PrimusGFS v3.1 Rationalization of Changes:

Azzule Systems gained valuable feedback from several of our clients, including indoor agricultural operations in Mexico, as well as from Certification Bodies, Training Centers, and industry experts at-large during the implementation of PrimusGFS v3.0. We believe strongly in serving the needs of the various groups with which we collaborate, and in doing so worked to address all feedback and suggestions in the updated v3.1.

Version 3.1 satisfies the needs of users from a local to a global scale with flexible modules and a variety of addenda developed to ensure strength in programs, regulatory compliance, and marketability. We are grateful to those individuals and companies that provided invaluable feedback to help continually improve PrimusGFS.

Additions made to the text will appear in red. Where no changes were made you will see "No Change in v3.1". Where text may have been removed you will see neither red text nor the phrase "No Change in v3.1". You may compare v3.0 Questions and Expectations with version 3.1 Questions and Expectations where necessary.

GENERAL			
Number	Question	Expectation	Interpretation Guideline
3.01.01	No Change in v3.1	There should be a designated person/persons responsible for the operation's food safety program. They should have documented formal training or trained by someone that has formal credentials that is documented .This training should meet all state and federal requirements.	There should be a designated person/persons in charge of the operation's food safety program, including food safety document control and verification of food safety activities and ideally be independent of production. They should have documented formal training or trained by someone that has the documented formal credentials. This training should meet all state and federal requirements.
SITE			
Number	Question	Expectation	Interpretation Guideline
3.02.03	No Change in v3.1	A documented risk assessment of the growing area and surrounding areas should be performed and documented annually, and when any changes are made to the growing area, and adjacent land. This should detail known or reasonable foreseeable risks/hazards, the specific microbial, chemical and physical risks and their severity and likelihood of occurring in the following areas: previous use of the growing area, adjacent land use (e.g., CAFO), water sources (chemical hazards e.g. heavy metals, perchlorate, etc., and microbial hazards e.g. pathogenic E. coli), water use, fertilizers, crop protection chemicals, worker health and hygiene, equipment and tools used for harvest, storage, transportation, topography of the land for runoff, prevailing weather conditions or weather events. and any other applicable areas. Farms and indoor agriculture operations following the CA or AZ LGMA should have a buffer zone of approximately 1,200 ft. (365m) for CAFO's with >1,000 head or 1 mile (1609m) for 80,000 head CAFO, which may increase or decrease after assessing the risks, determining, and deploying mitigation measures.	A documented risk assessment of the growing area and surrounding areas should be performed and documented annually, and when any changes are made to the growing area, and adjacent land. This should detail known or reasonable foreseeable risks/hazards, the specific microbial, chemical and physical risks and their severity and likelihood of occurring in the following areas: previous use of the growing area, adjacent land use (e.g., CAFO), water sources (chemical hazards e.g. heavy metals, perchlorate, etc., and microbial hazards e.g. pathogenic E. coli), water use, fertilizers, crop protection chemicals, worker health and hygiene, equipment and tools used for harvest, storage, transportation, topography of the land for runoff, prevailing weather conditions or weather events and any other applicable areas. Farms and indoor agriculture operations following the CA or AZ LGMA should have a buffer zone of approximately 1,200 ft. (365m) for CAFO's with >1,000 head or 1 mile (1609m) for 80,000 head CAFO, which may increase or decrease after assessing the risks, determining, and deploying mitigation measures.

3.02.04	Are the necessary food defense controls implemented in the operation?	The operation should have implemented the necessary controls for preventing intentional contamination of the product, high-risk areas, external areas and vulnerable points (i.e. those that are not permanently locked) . These measures should be based on the risk associated with the operation, as detailed in the food defense plan (1.08.02). Some high-risk areas of the operation include: personnel, visitors, contractors, computers, raw material receipt (raw materials, product and packaging), trucks (incoming and outbound), water sources, storage areas for product, materials, chemicals, production areas, shipping areas, utensils or other items used in the growing area, etc.	The operation should have implemented the necessary controls for preventing intentional contamination of the product and high-risk areas. These measures should be based on the risk associated with the operation, as detailed in the food defense plan (1.08.02). Some high-risk areas of the facility include: personnel, visitors, contractors, computers, raw material receipt (raw materials, product and packaging), trucks (incoming and outbound), water sources, storage areas for product, materials, chemicals, production areas, shipping areas, utensils or other items used in the growing area, etc.. FSIS has created a self-assessment guideline for food processors titled "Food Security Guidelines for Food Processors. These guidelines are available at: http://www.fsis.usda.gov/Oa/topics/SecurityGuide.pdf The associated self-assessment checklist is available at http://www.fsis.usda.gov/shared/PDF/Self_Assessment_Checklist_Food_Security.pdf?redirecthttp=true FDA Food Security Preventive Measures Guidance, http://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/fooddefense/ucm083075.htm FDA Guidance for Industry, http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/FoodDefense/
3.02.05	Removed from v3.0 and merge with Question 3.02.04	Removed from v3.0 and merge with Question 3.02.04	Removed from v3.0 and merge with Question 3.02.04
3.02.06	**3.02.05:** Are workers issued non-reproducible identification (e.g., badges, company ID cards, etc.)? **0 Points Information Gathering Question only**	The operation must have a worker access security system in place that could include ID cards (with photo), biometrics, unique assigned passcodes or key fobs (not an exhaustive list). The system employed must provide a unique link between the worker and site/facility access, be revocable upon termination from the company with controls to limit duplication. Agency labor should also have ID cards (such as agency ID's that are checked on arrival). The ID cards, if worn on the outer garments, should be firmly attached so as not to be a food safety hazard. If stored on one's person, this is also acceptable i.e. the ID card can be provided if challenged (if stored in pockets, etc., hand sanitation would be required after showing the ID card, prior to handling product). Companies with less than 20 workers are not expected to have an ID system. 0 Points Information Gathering Question only	The operation must have a worker access security system in place that could include ID cards (with photo), biometrics, unique assigned passcodes or key fobs (not an exhaustive list). The system employed must provide a unique link between the worker and site/facility access, be revocable upon termination from the company with controls to limit duplication. Agency labor should also have ID cards (such as agency ID's that are checked on arrival). The ID cards, if worn on the outer garments, should be firmly attached so as not to be a food safety hazard. If stored on one's person, this is also acceptable i.e. the ID card can be provided if challenged (if stored in pockets, etc., hand sanitation would be required after showing the ID card, prior to handling product). Companies with less than 20 workers are not expected to have an ID system. 0 Points Information Gathering Question only

3.02.11	**Q3.02.10:** Where soil, substrates or fertilizer (e.g., compost) are stored or handled, are measures in place to ensure seepage and runoff is collected or diverted and does not reach growing areas, product, or any of the water sources? **A ZERO POINT DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**	Soil, substrates and fertilizer (e.g., compost, compost teas, fish emulsions, fish meal, blood meal, bio-fertilizers, etc.) are stored in a manner to prevent contamination to the growing areas, product, or water sources. Containers should be structurally sound and not a source of runoff or contamination. There should be appropriate and effective barriers, coverings, soil berms, pits or lagoons to divert or collect potential run-off or threats from wind, as applicable. **A ZERO POINT DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**	Soil, substrates and fertilizer (e.g., compost, compost teas, fish emulsions, fish meal, blood meal, bio-fertilizers, etc.) are stored in a manner to prevent contamination to the growing areas, product, or water sources. Containers should be structurally sound and not a source of runoff or contamination. There should be appropriate and effective barriers, coverings, soil berms, pits or lagoons to divert or collect potential run-off or threats from wind, as applicable. **A ZERO POINT DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.** Minor deficiency (10 points) if: • Single/isolated instance risk to the growing areas, product, or water sources. Major deficiency (5 points) if: • Numerous instances of risk to the growing areas, product, or water sources. Non-compliance (0 points) if: • Systematic failure to prevent contamination.

PEST CONTROL

Number	Question	Expectation	Interpretation Guideline
3.03.03	No Change in v3.1	There should be a documented pest control program in place detailing the scope of the program, target pests and frequency of checks. If performed in-house, the pest-control operators or equivalent should be registered, licensed or have documented formal training (if regulation does not require certification or registration). As applicable, the person's training and/or license should specify structural pest control or equivalent, or have documentation to show that the license includes structural pest control training if not specified on license. Any substitute operator's license credentials should also be on file. If the service is contracted, the pest control contract service/company should be licensed in structural pest control, insured and the contract should be documented (quoting the scope of the program, types of pests it covers and frequency of visits). When licensing legislation does not apply (e.g., in certain countries), there should be evidence of on-going training. Auditors should check documentation for expiry dates.	There should be a documented pest control program in place detailing the scope of the program, target pests and frequency of checks. If performed in-house, the pest-control operators or equivalent should be registered, licensed or have documented formal training (if regulation does not require certification or registration). As applicable, the person's training and/or license should specify structural pest control or equivalent, or have documentation to show that the license includes structural pest control training if not specified on license. Any substitute operator's license credentials should also be on file. If the service is contracted, the pest control contract service/company should be licensed in structural pest control, insured and the contract should be documented (quoting the scope of the program, types of pests it covers and frequency of visits). When licensing legislation does not apply (e.g., in certain countries), there should be evidence of on-going training. Auditors should check documentation for expiry dates.

3.03.04	Is there a schematic drawing/ plan of the facility (indoor agriculture operation), showing numbered locations of all pest monitoring devices (e.g., rodent traps, bait stations, insect light traps, etc.) both inside and outside the facility?	A schematic drawing or trap map is on file, current and details internal and external traps. All devices (e.g., tin cats, Ketch-Alls, bait stations, glue boards, insect light traps, electronic fly killer units, etc.) should be numbered and clearly identified on the map. The numbers should match what is in operation). The document should be accurate, dated and should show the type of device.	A schematic drawing or trap map is on file, current and details internal and external traps. All devices (e.g., tin cats, Ketch-Alls, bait stations, glue boards, insect light traps, electronic fly killer units, etc.) should be numbered and clearly identified on the map. The numbers should match what is in operation). The document should be accurate, dated and should show the type of device.
3.03.07	Is the audited area free from animal presence and/or animal activity (wild or domestic)? If Yes, go to 3.03.08	Animals can represent potential contamination to the growing area, to the crop, to the field equipment, etc., and therefore, should not be present in the operations. Evidence of animal presence can include tracks, fecal matter, feathers, etc. Note: This includes any packaging or storage areas. (e.g., equipment, agronomic inputs, chemicals)	Animals can represent potential contamination to the growing area, to the crop, to the field equipment, etc., and therefore, should not be present in the operations. Evidence of animal presence can include tracks, fecal matter, feathers, etc. Note: This includes any packaging or storage areas. (e.g., equipment, agronomic inputs, chemicals)
3.03.07a	Is there any evidence of fecal matter in the audited area?	Fecal matter is a potential contaminant to the product being grown. Produce that has come into direct contact with fecal matter is not to be harvested. A "no harvest zone" of approximately 5ft (1.5 m) radius should be implemented unless or until adequate mitigation measures have been considered. If evidence of fecal matter is found, a food safety risk assessment should be conducted by qualified worker and include appropriate corrective and preventative actions. Consideration of the maturity stage and type of crop involved is required. Any evidence of human fecal matter in the growing area is an automatic failure.	Fecal matter is a potential contaminant to the product being grown. Produce that has come into direct contact with fecal matter is not to be harvested. A "no harvest zone" of approximately 5ft (1.5 m) radius should be implemented unless or until adequate mitigation measures have been considered. If evidence of fecal matter is found, a food safety risk assessment should be conducted by qualified worker and include appropriate corrective and preventative actions. Consideration of the maturity stage and type of crop involved is required. Any evidence of human fecal matter in the growing area is an automatic failure.
3.03.07b	Is the fecal matter found in the audited area, a systematic event (not sporadic)? **ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**	Animal fecal matter has the potential of representing contamination to the product being grown. Produce that has come into direct contact with fecal matter is not to be harvested. A "no harvest zone" approximately 5ft (1.5 m) radius should be implemented unless or until adequate mitigation measures have been considered. If evidence of fecal matter is found, a food safety risk assessment should be conducted by a qualified worker and include appropriate corrective and preventative actions. This question is "no" if the grower has already noted this issue and performed adequate corrective actions. Consideration of the maturity stage and type of crop involved is required. If this question is answered Yes, automatic failure of this audit will result. Any evidence of human fecal matter in the growing area is an automatic failure.	Animal fecal matter has the potential of representing contamination to the product being grown. Produce that has come into direct contact with fecal matter is not to be harvested. A "no harvest zone" approximately 5ft (1.5 m) radius should be implemented unless or until adequate mitigation measures have been considered. If evidence of fecal matter is found, a food safety risk assessment should be conducted by a qualified worker and include appropriate corrective and preventative actions. This question is "no" if the grower has already noted this issue and performed adequate corrective actions. Consideration of the maturity stage and type of crop involved is required. If this question is answered Yes, automatic failure of this audit will result. Any evidence of human fecal matter in the growing area is an automatic failure.

3.03.09	Are pest control devices located away from exposed raw materials (e.g., seeds, transplants, soil, media), finished goods and packaging, and poisonous bait traps are not used within the facility?	Pest control devices should be located away from exposed food products, packaging materials or equipment to prevent any physical or microbial contamination. Poisonous bait traps should not be located within the facility.	Pest control devices should be located away from exposed food products, packaging materials or equipment to prevent any physical or microbial contamination. Poisonous bait traps should not be located within the facility. Care should be taken to place pest control devices in such a manner that they do not pose a threat of contaminating product, packaging or raw materials. This includes the following restrictions: • Poisonous bait stations and other pesticides should only be used outside the facility. • There should be no domestic fly sprays used within the production and storage areas. • Block bait as opposed to grain and pellet bait should be used (except for the external use of National Organic Program approved materials). If used, insect light traps (ILTs), electrical fly killers (EFKs) or pheromone traps should be regularly cleaned out (kept free from a build-up of insects and debris). Sticky type ILTs should be monitored at least monthly and the sticky board replaced if ineffective. ILTs that use sticking as opposed to zapping methods (EFKs) are preferred. • If used, insect light traps or electric fly killers should not be placed above or in close proximity (10 feet, 3 meters) to product, food contact surfaces, equipment, or packaging material. Electric fly killers or insect light traps should not be located above dock doors (due to potential forklift damage) or in front of doorways (so attracting insects into the facility). Hallways or dock areas where product passes through are exempt from these distances, as long as product does not stop or is not stored in hallway or dock. • If used, insect light trap bulbs should be replaced at least every 12 months (this should be recorded), or as more frequently if directed by manufacturers. • No fly swatters should be evident in production or storage areas. • No bait should be found outside of bait stations. • If used, snap traps should be placed inside a trap box and should not use allergen containing baits (e.g., peanut butter). Any snap traps inside stations should be checked at least weekly and checks recorded (scored in 3.03.10). Any indoor use of chemicals e.g. knock down sprays should be done without contaminating food, packaging, and equipment (see the next bullet point regarding poisonous baits). All applications should be recorded properly (scored in 3.03.10), detailing where and when the application occurred, and any special methods used to avoid contamination. All applications should be made by experienced, licensed operators following any and all legal requirements and best practices. • The use of poisonous bait within the facility should not occur. If this use is required, then the area that is being trapped should have all the product and packaging removed prior to the use of the poisonous baits.

3.03.10	No Change in v3.1	All pest control devices should be maintained clean, in working order and replaced when damaged so that they will accomplish their intended use. Date of inspections should be posted on the devices, as well as kept on file (unless barcode scanned).	All pest control devices should be maintained clean, in working condition and replaced when damaged in order to accomplish their intended use. Date of inspections should be posted on the devices as well as kept on file (unless barcode scanned). The following criteria are met: • If non-toxic glue boards are used, they should be located inside a trap box or PVC piping, etc., and changed frequently ensuring that the surface has a shiny glaze with no build-up of dust or debris. • If cardboard traps are used (interior and dry areas only) they should be in good repair and marked as monitored (see below). • If mechanical wind-up traps are used, they should be wound. Winding is checked by triggering the spring device to operate the trap. The trap should be rewound after testing. • Approximately 10% of the traps, glue boards and bait stations should be checked by the auditor. • Record of service verification such as stickers, cards or bar codes should be on the inside of the station and on bottom of glue boards requiring the station to be opened to record data (date and initial of inspector) or to scan. External labeling is allowed on traps with a clear window on top. • Bait and other poisons should be controlled and applied by a licensed applicator. See 3.03.03 • Bait in bait stations should be secured inside the bait station on a rod above the floor of the station, or the bait station is designed so bait cannot be removed by a rodent or "float away" in a heavy rain. Bait stations should be tamper resistant. A key should be made available at the time of the audit. • No bait stations should be missing entire bait. • No old or moldy bait observed. • Bait stations and traps should not be fouled with weeds, dirt, and other debris. • External pest control devices should be checked at least monthly these checks to be recorded. • Internal pest control devices should be checked at least weekly – these checks to be recorded. • Any snap traps inside stations should be checked at least weekly – these checks to be recorded. Local regulations may require exceptions/differences to above guidelines. At all times, local regulations should be met but if the audit system requirements are more stringent, these should also be adhered to. Some contractors use barcode systems that automatically check to see if all traps are monitored on a scheduled visit.

3.03.11	No Change in v3.1	No Change in v3.1	The distance between traps should be determined based on the activity and the needs of the operation. As a guide (i.e. not expecting the use of tape measures) to number and placement of traps and bait stations: • Multiple catch traps or glue boards in stations or PVC pipes should be positioned between 20 to 40 feet (6 to 12 meters) intervals around the inside perimeter of all rooms. Spacing might be affected by the structure, storage and types activities occurring. • Multiple-catch traps may be supplemented with snap traps in stations if necessary in certain areas (e.g., in areas with high dust levels (e.g., potatoes, onions)) or box mezzanines where large traps or glue boards are not practical. • Inside the facility, traps should be placed within 6 feet (about 2 meters) of both sides of all outside exit/entry doors. This includes either side of the pedestrian doors. Effort should be made to avoid placing traps on curbing. • Bait stations or multiple-catch traps should be positioned between 50-100 feet (15-30 meters) intervals around the exterior of the building perimeter and within 6 feet (about 2 meters) of both sides of all outside exit/entry doors, except where there is public access (public access is defined as access easily gained by the general public such as parking lots or sidewalks, school areas or areas of environmental concern). Trap placement might be affected by the structure, external storage and type of area (urban, rural etc.). • Bait stations (where used) should be positioned within 100 feet (30 m) of structures. This may impact fence line/property boundary baiting i.e. bait stations must be within 100 feet (30 m) of buildings and at 50-100 feet (15-30 m) intervals. If an exterior fence line/property perimeter program is utilized at distances greater than 100 feet (30 m) from buildings, then non-bait traps (e.g. multiple catch traps) should be positioned at 50-100 feet (15-30 m) intervals along perimeter. Auditor should check label for bait and ensure compliance to distance requirements on label. • Outside packaging and any outside food storage should be protected by an adequate number of pest control devices.
3.03.12	No Change in v3.1	All traps should be clearly identified (e.g. numbered) to facilitate monitoring and maintenance. All traps should be located with signs (that state the trap number and also that they are trap identifier signs).	The devices are numbered and a coding system is in place to identify the type of device on a map. Auditor should check that the trap map numbering and trap positions, match reality. All internal traps should be located with a sign (that states the trap number and that it is a trap identifier), in case they are moved.

GENERAL CHEMICALS			
Number	Question	Expectation	Interpretation Guideline
3.04.01	No Change in v3.1	Chemicals within the scope of this question include pesticides, fertilizers, cleaners and sanitizers i.e. sanitation chemicals and food contact chemicals, such as chlorine, etc. Primary information in the product inventory includes: the product or chemical names, quantity available, and location of containers. Inventory by storage area/type of chemical is optimal. The inventory should take into account the arrival of new stocks and any discrepancies should be explained. Minimum frequency for inventory checks should be monthly during production season and a copy should be maintained separate from the chemical storage location(s). The frequency of the inventory checks may decrease in short season or off-season operations; auditor discretion applies.	Chemical inventories should be on file. Chemicals within the scope of this question include pesticides, fertilizers, cleaners and sanitizers i.e. sanitation chemicals and food contact chemicals, such as chlorine, etc. Primary information in the product inventory includes: the product or chemical names, quantity available, and location of containers. Inventory by storage area/type of chemical is optimal. The inventory should take into account the arrival of new stocks and any discrepancies should be explained. Minimum frequency for inventory checks should be monthly during production season and a copy should be maintained separate from the chemical storage location(s). The frequency of the inventory checks may decrease in short season or off-season operations; auditor discretion applies.
PRODUCTION FACILITY			
Number	Question	Expectation	Interpretation Guideline
3.05.01	No Change in v3.1	A master sanitation program should be in place that covers all the growing areas, storage areas, break areas, restrooms, maintenance and waste areas. The master sanitation program should reflect the type of indoor growing operation. (i.e. mushroom production, hydroponic, aeroponic, vertical growing). (Within these areas, areas such as walls, floors, light covers, overhead pipes, etc. should be included. List should include equipment (food contact and non-food contact), pallet jacks, fork lifts, carts, floor scrubbers, cooling equipment (evaporators, cooling coils, drip pans, etc., lift trucks and company owned trailers, etc.) The master sanitation schedule should include a detailed list of areas and equipment to be cleaned as well as the frequency.	The company should have a master sanitation program that covers the entire growing areas including equipment (food contact and non-food contact), pallet jacks, fork lifts, carts, floor scrubbers, cooling equipment (evaporators, cooling coils, drip pans, etc.), lift trucks and company owned trailers, etc. The master sanitation program should reflect the type of indoor growing operation. (i.e. mushroom production, hydroponic, aeroponic, vertical growing) The schedule should state what is to be cleaned and when (how often). Areas should include where applicable, maintenance areas, waste areas, restrooms, storage areas, and break areas. Within these listings there should be details like floors, walls, light covers, pipes, ceilings, evaporators, cooling coils, drip pans, drains, drain lines and reservoirs, named equipment and equipment parts and surfaces; including internal transport vehicles (forklifts, Bobcats, floor cleaners, pallet jacks, etc.). In-house delivery and shuttle trucks should be included in sanitation schedules, have SSOPs and cleaning records. Infrequent schedules i.e. weekly and above, are usually created for several reasons e.g. cleaning areas and equipment that are not cleaned daily, using a different cleaning technique/chemical than what is used on a daily schedule and/or doing a more "in depth" clean on equipment. Note that all cleaning mentioned on the schedule should be covered somewhere in the cleaning procedures and also on the sanitation logs. Schedule should be kept on file in an easily retrievable manner. Master sanitation schedule should include what is to be cleaned and when, i.e.: • List of areas, equipment, internal transport vehicles, in-house delivery trucks, etc. • Frequency of cleaning (daily, weekly, monthly, quarterly, annually, etc.)

3.05.02	Are there written cleaning and sanitation procedures (Sanitation Standard Operating Procedures) for the indoor agricultural operation and all equipment?	The indoor agricultural growing areas (floors, walls, overheads, etc.), all equipment (food contact, non-food contact, cooling equipment, etc.), internal transport vehicles and in-house owned trailers should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs). There should be SSOPs covering the cleaning and sanitizing operations noted in the master sanitation schedule. Procedures should detail what, who, how and when, including chemical details, solution temperature, water pressure, dwell times, any disassembly/reassembly instructions and cleaning verification procedures.	There should be written cleaning and sanitation procedures for all equipment (food contact, non-food contact, cooling equipment, etc.), areas (floors, walls, overheads, etc.), internal transport vehicles and in-house owned trailers that should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs). These will depend on the type of indoor agriculture operation and should cover all applicable areas of concern that have potential contamination risks to the product or water source. (i.e. mushroom production, hydroponics, aeroponics, vertical growing.) There should be SSOPs covering the cleaning and sanitizing operations noted in the master sanitation schedule. SSOPs should also be created for dry cleaning operations (where applicable). This includes equipment (named equipment and equipment parts and surfaces), floors, walls, light covers, pipes, ceilings, evaporators, cooling coils, drip pans, drains, drain lines and reservoirs, internal transport equipment (e.g. forklifts, pallet jacks, trolleys, floor cleaners, etc.). In-house delivery and shuttle trucks should be included in sanitation schedules, have SSOPs and cleaning records. A surface cannot be properly sanitized unless it is effectively cleaned. Use of a sanitizer is required unless there are justified exceptions that are fully documented. Procedures should respect the label (e.g. rinse/no-rinse, sanitizers, dwell time, etc.) and match operations noted on the master sanitation schedule (3.05.01). These procedures should include: • Responsibility for cleaning with cleaning methods • Item/area to be cleaned • Frequency of cleaning • Safety precautions (tag outs, personnel safety with respect to chemicals, etc.) • Chemical (name, dilution and water temperature requirements (as applicable)) and utensils used). • Specific preparation procedures regarding dilution (unless purchased as ready-to-use) for the specific chemicals or sanitizers being used and verification testing instructions and records (where appropriate • Detailed cleaning and sanitation methods, including solution temperature (as applicable), water pressure (as applicable), dwell times, any disassembly/reassembly instructions and cleaning verification procedures • Following the standard order: 1. Dry clean 2. Rinse 3. Clean 4. Rinse 5. Sanitize if required 6. Rinse (if label requires) • Special instructions with respect to cleaning • Responsible person in charge of cleaning (sanitation supervisor) • Logs/records of cleaning and responsibility for verification • Verification procedures (visual, ATP, microbial) and acceptance criteria

3.05.03	No Change in v3.1	Sanitation logs should be on file that cover all areas (e.g., production areas, storage areas, break areas, restrooms, maintenance, etc.), detailing walls, floors, overhead and all equipment (e.g., production equipment (food contact and non-food contact), pallet jacks, forklifts, carts, floor scrubbers, cooling equipment, lift trucks, company owned trailers, etc.). Logs should include: date, list of areas/equipment that were cleaned and sanitized, and the individual accountable who signed-off for each completed task. Logs should cover sanitation operations as noted in the master sanitation schedule.	The company has sanitation logs that cover all areas (e.g., production areas, storage areas, break areas, restrooms, maintenance, etc.), detailing walls, floors, overhead and all equipment (e.g., production equipment (food contact and non-food contact), pallet jacks, forklifts, carts, floor scrubbers, cooling equipment, lift trucks, company owned trailers, etc.). Logs are kept on file in an easily retrievable manner. The logs should be cross-checked against the master sanitation program (3.05.01). Logs of infrequent cleaning should be checked. Logs should include and be applicable to the type of indoor growing production: • Date • List of areas/equipment that were cleaned and sanitized --The individual accountable who signed-off for each task completed • Verification of task completed • Any deviations against the set SSOPs
3.05.04	No Change in v3.1	No Change in v3.1	Records should be made available to verify that filters in air conditioning, ventilation and air filtration units are regularly cleaned and replaced. Records might include in-house sanitation records, maintenance records and/or contractor records/invoices. Non-applicable if air conditioning, ventilation and air filtration units are not used in the operation.
3.05.05	No Change in v3.1	No Change in v3.1	Records should be available to verify that the cooling units are serviced and cleaned on a scheduled basis. Records might include in-house sanitation records, maintenance records and/or contractor records/invoices. Note contracts, invoices etc., must clearly state the services provided as per any other record. A cleaning and servicing at least once in the last 12 months is a minimum requirement, but usually frequency is higher, especially in high humidity and also with chiller units that are known to become dirty at a faster rate than others, e.g. next to open doors. Non-applicable if cooling units are not used in the operation.
3.05.06	No Change in v3.1	No Change in v3.1	All fan guards (cooling units and general ventilation) in the facility are clean. There is no build-up of dust or other materials on the fan guards. Non-applicable if fans or blowing equipment are not used in the operation.
3.05.10	Is the storage area completely enclosed?	All raw material and finished goods should be stored inside. Food contact packaging should be stored inside. Non-food contact packaging should be stored inside, but if stored outside, should be should protected.	To protect the product and packaging materials from the elements and pests, it is necessary to keep the storage area enclosed and pest proof. Main doors should be kept closed unless in use. Food contact packaging should not be stored outside. Non-food contact packaging e.g. cardboard outers should be stored inside if possible. If some non-food contact packaging is stored outside, then this outside storage area should be included in the pest control program. Outside stored, non-food materials should be covered with a waterproof and dust proof shroud (often made of plastic material). Yards or dock areas where product passes through (e.g., to and from a hydrocooler) are exempt, as long as the product is being transferred and is not actually being stored. Auditor discretion applies.

3.05.18	No Change in v3.1	No Change in v3.1	Single service containers are used for their intended purpose only (food contact use, not to hold nuts, bolts, trash or other miscellaneous items) and should not be re-used. Returnable plastic containers (RPCs) (e.g., CHEP, IFCO) should be treated like single service containers and only used for product. If a single service container is used for any other reason than the storage and distribution of food, it should be clearly differentiated as such (e.g., painted another color and labeled). Non-applicable if single use containers are not used in the operation.
3.05.19	No Change in v3.1	No Change in v3.1	All re-usable containers should be able to be cleaned or used with a clean liner to protect against contamination. Cleaning type and frequency should be determined based on the products and processes involved. Bins, boxes, hoppers, barrels, baskets, etc. used for the storage of raw materials (e.g., seeds, transplants, soil, media), finished goods or packaging should be kept in a clean state. The storage of these items should ensure that they remain clean and uncontaminated (e.g., covered clean). In-house re-usable containers should be labeled or color-coded (visually or in the language understood by the workers) so that their designated purpose can be easily identified. Returnable plastic containers (RPCs) (e.g., CHEP, IFCO) should be treated like single service containers and only used for product (score in 3.05.18). If the trash container is the only re-used container on site and is a specific and unique design, so that it cannot be mistaken for another use, then it should not be down scored. Non-applicable if re-usable containers are not used in the operation.
3.05.21	No Change in v3.1	No Change in v3.1	All facility floor drains, including covers and internal channels are clean, and free of decayed/old material. All facility floor drains are free of odors. There is no overflow or excessive standing water in the floor drains. Drains should have smooth walls and bases that allow free flow of water without catching debris, and also aid in the cleaning of the drains. Water from refrigeration drip pans is drained and disposed of away from product and product contact surfaces. Where possible, auditor should request floor drain covers to be removed for inspection. Use a flashlight to illuminate the bottom of deep drains. Non-applicable if floor drains are not present or used in the operation.
3.05.22	No Change in v3.1	No Change in v3.1	Vehicles and equipment used for moving raw materials, packaged products, and packaging throughout and within the facility are clean, well maintained, and do not transport goods outside the facility (unless cleaned and sanitized before re-entering). Open dock areas are accepted as being within the facility in this instance. Internal transport vehicles (forklifts, bobcats (or similar type vehicle), pallet jacks, carts, floor cleaners, etc.) used to transport food are in a good state of repair, clean, odor free, free of rodents and insects. Internal transport vehicles (forklifts, bobcats (or similar type vehicle), pallet jacks, carts, floor cleaners, etc.) used in food areas should not be gasoline or diesel powered; propane (LPG) powered vehicles are permitted although electric powered are ideal. Trucks and forklifts should not be left idling in enclosed spaces or during loading or unloading of products to reduce health risk and possible tainting of foods. A sanitation program for internal transport vehicles is established to assure proper sanitation levels. Internal transport vehicles should not be mobile "break areas" i.e. food and drink should not be stored on the vehicles. Floor cleaners should be kept in good condition and cleaned in order to prevent cross contamination. Where relevant, the brushes and fixtures on the floor cleaner might need to be changed or cleaned when moving from one risk area to another. Non-applicable if internal transport vehicles are not used in the operation.

INSPECTION			
Number	Question	Expectation	Interpretation Guideline
3.06.01	No Change in v3.1	No Change in v3.1	There should be records of the internal audits performed at each operation, with the frequency defined in the internal audit program. Frequency depends on the type and size of the operation. The records should include the date of the audit, name of the internal auditor, justification for the answers, detail any deficiencies found and the corrective action(s) taken. An audit checklist (ideally PrimusGFS) should be used that covers all areas of the PrimusGFS audit, including growing area, storage area, worker amenities, external areas, worker practices, etc. No down score if another audit checklist is used, as long as all areas are covered. See 1.04 regarding internal audit schedule.

WORKER HYGIENE			
Number	Question	Expectation	Interpretation Guideline
3.08.01	Are toilet facilities adequate in number and location and are they adequately stocked (e.g., toilet paper, disposable towels, soap, etc.)? **A ZERO POINT (NON-COMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Toilet facilities are available to all workers and visitors. At least 1 stall per 20 workers or if more stringent, as per prevailing national/local guidelines, and should be within 1/4 mile or 5 minutes walking distance of where workers are located. Restrooms should be stocked with toilet paper, unscented/non-perfumed soap and towels.	Toilet facilities should be available to all workers and visitors, while work is actively occurring. At least one toilet per 20 workers should be provided, or if more stringent, as per prevailing national/ local guidelines. Toilet facility placement should be within ¼ mile or 5 minutes walking distance of where workers are located, or if more stringent, as per prevailing national/ local guidelines. A 5 minute drive is not acceptable, while farm work is actively occurring with groups of three or more workers. Where there are two or less workers present (e.g., spray activities, irrigation check) and workers have transportation that is immediately available to toilets within a 5 minute drive, it is acceptable to score as total compliance. Doors should not open directly into areas where food is exposed to airborne contamination, i.e. storage, and growing areas. Use of double doors or having a positive airflow system is accepted. In older operations, where doors to restrooms were designed to open into the production areas, i.e. not located in the amenity area or office area, the doors should be kept closed at all times (e.g., use a spring-loaded door). Toilet paper should be available to each person and stored in such a way as to prevent contamination. Adequate trash disposal should be available within restrooms. Restrooms should have hand washing facilities with: Unscented/non-perfumed, neutral or antiseptic soap; scent should rinse away with the foam leaving no lingering fragrance on hands • An adequate supply of soap and paper towels. • Proper drainage and ideally warm water (> 100 oF, 38 oC) available for use. • If hand washing stations within toilet facilities are the only stations provided, then requirements for 3.08.03a apply • Cleanliness of toilet facilities is scored in 3.08.01a. United States Department of Labor 1928 Title Field Sanitation https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.110

3.08.03	3.08.03: Are hand washing stations adequate in number and appropriately located for worker access and monitoring usage? **A ZERO POINT (NON-COMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	An adequate number of hand washing stations, in working order, should be provided to ensure efficient worker flow (1 per 20 people on site), and available to all workers and visitors. Hands free is an optimum system. Hand washing stations should be visible and located within close proximity of toilet facilities and lunchrooms and 1/4 mile or 5 minutes walking distance of where workers are located.	An adequate number of hand washing stations, in working order, should be provided to ensure efficient worker flow (1 per 20 people on site), and available to all workers and visitors or if more stringent, as per prevailing national/ local guidelines. Hands free is an optimum system. Hand washing stations should be visible and located within close proximity of toilet facilities and lunchrooms and 1/4 mile or 5 minutes walking distance of where workers are located. United States Department of Labor 1928 Title Field Sanitation https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.110
3.08.03a	No Change in v3.1	No Change in v3.1	Hand washing facilities should be used only for hand washing (no storage, food handling, etc.). Hand washing stations should be properly stocked with liquid unscented/ nonperfumed, neutral or antiseptic soap; scent should rinse away with the foam leaving no lingering fragrance on hands. Single use paper towels should be used, and units properly located. There should be an adequate stock of soap and paper towels. Hand washing stations should be maintained in good working order with proper drainage and ideal warm water (> 100 oF, 38 oC) available for use. Discharge water from sinks should not run directly onto the floor. Care should be taken to ensure that hand wash water temperatures are not too hot when using pre-set mixer faucets (taps). Hands-free operations are an optimum system for food establishments. Cleanliness of hand wash stations is scored in 3.08.01a. United States Department of Labor 1928 Title Field Sanitation https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.110
3.08.10	Are all workers wearing protective outer garments suitable for the operation (e.g. appropriate clean clothes, smocks, aprons, sleeves and non-latex gloves)?	Workers should not wear personal clothes with sequins, pom-poms, fur, etc. No sleeveless tops without an over garment. Where dedicated protective clothing is not required/worn, it must be clear that outer street clothes are clean and not a potential source of contamination. If required, the policy should consider customer requirements, production risk, product type, etc.	If the operation has taken a decision to establish an outer garment policy based on risks this should consider the following: customer requirements, national and local legal requirements, potential cross contamination and foreign material risks, etc. Outer garments include where applicable: smocks, aprons, sleeves, gloves, etc. Suitable clothing is required for workers handling products that are potentially ready-to-eat (e.g., tomatoes, leafy greens, etc.). Items should be laundered in-house or by contract laundering agency. Individual workers should not take protective outer garments home for cleaning. Where items are laundered in-house the auditee should have documented SOP and GAP rules about how these garments are cleaned. Glove policy should be clear to workers – auditors will establish policy before making scoring decisions and note this policy for the audit report. Gloves are not allowed to replace hand-washing requirements. Gloves should be changed after break periods, using toilet facilities, any activity other than handling of food items or when gloves are soiled, torn or otherwise contaminated. If re-useable gloves are used, then they should be made of material that can be readily cleaned and sanitized, clean gloves should be issued at least daily and as needed throughout the day and stored properly in-between uses. Gloves should not be taken home for cleaning. Where gloves are used they should be non-latex (e.g. vinyl, nitrile, etc.). This includes gloves in first-aid kits. Where dedicated protective clothing is not required/worn, it must be clear that outer street clothes are clean and not a potential source of contamination. Workers should not wear personal clothes with sequins, pom-poms, fur, etc. No sleeveless tops without an over garment.

3.08.13	No Change in v3.1	Fresh potable water meeting the quality standards for drinking water should be provided and placed in locations readily accessible to all workers on-site to prevent dehydration. The term "potable" meaning that the water is of drinking water quality (e.g., the EPA Drinking Water Standard or equivalent). Auditors should verbally verify the source of the water at the time of the audit. If water containers are used, they should be maintained in a clean condition, free from residues and contamination to ensure workers are not adversely affected by contaminated water from unclean containers. If there is evidence (i.e. visual observation or documentation) the water is coming from a questionable source, the auditor should review water quality test results.	Fresh potable water meeting the quality standards for drinking water should be provided and placed in locations readily accessible to all workers on-site to prevent dehydration. The term "potable" meaning that the water is of drinking water quality (e.g., the EPA Drinking Water Standard or equivalent). Auditors should verbally verify the source of the water at the time of the audit. If water containers are used, they should be maintained in a clean condition, free from residues and contamination to ensure workers are not adversely affected by contaminated water from unclean containers. If there is evidence (i.e. visual observation or documentation) the water is coming from a questionable source, the auditor should review water quality test results.

AGRONOMIC INPUTS

Number	Question	Expectation	Interpretation Guideline
3.09.01b (Sewage sludge (biosolids))	No Change in v3.1	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.
3.09.05b (Soil or Substrate amendments)	No Change in v3.1	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.
3.09.06b (Inorganic Fertilizer)	No Change in v3.1	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.

3.09.01e (Sewage sludge (biosolids))	No Change in v3.1	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory).	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, “bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed. Where legally allowed, a reduced sampling rate is possible if the material is produced by the auditee (e.g. mushroom growing operations with in-house compost production) and has been through a validated physical/chemical/biological process to inactivate human pathogens (Salmonella spp., E. coli O157:H7, Listeria monocytogenes) and show fecal coliforms/gram <1000 MPN. The auditee has the test analyses that show that the material is safe and proper process control records (e.g., time/temperature records and calibration records, such as, temperature probe) are maintained and available during the audit. Validation studies used must be applicable to the situation at hand and care should be taken not to over extrapolate. The grower should have proof that compost suppliers have cross contamination SOPs and temperature/turning logs. Sampling Plan Options below may be used to determine the definition of lots produced. There should be an indication from the supplier/producer of how lots are determined (i.e. from the information here or from another method). The sampling plans below are taken from current regulations in the state of California (related to bio-solids) and recognized manure-based compost guidelines included under the Leafy Greens Marketing Agreement. Reference: 21 CFR Part 112 Subpart F- Biological Soil Amendments of Animal Origin and Human Waste, for details on treatment processes and microbial testing standards. California state regulations for compost (CCR Title 14 - Chapter 3.1 - Article 7; https://compostingcouncil.org/wp-content/uploads/2013/05/California.pdf NOP 5021 Guidance Compost and Vermicompost in Organic Crop Production; https://www.ams.usda.gov/sites/default/files/media/5021.pdf

3.09.02e (Animal Based Compost)	No Change in v3.1	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory).	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed. Where legally allowed, a reduced sampling rate is possible if the material is produced by the auditee (e.g. mushroom growing operations with in-house compost production) and has been through a validated physical/chemical/biological process to inactivate human pathogens (Salmonella spp., E. coli O157:H7, Listeria monocytogenes) and show fecal coliforms/gram <1000 MPN. The auditee has the test analyses that show that the material is safe and proper process control records (e.g., time/temperature records and calibration records, such as, temperature probe) are maintained and available during the audit. Validation studies used must be applicable to the situation at hand and care should be taken not to over extrapolate. The grower should have proof that compost suppliers have cross contamination SOPs and temperature/turning logs. Sampling Plan Options below may be used to determine the definition of lots produced. There should be an indication from the supplier/producer of how lots are determined (i.e. from the information here or from another method). The sampling plans below are taken from current regulations in the state of California (related to bio-solids) and recognized manure-based compost guidelines included under the Leafy Greens Marketing Agreement. Reference: 21 CFR Part 112 Subpart F- Biological Soil Amendments of Animal Origin and Human Waste, for details on treatment processes and microbial testing standards. California state regulations for compost (CCR Title 14 - Chapter 3.1 - Article 7; https://compostingcouncil.org/wp-content/uploads/2013/05/California.pdf NOP 5021 Guidance Compost and Vermicompost in Organic Crop Production; https://www.ams.usda.gov/sites/default/files/media/5021.pdf

3.09.03e (Untreated animal manure)	No Change in v3.1	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory).	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed. Where legally allowed, a reduced sampling rate is possible if the material is produced by the auditee (e.g. mushroom growing operations with in-house compost production) and has been through a validated physical/chemical/biological process to inactivate human pathogens (Salmonella spp., E. coli O157:H7, Listeria monocytogenes) and show fecal coliforms/gram <1000 MPN. The auditee has the test analyses that show that the material is safe and proper process control records (e.g., time/temperature records and calibration records, such as, temperature probe) are maintained and available during the audit. Validation studies used must be applicable to the situation at hand and care should be taken not to over extrapolate. The grower should have proof that compost suppliers have cross contamination SOPs and temperature/turning logs. Sampling Plan Options below may be used to determine the definition of lots produced. There should be an indication from the supplier/producer of how lots are determined (i.e. from the information here or from another method). The sampling plans below are taken from current regulations in the state of California (related to bio-solids) and recognized manure-based compost guidelines included under the Leafy Greens Marketing Agreement. Reference: 21 CFR Part 112 Subpart F- Biological Soil Amendments of Animal Origin and Human Waste, for details on treatment processes and microbial testing standards. California state regulations for compost (CCR Title 14 - Chapter 3.1 - Article 7; https://compostingcouncil.org/wp-content/uploads/2013/05/California.pdf NOP 5021 Guidance Compost and Vermicompost in Organic Crop Production; https://www.ams.usda.gov/sites/default/files/media/5021.pdf

3.09.04e (Non-Synthetic Crop Treatment)	No Change in v3.1	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory).	There should be evidence that each laboratory test result (certificate of analysis) provided is traceable to each material used. (e.g., CoA is traced to each lot of crop treatment used). Tests should include microbiological analyses. As minimum, for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and for animal based compost microbial testing should include Salmonella spp., E. coli O157:H7, and Listeria monocytogenes at Negative or <DL and include fecal coliforms/gram at < 1000 MPN of total solids and any other pathogens appropriate for the source of material using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed. Where legally allowed, a reduced sampling rate is possible if the material is produced by the auditee (e.g. mushroom growing operations with in-house compost production) and has been through a validated physical/chemical/biological process to inactivate human pathogens (Salmonella spp., E. coli O157:H7, Listeria monocytogenes) and show fecal coliforms/gram <1000 MPN. The auditee has the test analyses that show that the material is safe and proper process control records (e.g., time/temperature records and calibration records, such as, temperature probe) are maintained and available during the audit. Validation studies used must be applicable to the situation at hand and care should be taken not to over extrapolate. The grower should have proof that compost suppliers have cross contamination SOPs and temperature/turning logs. Sampling Plan Options below may be used to determine the definition of lots produced. There should be an indication from the supplier/producer of how lots are determined (i.e. from the information here or from another method). The sampling plans below are taken from current regulations in the state of California (related to bio-solids) and recognized manure-based compost guidelines included under the Leafy Greens Marketing Agreement. Reference: 21 CFR Part 112 Subpart F- Biological Soil Amendments of Animal Origin and Human Waste, for details on treatment processes and microbial testing standards. California state regulations for compost (CCR Title 14 - Chapter 3.1 - Article 7; https://compostingcouncil.org/wp-content/uploads/2013/05/California.pdf NOP 5021 Guidance Compost and Vermicompost in Organic Crop Production; https://www.ams.usda.gov/sites/default/files/media/5021.pdf
3.09.02g 3.09.04g 3.09.05e 3.09.06d	Removed Question from the indoor agriculture module due to the question "Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	Removed	Removed

IRRIGATION / WATER USE			
Number	Question	Expectation	Interpretation Guideline
3.10.01a (municipal / district)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/

3.10.02a (Well)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/

3.10.03a (Non-Flowing Surface Water)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/

3.10.04a (Open Flowing Surface Water)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/

3.10.05a (Reclaimed Water)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/

3.10.06a (Tail Water)	Are generic E.coli tests conducted on the water (taken from the closest practical source of use) at the required and/or expected frequency? **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**	Microbial water testing, including generic E. coli, should occur for all water sources used for any growing activities like crop protection/fertilizer and frost or freeze prevention programs. Water samples should be taken from as close to the point of use as is practical. At least one sample per distribution system is required. If there are multiple sampling points in a distribution system, then samples are taken from a different location each test (randomize or rotate locations). For farm and indoor agriculture operations, one sample per water source is collected and tested prior to use if >60 days since the last test of the water source. Additional samples are taken at least monthly during use of the water source. A less frequent testing is acceptable if supported by a valid documented risk assessment although there should be at least one water test per season. Where there are more stringent federal, national or local requirements, these requirements should be followed. If a risk assessment is used to define the frequency, it should include at a minimum the water source, method of application (edible product contact vs non- edible product contact), reference or evidence to the microbial historical data of the water source, and its vulnerability to contamination. A vulnerable water source is one for which there is a potential risk of contamination by fecal matter (e.g. animals grazing upstream of a river abstraction point, overloading of a sewage treatment plant by storm water) or other potential risk factors. As examples, vulnerable sources may be surface water (rivers, lakes, natural ponds), reservoirs supplied by well water or rain water, groundwater collected from shallow wells. Other sources may be vulnerable under specific circumstances and the degree of vulnerability should be established by the grower's risk assessment. In the event the risk assessment indicates contamination risks, the operation should implement adequate measures to prevent and/or mitigate product contamination. **A ZERO POINT (NONCOMPLIANCE) DOWN SCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.** References: https://extension.psu.edu/safe-uses-of-agricultural-water https://gaps.cornell.edu/educational-materials/decision-trees/agricultural-water-production/
3.10.01d (Municipal / District)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/

3.10.02d (Well)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/
3.10.03d (Non-Flowing Surface Water)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/

3.10.04d (Open Flowing Surface Water)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/
3.10.05d (Reclaimed Water)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/

3.10.06d (Tail Water)	No Change in v3.1	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV).	For generic E. coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded, there should be recorded corrective actions that prevent or mitigate product contamination, including investigations, water retests, and if required, crop testing (E. coli O157:H7 and Salmonella - zero tolerance). Failure to take corrective actions, prevent or mitigate product contamination when there is evidence of high levels or an upward trend of E. coli may result in an automatic failure of the audit. For farms or indoor agriculture operations following the FDA's Produce Safety Rule, the operation needs to ensure they are meeting the requirements for samples to calculate the Geometric Mean (GM) and Statistical Threshold (STV). Reference: https://producesafetyalliance.cornell.edu/food-safety-modernization-act/produce-safety-rule/
3.10.07	No Change in v3.1	No Change in v3.1	There should be a documented assessment for each water source used in the growing area. Prior to the first seasonal planting and at least annually and when any changes are made to the system, there should be a documented risk assessment for each water source covering potential physical, chemical and biological hazards from animal access, upstream contamination/runoff, proper well condition, water treatment, water capture, backflow, maintenance, cross contamination from leaching, cross connections, recirculating water systems, etc. If flood or furrow irrigation is used, there needs to be examples of how the operation is minimizing the risk. Farms and indoor agriculture operations following the CA or AZ LGMA, where the risk assessments suggest a need, surface waters passing within 400 feet (121 meters) of a CAFO with more than 80,000 head, must be treated to meet microbial acceptance criteria for Generic E.coli of negative or < detection limit (MPN or CFU/100mL) if used in any overhead irrigation application at the field level within two weeks of scheduled harvest.

PESTICIDE USAGE

Number	Question	Expectation	Interpretation Guideline
3.11.02	No Change in v3.1	All pesticides must be registered for such use, as required by prevailing regulation, and used in accordance with label directions. N/A is allowed only when registration/authorization information does not exist for pesticides to be used on target crops in the country of production.	All pesticides must be registered for such use, as required by prevailing regulation, and used in accordance with label directions. N/A is allowed only when registration/authorization information does not exist for pesticides to be used on target crops in the country of production.

3.11.03	Where products are destined for export, do records show that only pesticides approved for use in destination market(s) are used and are in compliance with all requirements of label direction, national (e.g., EPA) registration and any federal, state or local regulations and guidelines? **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**	All pesticides must be registered for such use in the destination market, as required by prevailing regulation, and used in accordance with label directions. (i.e. application rates, intended purpose, worker protection standards, personal protection equipment, container storage, disposal). The grower should provide documented evidence that they are complying with the expectations regarding crop protection products of the country of origin and proof of those expectations. That evidence may be in the form of: chemical records, application methods, rates and dosage, compliance with pre-harvest intervals, or any other relevant information. This question is Not Applicable if the product is sold only in the country of production (domestic market). **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**	All pesticides must be registered for such use in the destination market, as required by prevailing regulation, and used in accordance with label directions. (i.e. application rates, intended purpose, worker protection standards, personal protection equipment, container storage, disposal). The grower should provide documented evidence that they are complying with the expectations regarding crop protection products of the country of origin and proof of those expectations. That evidence may be in the form of: chemical records, application methods, rates and dosage, compliance with pre-harvest intervals, or any other relevant information. This question is Not Applicable if the product is sold only in the country of production (domestic market). **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**
3.11.04	**3.11.05:** For those pesticides that are not registered for use on the target crops in the country of production or if the country does not have, or has a partial legislative framework to cover pesticides, can the grower show that they have registration information, label information, MRL tolerances, etc. for the country of destination? **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**	Grower should be aware of the crop protection products registered and/or authorized by a government agency for use in the target crops in the country of production. Where the country of production does not have or has partial legislation covering pesticides, and if the use of pesticides that are registered for the target crop in another country (extrapolation) is not prohibited, the grower must have information for the pesticides in the country(ies) of destination. The information must show: registration for the specific crop, product labels, Maximum Residue Limit (MRL) tolerances and may also include banned chemical lists, and any other relevant guidelines or legislation. If there is no information available for pesticides used that are not registered in the country of production, or its use based on registration, label and other legislation of the destination country, extrapolation is prohibited by the country of production, and an automatic failure will be scored. This question is Not Applicable if the product is sold only in the country of production (domestic market). **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**	Grower should be aware of the crop protection products registered and/or authorized by a government agency for use in the target crops in the country of production. Where the country of production does not have or has partial legislation covering pesticides, and if the use of pesticides that are registered for the target crop in another country (extrapolation) is not prohibited, the grower must have information for the pesticides in the country(ies) of destination. The information must show: registration for the specific crop, product labels, Maximum Residue Limit (MRL) tolerances and may also include banned chemical lists, and any other relevant guidelines or legislation. If there is no information available for pesticides used that are not registered in the country of production, or its use based on registration, label and other legislation of the destination country, extrapolation is prohibited by the country of production, and an automatic failure will be scored. This question is Not Applicable if the product is sold only in the country of production (domestic market). **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**

3.11.05	**3.11.04:** Where products are destined for export, are there records showing that pre-harvest intervals and application rates are sufficient to meet MRL entry requirements of the country of export? Records show any non-compliant product is diverted to a market where it meets requirements. **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.**	Maximum Residue Limits (MRL) tests should be performed. The auditor should review those to ensure it meets MRL entry requirements in the country of destination or the Codex Alimentarius Commission if the country of destination/market follows this MRL compliance. Records show that any non-compliant product is diverted to a market where it meets the requirements. This question is Not Applicable if the product is sold only in the country of production (domestic market). **Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.** Reference: http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/	Maximum Residue Limits (MRL) tests should be performed. The auditor should review those to ensure it meets MRL entry requirements in the country of destination or the Codex Alimentarius Commission if the country of destination/market follows this MRL compliance. Records show that any non-compliant product is diverted to a market where it meets the requirements. This question is Not Applicable if the product is sold only in the country of production (domestic market).**Corrective actions are required if a non-compliance. If corrective actions are not provided and acceptable by the certification body a failure of the audit is scored.** Reference: http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/