(b)(5)
§112.11	§112.32(b)(6)
§112.12(c)	§112.33(a)
Subpart C- Personnel Qualifications & Training	§112.33(b)
§112.21(a)	Subpart E- Agricultural Water
§112.21(b)	§112.41
	5112.11
§112.21(c)	§112.42(a)
§112.21(c)	§112.42(a)
§112.21(c) §112.21(d)	§112.42(a) §112.42(b)
§112.21(c) §112.21(d) §112.22(a)(1)	§112.42(a) §112.42(b) §112.42(c)
§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2)	§112.42(a) §112.42(b) §112.42(c) §112.42(d)
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1)</pre>
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3) §112.22(b)(1)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2)</pre>
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3) §112.22(b)(1) §112.22(b)(2)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2) §112.43(b)</pre>
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3) §112.22(b)(1) §112.22(b)(2) §112.22(b)(3)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2) §112.43(b) §112.44(a)(1)</pre>
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3) §112.22(b)(1) §112.22(b)(2) §112.22(b)(3) §112.22(c)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2) §112.43(b) §112.44(a)(1) §112.44(a)(2)</pre>
<pre>§112.21(c) §112.21(d) §112.22(a)(1) §112.22(a)(2) §112.22(a)(3) §112.22(b)(1) §112.22(b)(2) §112.22(b)(3) §112.22(c) §112.22(c)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2) §112.43(b) §112.44(a)(1) §112.44(a)(2) §112.44(a)(3)</pre>
<pre>\$112.21(c) \$112.21(d) \$112.22(a)(1) \$112.22(a)(2) \$112.22(a)(3) \$112.22(b)(1) \$112.22(b)(1) \$112.22(b)(2) \$112.22(b)(3) \$112.22(c) \$112.23 \$112.30(a)</pre>	<pre>§112.42(a) §112.42(b) §112.42(c) §112.42(d) §112.43(a)(1) §112.43(a)(2) §112.43(a)(2) §112.44(a)(1) §112.44(a)(2) §112.44(a)(3) §112.44(a)(4)</pre>

Developed by: V. Toney, Produce Safety Technician – Michigan On-Farm Produce Safety

§112.45(a)	§112.52(a)
§112.45(a)(1)	§112.52(b)
§112.45(a)(2)	§112.52(c)
§112.45(b)(1)	§112.53
§112.45(b)(2)	§112.54(b)(1)
§112.46(a)(1)	§112.54(b)(2)
§112.46(a)(2)	§112.56(a)
§112.46(a)(3)	§112.60(a)
§112.46(b)(1)	§112.60(b)(1)
§112.46(b)(2)	§112.60(b)(2)
§112.46(b)(3)	Subpart G-H Reserved
§112.47(a)(1)	Subpart I- Domesticated and Wild Animals
§112.47(a)(2)	§112.83(a)
§112.47(b)	§112.83(b)(1)
§112.48(a)	§112.83(b)(2)
§112.48(b)	Subpart J Reserved
§112.48(c)	Subpart K- Growing, Harvesting, Packing and
§112.50(a)	Holding Activities
§112.50(b)(1)	§112.111(a)
§112.50(b)(2)	§112.111(b)
§112.50(b)(3)	§112.112
§112.50(b)(4)	§112.113
§112.50(b)(5)	§112.114
§112.50(b)(6)	§112.115
§112.50(b)(7)	§112.116(a)(1)
§112.50(b)(8)	§112.116(a)(2)
§112.50(b)(9)	§112.116(b)
Subpart F- Biological Soil Amendments of Animal Origin and Human Waste	Subpart L- Equipment, Tools, Buildings and Sanitation

§112.123(a)	§112.130(b)(3)
§112.123(b)(1)	§112.130(c)
§112.123(b)(2)	§112.130(d)
§112.123(c)	§112.131(a)
§112.123(d)(1)	§112.131(b)
§112.123(d)(2)	§112.131(c)
§112.123(e)	§112.131(d)
§112.124(a)	§112.132(a)(1)
§112.124(b)	§112.132(a)(2)
§112.124(c)	§112.132(b)
§112.125(a)	§112.133(a)
§112.125(b)	§112.133(b)
§112.126(a)(1)	§112.133(c)
§112.126(a)(2)	§112.133(d)
§112.126(b)(1)	§112.134(a)(1)
§112.126(b)(2)	§112.134(a)(2)
§112.127(a)(1)	§112.134(b)
§112.127(a)(2)	§112.140(a)
§112.127(b)	§112.140(b)(1)
§112.128(a)	§112.140(b)(2)
§112.128(b)	Subpart M- Sprouts
§112.129(a)	§112.142(a)
§112.129(b)(1)	§112.142(b)(1)
§112.129(b)(2)	§112.142(b)(2)
§112.129(b)(3)	§112.142(c)(1)
§112.129(c)	§112.142(c)(2)
§112.130(a)	§112.142(d)
§112.130(b)(1)	§112.142(e)(1)
§112.130(b)(2)	§112.142(e)(2)

Developed by: V. Toney, Produce Safety Technician – Michigan On-Farm Produce Safety

§112.143(a)	§112.148(b)
§112.143(b)	§112.148(c)
§112.143(c)	§112.148(d)
§112.143(d)	§112.150(a)
§112.143(e)	§112.150(b)(1)
§112.143(f)	§112.150(b)(2)
§112.143(g)	§112.150(b)(3)
§112.144(a)	§112.150(b)(4)
§112.144(b)(1)	§112.150(b)(5)
§112.144(b)(2)	§112.150(b)(6)
§112.144(c)(1)	Subpart N- Analytical Methods
§112.144(c)(2)	§112.151(a)
§112.145(a)	§112.151(b)(1)
§112.145(b)	§112.151(b)(2)
§112.145(c)(1)	§112.152(a)
§112.145(c)(2)	§112.152(b)
§112.145(c)(3)	§112.153(a)(1)
§112.145(d)	§112.153(a)(2)
§112.145(e)	§112.153(b)
§112.146(a)	Subpart O- Records
§112.146(b)	§112.161(a)(1)
§112.146(c)	§112.161(a)(2)
§112.146(d)	§112.161(a)(3)
§112.146(e)	§112.161(a)(4)
§112.146(f)	§112.161(b)
§112.147(a)	§112.162(a)
§112.147(b)	§112.162(b)
§112.147(c)	§112.163(a)
§112.148(a)	§112.163(b)

Developed by: V. Toney, Produce Safety Technician – Michigan On-Farm Produce Safety

§112.164(a)(1)	§112.203(c)(1)
§112.164(a)(2)	§112.203(c)(2)
§112.164(b)	§112.203(d)(1)
§112.165(a)	§112.203(d)(2)
§112.165(b)	§112.203(e)
§112.165(c)	§112.203(f)
§112.166(a)	§112.203(g)
§112.166(b)	§112.203(h)
§112.166(c)	§112.204(a)
Subpart P- Variances	§112.204(b)
§112.173(a)	§112.205(b)(1)
§112.173(b)	§112.206(a)(1)
§112.173(c)	§112.206(a)(2)
§112.177(a)	§112.207(a)(2)
Subpart Q- Compliance and Enforcement	§112.208(c)(1)
Subpart R- Withdrawal and Qualified	§112.208(c)(2)
Exemption	§112.208(c)(3)
§112.201(2)	§112.208(c)(4)
§112.201(3)	§112.208(c)(5)
§112.202(a)	
5112.202(0)	§112.208(c)(6)
§112.202(c)	
	§112.208(c)(6)
§112.202(c)	§112.208(c)(6) §112.208(c)(7)
§112.202(c) §112.202(d)	§112.208(c)(6) §112.208(c)(7) §112.210(a)

#### References

Food and Drug Administration (2015). *Food Safety Modernization Act Produce Safety Rule*. <u>https://www.federalregister.gov/documents/2015/11/27/2015-28159/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption</u>

Produce Safety Alliance (2019). *PSA Curriculum*. College of Agriculture and Life Sciences: Cornell University.