

Food Safety Programs and Auditing Protocol for the Fresh Tomato Supply Chain



2011

Open Field Harvest and Packing



Food Safety Programs and Auditing Protocol for the Fresh Tomato Supply Chain, 2011

Forward

Work on *Food Safety Programs and Auditing Protocol for the Fresh Tomato Supply Chain* (“Tomato Food Safety Protocol”) was initiated shortly after the successful completion of the *Commodity Specific Guidelines for the Fresh Tomato Supply Chain, 2nd Edition* (“2nd edition”), at the request of fresh tomato supply chain stakeholders who were concerned that the 2nd edition did not provide sufficiently auditable standards or “metrics”. The general omission of metrics from the 2nd edition was intentional, as the contributors believed that operations should establish food safety requirements for themselves, based on the considerations described in the 2nd edition. Nevertheless, both buyers and suppliers in the tomato supply chain expressed concern that they were unsure of what constituted “compliance”. Buyers were concerned that operations might interpret the considerations in the 2nd edition too loosely, allowing food safety risks to go uncontrolled. Suppliers were concerned that auditor interpretations of the 2nd edition would result in an unending spiral of ever increasing audit expectations, resulting in additional costs without improving food safety. Thus, the Tomato Food Safety Protocol was initiated in October 2008 in an effort to harmonize food safety audit standards for the fresh tomato supply chain.

To prevent the Tomato Food Safety Protocol from becoming just another standard, in addition to rather than replacing others, a critical mass of fresh tomato “buyers” (e.g., processors, foodservice and retail) were asked to participate and, if successful, be prepared to accept audits of their suppliers using this standard. In this way, the goal was ultimately to replace the multitude of similar but different audit standards with this one.

The Tomato Food Safety Protocol was developed during a series of open meetings. Invitations were extended to all participants in the 2nd edition – from industry, government and academia, Mexico and Canada – and additional participants welcomed as they were identified. In an effort to assure transparency, no one who asked to participate was excluded. The individuals and organizations participating in development of the Tomato Food Safety Protocol are listed below.

The Tomato Food Safety Protocol began with the 2nd edition as a basis, endeavoring to establish “requirements” that were as specific as possible, but keeping in consideration different needs based on region, sub-commodity (e.g., round vs. Roma vs. grape or cherry tomatoes), operation size and equivalent growing or handling practices. Every effort was made to base these requirements on current science, but the participants accepted that these requirements would likely change as future research provides better information.

Although the initial intention was to establish mandatory metrics (e.g., how often, how many, how far), the participants were, frankly, surprised to find that current science provided little basis for universal numerical standards. Consequently, requirements more often became performance expectations rather than numerical measurements.

The entire fresh tomato supply chain was considered in this effort, but the participants recognized that the goal of replacing other, existing audit standards with the Tomato Food Safety Protocol would only be successful in operations that are primarily handling tomatoes; e.g., open field operations, harvesting, field packing, greenhouses, packinghouses, tomato repackers, tomato distributors and warehouses. Other operations in the tomato supply chain, i.e., fresh-cut processors, retailers, and foodservice operations, while handling tomatoes, would also be handling a far greater diversity of foods. The participants considered tomato-specific standards for those operations but, since tomato-specific standards would not replace existing audit standards for such operations, ultimately decided not to establish stand-alone audits. Therefore, while the Tomato Food Safety Protocol may be informative to all operations that handle tomatoes, it is specifically targeted to operations that undergo tomato-specific audits.

Format of the Tomato Food Safety Protocol and Checklists and Their Use

Four sets of Tomato Food Safety Protocols were developed for use by operations and auditors: Open Field Production, Harvest and Field Packing; Greenhouse; Packinghouse; and Repacking and Distribution. Each set contains auditable requirements – “Items” – that the participants concluded should be attainable and in place for any North America fresh tomato operation, regardless of region, size, growing practice (e.g., organic) or sub-commodity handled. As appropriate to the type of operation, the Items were further divided into sections that the participants considered critical for a food safety program, such as management responsibility, facility and environmental assessment, raw materials and inputs including water, pest control and pesticide usage, tomato cleaning operations, sanitation, food contact containers, food contact tools and equipment, employee health and hygiene, education and training, and traceback and recall programs.

For each Item, the Tomato Food Safety Protocol contains a simply-stated Requirement, and a Procedure that restates the requirement in other words, in an effort to minimize misunderstanding. The Requirement and Procedure are instructions to the operation to clearly describe the programs that are expected to be in place and maintained, and that will be audited. Each Item also includes a Verification and Corrective Action/Disposition. The Verification is provided as instruction to the auditor how to verify whether the operation has complied with the Requirement. The Corrective Action/Disposition is provided as instruction to the operation if the audit determines that compliance has not been achieved. While each of these is not necessarily binding on the operation or the auditor – equivalent procedures and actions that meet the intent of

the Item are acceptable or, in some cases, not applicable – they are provided in an effort to minimize “standards creep”, which has led to the multitude of disparate and often conflicting standards.

Each of the four Tomato Food Safety Protocols is accompanied by a Checklist, which provides an audit format that auditors can use to assess and record compliance. Each Checklist begins with a cover page that provides information about the auditor, the audited operation and the audit. That is followed by an Audit Summary in which the auditor will indicate the number of Items rated as C, CAN, IAR and NA (see below) as well as listing the Item numbers requiring corrective action; i.e., judged as CAN or IAR. The participants intentionally chose not to “score” the audit, indicating that audit scores tend to distract from auditor observations and judgments.

The body of the Checklist mirrors the associated Tomato Food Safety Protocol, with all of the Items and Requirements listed. The Checklist also includes, for each Item, an opportunity for the auditor to indicate the level of compliance observed. The possible “judgments” were left generally broad and include the following: C, Compliant with requirement; CAN, Corrective Action Needed to be compliant; IAR, Immediate Action Required because of imminent food safety risk; and NA, not applicable or not needed. A judgment of C or NA is self-explanatory. A judgment of CAN, Corrective Action Needed to be compliant, is expected when the operation has clearly not complied with the intent of the Item, but that noncompliance is not reasonably likely to result in a food safety issue. A judgment of IAR, Immediate Action Required because of imminent food safety risk, is expected when a noncompliance may reasonably and directly result in an unacceptable food safety risk, and requires immediate corrective action to prevent the risk from continuing. IAR was not provided as a possible judgment for audit Items that the participants could not conceive of a noncompliance resulting in a food safety risk; e.g., Item 1.5 in the Greenhouse checklist, *Operation has a written procedure and timelines for implementing and documenting corrective actions*. The Checklist also has a space at each Item in which the auditor can provide Comments to explain the judgment. An Auditor Comment is required for all CAN and IAR judgments.

It was the intention in the development of these Tomato Food Safety Protocols for the *Commodity Specific Guidelines for the Fresh Tomato Supply Chain*, 2nd edition, to serve as a prerequisite reference to the use of this document. Each of the four Tomato Food Safety Protocols and their associated Checklists are intended for discrete segments of the fresh tomato supply chain, and it is the responsibility of the user to utilize the appropriate document. Throughout the documents, the term “shall” is used to indicate an action mandatory for compliance, while “should” indicates a recommended action that may not be necessary for some operations. In an operation’s food safety program that is compliant with the Tomato Food Safety Protocol, standard operating procedures (SOPs) may be designed to cover more than one requirement.

Performance of an audit to verify compliance with the Tomato Food Safety Protocol is expected to include reviews of pertinent policies and SOPs, official records demonstrating compliance, and visual observations of the operation to determine the current level of compliance. In order to demonstrate compliance, all required documentation shall be kept on file and made available for review by the auditor. Lot-specific records shall be retained for two (2) years or as required by prevailing laws or regulations. Observation of incomplete or otherwise noncompliant records required for compliance shall require a corrective action, such as retraining of the responsible individuals. The operation shall assess whether the noncompliant records indicate a potential food safety risk. Where training is required, it is expected that employees sign their training records, indicating that they understand and agree to follow the policy or procedure that is the subject of the training. Observations of noncompliances that may result in a risk of contamination of public health concern shall require an immediate corrective action and an assessment of the actual noncompliance and, if contamination is reasonably likely to have occurred, a corrective action shall be taken to prevent the affected product from being harvested or distributed into commerce. Such corrective actions shall be documented and those records shall be available for regulatory review, in compliance with prevailing laws and regulations. It is a violation of federal law (i.e., Federal Food, Drug and Cosmetic Act) to introduce or deliver for introduction into interstate commerce any food that is adulterated or misbranded. Foods, including fresh tomatoes, that are discovered to be adulterated and have been released into commerce should be recalled and the prevailing regulatory authorities notified.

2011 Revision

In late 2010, the tomato industry reconvened to review the performance of the Tomato Food Safety Protocol, and recommended several changes. In this Open Field Production, Harvest and Field Packing document, the Procedure and auditor Verification for item 2.1, the Verification for item 8.16 and the Procedure for item 10.3 were clarified, and a new item 2.2 was added. The changed sections are displayed in red. The Checklist that accompanies this document was also amended to include the new item 2.2.

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Open Field Production, Harvest and Field Packing

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1. Management Responsibility				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
1.1	Operation has designated an individual responsible for food safety.	Operation prepares an organizational chart or other documentation that identifies the responsible individual. Individual can be a dedicated employee or part-time contracted.	Auditor reviews the organizational chart or other document for the designated food safety individual.	Operation designates who is responsible for food safety. Organizational chart or other documentation is developed or revised.
1.2	Responsible individual has evidence of training in food safety relevant to tomatoes.	The point person for food safety demonstrates knowledge of food safety principles. Food safety designate has completed at least one formal food safety course/workshop or by job experience.	Auditor reviews the evidence of the individual's training relevant to tomato food safety, such as a degree or course certificate or receipt, or attendance at a relevant food safety meeting, or company training record. If the operation passes the food safety audit, then the auditor will judge the food safety individual's training to be adequate.	Individual must obtain demonstrable food safety training.
1.3	Operation has current copies of the <i>Commodity Specific Food Safety Guidelines for the Fresh Tomato Supply Chain, Food Safety Programs and Auditing Protocol for the Fresh Tomato Supply Chain</i> and additional food safety documents as required by state and/or federal regulation.	Operation has a current copy of the Guidelines, this audit document and all other required documents.	Auditor observes the current copies at the operation.	Operation obtains current copies.

1.4	Operation has procedures for conducting self-audits, and conducts self-audits to verify compliance with established internal policies and procedures.	Operation has a self-audit procedure and performs documented self-audits, with corrective actions, preventive measures, documentation and follow-up as needed, at a prescribed frequency sufficient to ensure compliance with established internal policies and procedures, the <i>Commodity Specific Food Safety Guidelines for the Fresh Tomato Supply Chain</i> , this auditing module and additional food safety documents as required by state and/or federal regulation.	Auditor reviews the self-audit procedures, and records of self-audits to verify compliance with the procedures.	Operation develops and maintains self-audit program, with corrective actions preventive measures, documentation and follow-up.
1.5	Operation has a written procedure and timelines for implementing and documenting corrective actions.	Operation has a written procedure to implement and document corrective actions, including timelines and sign-off by a responsible individual.	Auditor observes that the written procedure includes assignment, timeline and sign-off. Auditor observes evidence that the procedure has been followed.	Operation develops, revises or implements the written procedure.
1.6	Operation has a “zero tolerance” policy for controllable practices and conditions that result in immediate food safety risks.	Policy establishes consequences for employees who violate established policies or procedures, resulting in an immediate food safety risk.	Auditor reviews policy, observes evidence of compliance, and interviews employees for knowledge of the policy.	Operation develops a written policy and provides training.

2. Farm History and Assessment

Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
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2.1	An initial, pre-production, environmental assessment has been conducted of all production land.	<p>Operation has a written assessment to include a map or general description of the land being farmed, topography, land history of use, adjacent land use, water sources, and animal and wildlife presence or migration patterns. A document, signed by an authorized agent of the operation, shows that the production land, adjacent land and nearby areas have been assessed for a history of potential contamination sources including but not limited to industrial activity, toxic waste, landfill purposes, incinerator or municipal waste, sewage treatment facilities, other commercial facilities that handle potential contaminants, septic systems, domestic animal operations (such as concentrated animal feeding operations, poultry farms, hobby farms, grazing land, effluent lagoons or spray fields), surface water bodies, animal manure or compost piles, concentrated wild animal habitats or harborage areas. If the assessment indicates mitigation is warranted to control a hazard reasonably likely to occur, the document includes the mitigation strategy and its performance. Potential contamination sources, their approximate distances from the production area, and the implemented mitigation steps shall be documented in the environmental assessment. Assessments are reviewed by the food safety designate, and revised as needed, prior to each production cycle.</p>	<p>Auditor reviews the assessment documents, including:</p> <ul style="list-style-type: none"> ▪ The written assessment; ▪ The risk factors considered; ▪ The risk factors identified; ▪ The steps used to mitigate the risk factors identified. <p>Potential contamination sources, their approximate distances from the production area, and the implemented mitigation steps shall be documented in the audit report.</p>	<p>Operation develops or modifies the required document(s), assessment or reviews, as needed. If farm is on landfill or for waste disposal, an assessment is conducted and shows the land to be fit to grow produce. If adjacent land is used to store municipal waste, and pollution control measures are not adequate, analytical tests have been conducted for heavy metals, toxins, etc. by the land owner/user and records are available. If not available, the tomato grower will conduct such tests on land adjacent to boundary. If adjacent land is in animal husbandry or used to store animal manure, effective mitigation strategies will be employed, such as physical barriers to prevent movement of animal waste onto farm are in place – ditch, berm, slope, dike, etc. Perform training as needed.</p>
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2.2	The environmental assessment shall consider domestic animal operations.	For operations less than 400 feet from a concentrated animal feeding operation (as defined in EPA regulation 40 CFR part 122.23), poultry house, other domestic animal feeding operation or animal manure pile, the operation shall have a written risk assessment specific to that potential source of contamination and, if warranted by the risk assessment, mitigations steps shall be implemented, according to the current <i>Commodity Specific Food Safety Guidelines for the Fresh Tomato Supply Chain</i> .	Auditor shall review the environmental assessment for whether animal operations on adjacent or nearby areas were considered. If warranted by the risk assessment, auditor verifies whether mitigation steps have been described in the risk assessment and implemented.	Operation includes the domestic animal operation(s) in the environmental assessment and, where warranted, performs a risk assessment and implements mitigation steps.
2.3	A second environmental assessment in the form of a review based upon current conditions is conducted not more than five (5) days from the first scheduled harvest date.	The assessment is re-performed, and documented, for environmental conditions that reasonably may have changed since the last assessment, including flooding, adequacy of water sources for their intended use, adjacent land uses, animal migrations, debris, worker health and hygiene, or other potential sources of fruit adulteration.	Auditor reviews the re-assessment document, including corrective action documents for mitigations or deficiencies identified in the pre-production risk assessment.	Operation develops or modifies the document, or reviews, as needed. Perform training as needed.

2.4	If the field is subject to flooding, operation has an established decision tree or corrective action plan in the event of flooding in the production area. Procedures prohibit harvest of product that has come into contact with flood waters.	Flooding is defined as the uncontrolled introduction of large amounts of water of unknown quality into the production area that is reasonably likely to come into contact with the edible portion of the crop, or otherwise cause adulteration of the crop. If the field is subject to flooding, procedure is established that includes a decision tree or corrective action to take in the event of flooding in a production area. Procedure specifies performance of a written risk assessment, which will consider whether there is an increased potential of contamination from the flood event. If warranted by the risk assessment, a no-harvest zone is positioned so that operations in the non-flooded zone are not compromised by the flooded zone; for example, 10 feet.	If the field is subject to flooding, auditor verifies that the operation has a policy/procedure regarding flooded fields. Auditor looks for evidence of flooding in the field. If the field has flooded since the last audit, the auditor observes the operation's risk assessment for current acceptability of the field and/or crop.	Operation develops a written procedure for flooded fields. Field must obtain/develop a written risk assessment.
2.5	Operation has a policy that prohibits harvesting of tomatoes with evidence of being contaminated with animal/bird feces.	Operation has policy, and provides training, to prohibit harvest of fruit contaminated with animal/bird feces. Policy includes an assessment of the potential impact of the animal/bird feces on field harvestability.	Auditor reviews policy and observes evidence of compliance with the procedures for preventing, detecting, and correcting contamination of tomatoes with animal/bird feces.	Operation develops a policy and provides training.
2.6	Operation has an SOP addressing animal intrusion.	SOP includes an established decision tree or corrective action plan, based on the type and apparent number of animals and an assessment of the potential impact of the animal intrusion on product harvestability, and when documentation of the action is required. Policy prohibits harvest of tomatoes if assessment determines an immediate food safety risk.	Auditor reviews SOP and observes evidence of compliance with the procedures for assessing the impact of animal intrusion.	Operation develops a written SOP and provides training.

3. Soil Amendment Usage				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
3.1	If fertilizers containing manures or composts are used, only properly treated (composted or heat treated) manures are allowed for use in fields. Biosolids are not permitted.	Soil amendment use records are available, reviewed and current (conventional or organic). If treated manures are used, records of composition, dates of treatment, methods utilized, application dates and letter of guarantee, certificate of analysis (COA) or any test results or verification data demonstrating compliance with process or microbial standards must be documented. For non-composted animal by-products-containing soil amendments, the operations shall retain a certificate or letter showing the lethality of the process. Compost applications shall be no less than 45 days prior to harvest.	Auditor reviews the amendment use documents and records demonstrating compliance with prevailing national or local established composting or heat treatment standards or guidelines.	Operations must obtain the necessary documents. If the documents cannot be obtained, field cannot be harvested for that crop cycle.
4. Preharvest Agricultural Water				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
4.1	The sources of irrigation water (pond, stream, well, municipal, other) are documented.	The operation has an up-to-date map documenting the location of the sources.	Auditor verifies that the map is accurate to the operation's water sources.	Operation develops or updates the water source map.
4.2	The type of irrigation used (flood, drip, sprinkler overhead, others) is documented.	The operation notes the type of irrigation used for all crops.	Auditor verifies that the method of irrigation is noted.	Operation finds a place to note it.

4.3	A sanitary survey was completed for each water source.	Procedures ensure that any water source and distribution system used is properly designed, located, constructed and maintained in such a way as to prevent contamination; i.e., backflow prevention, proper well construction, adequate maintenance of water system, protection against animal intrusion where practical. Channel, ditches and on-site reservoirs are inspected and cleaned routinely.	Auditor reviews records and inspects the water source and distribution system to verify compliance.	Complete the survey and correct deficiencies.
4.4	Water tests are conducted.	One sample per water source shall be tested at the closest practical point of use, prior to and throughout the crop cycle, at a minimum according to the relative risk of the water source; e.g., annual testing of municipal water, wells and other sources that historically have demonstrated compliance with the microbial standard; monthly testing of treated surface water or sources that historically have demonstrated non-compliance with the microbial standard.	Auditor reviews water test results and any corrective actions taken to bring the water source into compliance.	Operation performs testing or obtains documentation of test results. If water does not meet standards, cease using the water source until corrected and confirmed by testing, or implement water treatment (e.g., chlorination) that brings the water into compliance.
4.5	If water is treated to bring it into compliance, records are maintained of treatments and testing	If water source is treated (e.g., chlorination, UV, ozone), details of the treatment and tests, at least daily while in use, to verify antimicrobial treatment levels are at effective and legal limits shall be documented.	Auditor reviews water treatment records	Operation performs testing and prepares documentation.

4.6	Non-Foliar The water test meets EPA recreational water standards for E. coli; i.e., 40 CFR Part 131.41(c)	Written procedure requires a BAM or other testing procedure validated for generic E. coli quantitation in water.	Auditor reviews water test results and any corrective actions taken to bring the water source into compliance.	Perform a sanitary survey for each affected water source, perform any remedial action as required and retest. If the retest also exceeds the standard, further evaluate potential corrective actions, such as treatment, retreatment, or discontinue use of source.
4.7	Foliar The water test meets EPA microbial standards for drinking water; i.e., 40 CFR Part 141.63	Written procedure requires a BAM or other testing procedure validated for generic E. coli quantitation in water.	Auditor reviews water test results and any corrective actions taken to bring the water source into compliance. If tomatoes have been contacted with non-compliant water, auditor reviews the risk assessment and disposition.	Perform a sanitary survey for each affected water source, perform any remedial action as required and retest. If the retest also exceeds the standard, further evaluate potential corrective actions, such as treatment, retreatment, or discontinue use of source. Operation shall evaluate tomatoes that have been contacted with non-compliant water to assess food safety risk. The assessment is documented and tomatoes dispositioned accordingly.

5. Pesticide Usage

Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
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5.1	Pesticide chemicals and their use must comply with all requirements of national (e.g., EPA) registration and any federal, state or local regulations.	Pesticide chemicals used must comply with all requirements of EPA registration and any federal, state or local regulations. Pesticides must be appropriately registered for such use and must be used in accordance with label directions. Pesticide uses shall be documented. Pesticides shall be applied by trained, licensed or certified pesticide personnel, as required by regulation.	Auditor reviews pesticides used and application records.	Perform training on recordkeeping procedures, as needed. If unregistered pesticides are used, then the crop shall not be harvested.
5.2	Equipment used to apply pesticides shall be maintained and calibrated at a frequency sufficient to assure accuracy of delivery.	Maintenance and calibration records are maintained and, if calibration is not performed on-site, records made readily available for review.	Auditor reviews maintenance and calibration records to ensure they are up to date.	If equipment is out of calibration, or calibration is unknown, tomatoes shall be tested for pesticide residues to ensure compliance with current regulatory limits.
5.3	Water used to mix pesticides meets EPA microbial standards for drinking water; i.e., 40 CFR Part 141.63	Operation has a written policy requiring foliar-application pesticides to be diluted only with water that meets microbial standards for drinking water. Operations will have documentation demonstrating compliance, such as test results for the water source used.	Auditor reviews the policy and inspects pesticide mixing and application records.	Operation develops a written policy. Retraining of pesticide applicator as needed. If unknown or non-drinking quality water was used to prepare pesticides, then test the water source for compliance with drinking water E. coli standards. Do not harvest product unless water test results demonstrate compliance.

6. Harvest, Transport and Product Containers

A. Produce Containers

Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
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6.1	All compounds used to clean or sanitize food contact containers, tools, utensils, equipment or other food contact surfaces are approved for that use by the US EPA, FDA or other prevailing agency. Actual use conforms to label directions.	Documentation is available to demonstrate that cleaning and sanitizing products are approved for their use, and are used according to label directions. Sanitizing chemicals uses shall be documented.	Auditors review documentation and supplies to confirm approved use, and interview individuals responsible for their use for knowledge of approved use. Auditor reviews records of use, and visually observes use, to verify compliance with label directions.	Non-compliances are corrected on-site. Records are reviewed for potential product adulteration. Retraining is performed.
6.2	Harvest and other food contact implements, buckets and totes, are clean and sanitized as necessary according to SOP.	Written SOP is established to ensure that buckets, totes and harvest containers and implements are adequately cleaned and sanitized prior to use and at a prescribed frequency (e.g., daily during use), or more frequently if needed, and documentation of compliance is maintained. If containers are nested during storage or transportation, external surfaces are also cleaned and sanitized.	Auditor reviews SOP, cleaning logs and records, interviews responsible individuals for knowledge of the SOP and observes employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.
6.3	Reusable product bins, trays and containers are made of impervious materials that can be cleaned and sanitized.	Written SOP requires that all reusable product containers are made of materials that can be sanitized, or clean and sanitary liners are used. Wood is not an appropriate food contact surface. Procedures require damaged containers that are no longer easily cleanable or sanitary shall be removed from service of food contact purposes.	Auditor reviews SOP, visually observes product bins, trays and containers and their use for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected. Operation makes a commitment for phasing out non-conforming product containers; e.g., wooden bins, in a reasonable timeline. Retraining is performed.

6.4	Operation has a policy that requires bins trays and boxes made of corrugated cardboard are for single use only.	Written policy prohibits re-use of single-use bins, trays and boxes made of corrugated cardboard or fiberboard for product contact purposes.	Auditor reviews policy, observes practices related to corrugated cardboard or fiberboard bins, trays and boxes for evidence of non-compliance.	Policy is developed or revised. Tomatoes that have been packed in a re-used cardboard or fiberboard bin, tray or box shall be corrected, which may include tomatoes are segregated, washed and repacked in new containers, or discarded. Retraining is performed.
6.5	SOP specifies that workers do not remove harvest buckets from the field.	Written SOP prohibits taking harvest buckets home.	Auditor reviews SOP and observes practices related to handling of harvest buckets.	Policy is developed or revised. Retraining is performed.
6.6	Bins, totes and containers intended for harvesting of product are staged and stored in designated locations.	Locations are designated for bins, totes and containers to be staged and stored in a manner to minimize contamination and opportunity for pest harborage. Procedures are in place to inspect and clean and make sanitary bins, totes or trays, if contamination is observed.	Auditor observes locations for staging and storing of bins, totes and containers for compliance and evidence of overt contamination or pest activity.	Re-evaluate designated storage location to minimize contamination. Bins, totes and containers not in designated area are moved to designated area. Bins, totes or containers reasonably concluded to be contaminated are cleaned and made sanitary before use.
6.7	Bins, totes and containers intended for the harvesting of product shall be used only for that purpose.	A system shall be in place to clearly identify bins, totes and containers to their intended use. Bins, totes and containers intended for the harvesting of product shall be used only for that purpose. Bins, totes and containers used for alternate purposes are clearly identified and not used for harvesting of product.	Auditor visually observes bins, totes and containers for evidence of non-compliance.	Use bins, totes and containers only for appropriate uses. Re-evaluate use identification procedure. Retraining is performed. Bins, totes and containers used inappropriately are identified for non-harvest use, or are cleaned and made sanitary before use, as appropriate.

B. Food Contact Tools, Utensils and Equipment				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
6.8	Product contact tools, utensils and equipment are made of impervious, cleanable, sanitizable material.	Written SOP requires that all product contact tools (e.g., clippers, knives, shears), utensils and equipment are made of materials that can be cleaned and sanitized.	Auditor reviews SOP, visually observes product contact tools, utensils and equipment and their use for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected. Operation makes a commitment for phasing out non-conforming product contact tools, utensils and equipment, in a reasonable timeline. Retraining is performed.
6.9	Product contact tools (harvesting aids) are clean and sanitary and there is a schedule for cleaning and sanitizing.	Written SOP is established to ensure that product contact tools, utensils and equipment are adequately cleaned and sanitized at a prescribed frequency, or as needed, and documentation of compliance is maintained.	Auditor reviews SOP, cleaning logs and records, interviews responsible individuals for knowledge of the SOP and observes employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.
6.10	Harvest tools, utensils and knives are stored in a way that minimizes contamination.	Policy is established for the proper storage of harvest tools and handling when not in use, e.g., during breaks.	Auditor reviews policy, visually observes handling and storage of harvest tools, interviews individuals for knowledge of the policy and observes employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on-site. Retraining is performed.
C. Vehicles and Equipment in the Field				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
6.11	Vehicles used in tomato production, harvest and transport are not a source of contamination.	Operation has a policy to ensure vehicles used in tomato production, harvest and transport shall be sufficiently clean and managed so as not to be a source of contamination.	Auditor reviews policy, observes vehicles used in the field for evidence of contamination, interviews responsible employees for knowledge of the policy.	Policy is developed or revised. Non-compliances are corrected on-site. Retraining is performed.

7. Field Packing of Tomatoes				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
7.1	Operation has written policy that damaged, soft and decayed tomatoes are not harvested to the degree possible.	Employees are trained to recognize damaged, soft and decayed tomatoes, either not harvest or discard potentially affected product, and when to report observations to a designated supervisor.	Auditors reviews SOP, performance criteria, interviews employees for knowledge of the policy and observes harvest area and employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on-site. Retraining is performed.
7.2	Operation shall have a policy that cloths, towels, or other cleaning materials shall not be used to wipe tomatoes.	Employees are trained that wiping tomatoes with cloths or other multiple use materials may pose a risk of cross-contamination and are prohibited.	Auditor reviews policy, interviews employees for knowledge of the policy and observes harvest area and employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on-site. Retraining is performed.
7.3	If tomatoes are washed in the field, operation shall have written procedures regarding the quality of wash water and use of wash water sanitizing chemicals.	Only water that meets the microbial standards for potable water is used. Sanitizing chemicals used must comply with all requirements of EPA registration and any federal, state or local regulations.	Auditor reviews documentation of water quality. Auditor reviews written policy, reviews wash water records, and interviews employees for knowledge of the policy.	Policy is developed or revised. Non-compliances are corrected on-site. Retraining is performed.
7.4	Packing containers shall be labeled as to their source, and to identify that the product has been field packed.	Cartons or other primary packaging shall be labeled accurately and shall clearly communicate the tomatoes were packaged in the field.	Auditor observes packaging for accuracy and is clearly labeled as field packed.	Operation ceases to use non-compliant packaging or labeling. Non-compliances are corrected on-site.
8. Employees and Harvest Crews				
A. Toilet and Handwashing Facilities				
Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition

8.1	Clean and sanitary toilet facilities are provided for all employees and toilets are made from cleanable materials and are cleaned and sanitized daily or sufficiently often to be maintained in a clean and sanitary manner.	Written SOPs and logs that the sanitary facilities are maintained at a frequency appropriate to the operation and the level of use. Records shall provide sufficient information to document that the SOP is being followed, including the recent dates of service.	Auditor reviews service records for compliance with the SOP and visually observes the condition of the facilities.	Operation develops a written procedure and provides training. The SOP for risk assessment shall be followed. Toilet facility may be serviced on-site, or removed and replaced with a compliant unit. Documentation from the responsible party that the unit has been serviced into compliance shall be prepared.
8.2	The number of toilet facilities meets state and federal requirements.	The operation will have verification that the number of toilet facilities meets the more stringent federal or state regulations. The relevant OSHA regulation: 29 CFR part 1928.110, specifies one gender-specific toilet facility per 20 employees	Auditor verifies that the number of available toilet facilities is compliant for the number of employees.	Operation obtains a sufficient number of toilet facilities to be compliant.
8.3	Toilet facilities are located within ¼ mile (400 m) or a five minute walk of work areas.	Toilet facilities shall be easily accessible.	Auditor visually verifies that the toilet facilities are located at an appropriate distance from employees.	Toilet facilities shall be moved to a compliant location.
8.4	Toilet facilities are located, serviced and maintained in a manner to not be a source of contamination of produce.	Toilet facilities are situated during operation and servicing, and maintained to be free from leaks or spills, so as not to pose a hazard to the produce or other opportunity for contamination.	Auditor visually and by records verifies that toilet facilities are not positioned, leaking or serviced in a manner that poses a risk of produce contamination.	Relocation of toilet facility position or servicing location to be compliant. The SOP for risk assessment shall be followed.
8.5	A response plan is in place in the event of a major spill or leak of field sanitation units.	A written corrective response plan is developed, and implemented in the event of a major leak or spill.	Auditor verifies existence of the plan and interviews the responsible person for knowledge.	Operation prepares or edits the plan. Retrain or replace the responsible person.

8.6	All toilet facilities contain toilet paper.	Toilet facilities shall be stocked with toilet paper, positioned and stored in a sanitary manner. Toilet facility servicing shall be sufficiently frequent to assure compliance.	Auditor verifies toilet facilities are equipped with toilet paper positioned in a compliant manner.	Responsible party restocks the toilet facility with toilet paper.
8.7	There is a program for the sanitary disposal of used toilet paper.	Training programs shall include procedures for sanitary disposal of used toilet paper, in a manner compliant with prevailing standards.	Auditor verifies the training program and observes the toilet facilities for evidence of non-compliance.	Non-compliances are corrected on site. Retraining is performed.
8.8	Hand washing facilities, with soap, water and disposable hand-drying towels, or air blowers, and refuse containers are provided	Hand washing facilities must be sufficient in number so as not to be limiting for the number of employees, easily accessible and adequately stocked. Water for handwashing shall meet the microbial standard for potable water (including hot water where available). Refuse receptacles are constructed and maintained in a manner that protects against contamination of tomatoes.	Auditor visually observes the hand washing facilities for compliance.	Restock and maintain, or provide, to compliance.
8.9	Gray water is captured and disposed of away from the harvest/packing area so that there is no evidence of runoff into production areas.	Waste water from hand washing facilities shall be captured and disposed in an appropriate manner.	Auditor visually verifies that hand washing facilities have adequate mechanism for capture and disposal.	Hand washing facility shall be repaired, redesigned or replaced to compliance.
8.10	If hand wash water tanks are used, they are cleaned and sanitized and the water is changed periodically.	Water tanks used to provide hand wash water shall be maintained at a prescribed frequency in a clean and sanitary manner.	Auditor reviews cleaning and sanitizing protocol and service logs, and visually observes condition of water tanks for signs of non-compliance.	Clean and sanitize the tank, replace water to compliance.

8.11	The source of water used to fill hand washing tanks meets the microbial standard for potable water and is documented.	Water used for hand washing tanks is from a source that meets microbial standards for potable water (40 CFR Part 141.63), or has been treated to be compliant. Documentation of the quality of the source is maintained.	Auditor reviews documentation of water quality.	Replace water source or treat to achieve compliance. Obtain documentation demonstrating compliance.
8.12	Toilet and hand washing facilities are inspected by a designated individual at a sufficient frequency during use to assure cleanliness, condition and adequate supplies.	The operation designates a trained individual to routinely inspect the toilet and hand washing facilities for compliance. Records are maintained.	Auditor reviews inspection records and interviews the designated individuals for knowledge.	Retrain or replace the designated individuals.

B. First Aid Policies

Item#	Requirement	Procedure	Verification	Corrective Action/Disposition
8.13	There is a written policy describing procedures which specify handling/disposition of produce or treatment of food contact surfaces that have come into contact with blood or other bodily fluids.	A written policy or procedure shall require designation and disposal of any produce and cleaning/sanitization of food contact surfaces that may have come into contact with blood or other bodily fluids.	Auditor verifies existence of the policy and interviews the responsible person for knowledge.	Operation prepares or edits the policy. Retrain or replace the responsible person.
8.14	There is a written policy instructing workers to seek prompt treatment for cuts, abrasions and other injuries and first aid supplies are provided.	Written policies and training programs shall require employees to report and seek treatment for cuts, abrasions and other injuries. Operation shall have and provide adequate first aid supplies.	Auditor verifies existence of the policy, training program and observes the first aid supplies. Auditor questions employees for knowledge of policy and observes employees for evidence of non-compliance.	Policy or training program is developed or revised. Non-compliances are corrected on site. Retraining is performed.

C. Habits and Conditions

Item#	Requirement	Procedure	Verification	Corrective Action/Disposition
8.15	There is a written Hygiene Practices policy including, but not limited to, policies and procedures on hand washing, prohibiting urinating or defecating in the field, and prohibiting handling produce after using the washroom without washing their hands, for all employees and visitors.	A written Hygiene Practices policy shall apply to employees, outside contractors, inspectors, and visitors.	Auditor verifies existence of the policy, questions employees for knowledge of policy, and observes employees and visitors for evidence of non-compliance.	Policy or training program is developed or revised. Non-compliances are corrected on site. Retraining is performed.
8.16	Policies shall require hand washing with soap and potable water at the appropriate time, such as before starting work, after use of toilet facilities, after breaks and when hands may have become contaminated. Policy shall apply to employees, outside contractors, inspectors, and visitors. Compliance is emphasized by management.	Operation shall have a written SOP regarding hand washing practices. Operation management reinforces importance of and compliance with handwashing policy. Sanitizers may not be used in lieu of soap and water hand washing, but may be used to supplement. If gloves are used when contacting tomatoes or food contact surfaces, policies will clearly communicate that gloves are not a replacement for good handwashing practices.	Auditor observes handwashing practices of employees and visitors for compliance. If handwashing practices are observed to be compliant, auditor will judge management emphasis to be sufficient. Affected product is evaluated for potential contamination and disposition.	SOP is developed or revised. Retraining is performed. Management increases frequency of or approach to reinforcing hand washing policy.
8.17	There are signs, in the appropriate language or pictorially, reminding workers to wash their hands after using the toilet.	Easily understandable hand washing signs are posted on toilet facilities.	Auditor visually verifies placement and content of signs.	Appropriate signage is posted.

8.18	If gloves are used, there must be a written SOP regarding their use.	If gloves are used for product or food contact purposes, operation shall have a written policy and SOP regarding their use, maintenance and disposal, including cleaning of reusable gloves, not taking gloves into restrooms or eating areas, replacing gloves that may be damaged or have become a source of contamination. The SOP should also address limitations of use of non-sanitary gloves (i.e., work gloves). The SOP will require that reusable gloves shall not be taken home by workers for cleaning and sanitizing, and the operation shall be responsible to ensure that reusable gloves are washed in water over 140°F and sanitized daily by a validated procedure.	If gloves are used, auditor reviews the SOP, records of SOP performance, and visually verifies that glove use is consistent with the SOP; i.e., gloves at the beginning of tomato handling activities are clean and not damaged; workers are observed to not take gloves into restrooms or eating areas; and that gloves are not taken into restrooms or eating areas.	SOP is developed or revised. Non-compliances are corrected on site. Retraining is performed.
8.19	SOPs establishing the operation's illness policy provide that workers who show signs of illness (vomiting, jaundice, diarrhea) or open or exposed sores or lesions on their hands are not permitted to perform job duties where they will come in direct contact with raw product or food contact surfaces.	SOPs and documented employee training at least annually to report any active case of illness that may be transmissible by food, open sores or lesions to their supervisor, and that such employees are not permitted to work directly with food or food contact surfaces.	Auditor reviews the policy, reviews training records, interviews employees for knowledge of the policy and observes employees for evidence of non-compliance.	The policy and training are created or amended to be compliant. Retraining is performed and documented.
8.20	There is a written policy regarding jewelry, nail polish and false nails in the workplace	Operation has a policy on acceptable and prohibited jewelry in the production area. The policy shall restrict use of nail polish or false nails.	Auditor reviews policy and visually observes compliance.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.

8.21	Food and tobacco products are only in designated areas as specified in company SOP.	Operation has a written policy prohibiting food and tobacco products except in designated areas.	Auditor verifies existence of the policy, questions employees for knowledge of policy, and observes employees and visitors for evidence of non-compliance.	Policy or training program is developed or revised. Non-compliances are corrected on site. Retraining is performed.
8.22	Drinking water shall be provided in fountains or single use containers. Drinking water containers shall be handled in a manner that prevents them from becoming sources of contamination.	Operation has a written policy regarding drinking water, and water cups, containers or fountains that are clean and sanitary, and handled in a manner that prevents them from becoming sources of contamination	Auditor observes that drinking water containers are handled in a manner that prevents them from becoming sources of contamination.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.
8.23	There is a written policy prohibiting the storage and use of personal items outside of designated areas.	Operation has a policy to permit employee personal items (e.g. employee lunches, drinks, clothing) only in designated, non-production and non-product storage areas.	Auditor reviews policy and visually observes compliance.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.

9. Education and Training

Item#	Requirement	Procedure	Verification	Corrective Action/Disposition
9.1	Employees shall receive mandatory safe product handling and personal hygiene education at time of hire with reinforcements as detailed in company SOP.	Operation shall have a written SOP that outlines topics to be covered in training, with reference to authoritative sources of training information; dates, names and signatures of trainees; and prescribed frequencies of training.	Auditor reviews SOP and training logs, interviews employees for knowledge of the training and observes employees for evidence of non-compliance.	Policy is developed or revised. Non-compliances are corrected on site. Retraining is performed.

9.2	Individuals shall be trained on all food safety requirements specific to their assigned duties.	Training programs shall be inclusive of all individuals' assigned responsibilities and operational requirements.	Auditor reviews training program and logs, interviews employees for knowledge of the training and observes employees for evidence of insufficient training for assigned duties.	Policy is developed or revised. Retraining is performed.
9.3	Workers are trained and follow the policy that product that has dropped on the ground is discarded.	Employees are trained that product that has fallen to the ground, i.e., drops, shall not be harvested.	Auditor reviews SOP, performance criteria and training logs, interviews employees for knowledge of the training and observes production areas and employees for evidence of non-compliance.	Training program is revised. Retraining is performed.
9.4	Supervisors are trained to look for, recognize and react to symptoms of potentially infectious illness.	Supervisors are trained to look for and recognize symptoms such as diarrhea, vomiting or other signs of potentially infectious illness, and appropriate actions to be taken.	Auditor reviews training programs, training logs, and interviews supervisors for knowledge of illness symptoms and appropriate actions.	Training program is revised. Retraining is performed.

10. Traceback and Recall Programs

Item#	Requirement	Procedure	Verification	Corrective Action/ Disposition
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10.1	Operation maintains adequate record of the sale or disposition of product (One step forward)	Operation has policy that addresses record keeping of production field or block, harvest dates, quantities harvested, and subsequent destination of product, transporter and nontransporter, and transport of such records with the product to the subsequent destination. Records are retained and readily retrievable for at least two years or as required by prevailing regulation.	Auditor reviews policy and reviews records for compliance.	Policy is developed or revised. Non-compliances are corrected on-site. Operation makes a commitment to move to electronic record keeping. Retraining is performed.
10.2	Operation maintains adequate record of the source of all products used in the farm. (One step back)	Operation has policy that addresses record keeping of source of seed or transplants, soil inputs, irrigation water sources and test records, names of crews involved in field operations, and other crop history information relevant to product safety. Records are retained for at least two years or as required by prevailing regulation.	Auditor reviews policy and reviews records for compliance.	Policy is developed or revised. Retraining is performed.
10.3	Operation has a recall procedure in place.	Operation shall have a procedure and maintain records to identify all outgoing product lots and shipments with all component tomato lots, in both traceback and trace forward directions, to achieve 100% reconciliation of shipped product within 2 hours. Operation shall perform and document a trace exercise at least annually. This may be performed during the audit or during a mock recall.	Auditor reviews policy, reviews records for compliance and requests that the operation perform a specific trace exercise.	Policy is developed or revised. Retraining is performed.