

# **PrimusGFS Audit**

## **Harvest Crew**

### **(Module 4) Guidelines**

*Used in conjunction with the PrimusGFS v3.2 audit*

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These guidelines help interpret/support the principles, requirements and expectations of the PrimusGFS v3.2 Modules 1, 2, 3, 4, 5, 6 and 7 as noted in the Scheme normative documents. These guidelines are neither exhaustive nor exclusive and detail minimum requirements only by means of statements related to audit questions and expectations. There will be variations in applicability to an operation based on the process(es) and commodities involved. Auditors and auditees should interpret the questions and criteria in different situations, with the food safety and risk minimization being the key concerns.

The operation's practices, policies and procedures should be pertinent to the situation at hand and be able to stand up to any challenge by an auditor or other relevant interested party (including law enforcement). Where laws, customer requirements and specifications, commodity specific guidelines and/or best practice recommendations exist and are derived from a reputable source, these practices and parameters should be followed if they present a higher level of compliance than those included in the audit scheme.

Website links shown in this document are there to aid understanding and provide assistance by way of example (link listings are not exhaustive). These links are not a sign of endorsement by Azzule. Furthermore, Azzule Systems accepts no liability for the content of these links.

Please be aware that there is additional information on the PrimusGFS website including the audit checklist templates. The PrimusGFS website also has access to the official PrimusGFS General Regulations, which explain the overall scheme scoring systems and other details of the scheme.

The following **text** is a modified excerpt from the PrimusGFS General Regulations v3.2. It is provided here as an introduction to the audit notes. For full and current text please refer to the most recent version of the PrimusGFS General Regulations at <http://www.primusgfs.com/documents.aspx>.

## **Audit Execution**

The audit should be performed using the most recent version of the PrimusGFS normative documents. The PrimusGFS Standard is divided into seven Modules:

- Module 1 – Food Safety Management System
- Module 2 – Farm
- Module 3 – Indoor Agriculture
- Module 4 – Harvest Crew
- Module 5 – GMP
- Module 6 – HACCP
- Module 7 – Preventive Controls

Each Module is divided into sections, related to the specific Module and each section includes questions that detail the requirements for the specific section.

## **Scoring System**

For all Modules, the amount of deficiencies and the associated risks have to be considered to assign the severity of the finding, which can be Minor Deficiency, Major Deficiency and Non-Compliance. When no deficiencies are found, a Total Compliance is given. The possible points for the questions in each Module are listed in the following table:

Scoring System for Questions				
Possible answer	Possible Points for the Question			
<b>Total compliance</b>	15 points	10 points	5 points	3 points
<b>Minor deficiency</b>	10 points	7 points	3 points	2 points
<b>Major deficiency</b>	5 points	3 points	1 point	1 point
<b>Non-compliance</b>	0 points	0 points	0 points	0 points
<b>Not applicable</b>	0 points	0 points	0 points	0 points

Detailed compliance requirements are noted for each question throughout this document, but some general statements are described below. These statements are superseded by the specific question compliance criteria and users should be aware that some questions do not follow the general statements below (e.g., automatic failure questions).

Compliance for Questions	
Answer	Criteria Used
<b>Total compliance</b>	To meet the question and/or compliance criteria in full.
<b>Minor deficiency</b>	To have minor deficiencies against the question and/or compliance criteria. To have single or isolated non-severe deficiencies (usually up to three) against the question and/or compliance criteria. To have covered most of the question compliance criteria, but not all.
<b>Major deficiency</b>	To have major deficiencies against the question and/or compliance criteria. To have numerous non-severe deficiencies (usually more than three) against the question and/or compliance criteria. To have single or isolated severe deficiencies against the question and/or compliance criteria. To have covered some of the question compliance criteria, but not most of it.
<b>Non-compliance</b>	To have not met the question and/or compliance criteria requirements at all. Having fundamental deficiencies against the question and/or compliance criteria (severe or non-severe issues).
<b>Not applicable</b>	The requirement described in the question is not applicable for the operation being audited. Justification should be provided in the auditor's comments. Be aware that there are some questions that do not allow a non-applicable response.

## Automatic Failure

There are some questions that if down scored will lead to an automatic failure and an overall score of 0% for the corresponding Module. On being immediately informed of the automatic failure by the auditor during the audit, the auditee has the option to have the auditor continue the audit or to have the audit halt at that point (all charges will apply). **The auditor should explain the advantages of finishing the audit, including the ability for the auditee to learn of other potential non-conformances and to show their buyers the status of their food safety system despite the automatic failure issue.**

## Special Circumstances for Not Certifying

Please also note, that under special circumstances and upon finding serious food safety risks, a “not certified” decision can be given. The auditee should be immediately informed of the automatic failure by the auditor during the audit. The auditee has the option to have the auditor continue the audit or to have the audit halt at that point (all charges will apply).

There are other Special Circumstances that are not technical in nature. Examples of these include detection of deliberate illegal activities, such as deliberate mislabeling, discovery of falsified records, attempting to bribe an auditor/CB personnel, threatening behavior towards an auditor/CB personnel, etc. Please refer to the General Regulations for further details.

## Audit Termination

Once an audit has been started, should the auditee wish to stop the audit for any reason, the auditor will complete the report for as many questions as they were able to verify. PrimusGFS audits cannot be converted into a pre-assessment audit once the audit has been started. If an audit is terminated early, questions that the auditor was unable to verify will be marked as a non-compliance and will receive a score of zero. For questions unable to be verified, the auditor will indicate that the audit was terminated at the request of the auditee before the auditor could verify whether or not the audit conformed to the compliance criteria of the question. A report will be created on the database and issued, and all charges will apply.

## Documentation Requirements

### Organization’s Food Safety Systems:

When an Organization and its associated Operations are being audited, the auditor is checking the systems (SOP’s, policies, etc.) and the implementation of these systems throughout the visual inspection.

While auditees often create and implement their own systems, they can also use systems that have been created by other entities, for example, their customers’ technical manager, their consultants, etc., or a combination of resources. The Organization can create their own SOPs, or in other instances, can utilize SOP templates provided by other entities. As long as the systems meet the requirements of the PrimusGFS questions and expectations and these systems are being implemented properly, the auditee should receive full points for their efforts. The auditee is responsible for ensuring that the systems they use are reviewed, maintained and up-to-date. If the auditor detects any inconsistency, it will result in a down score.

### New PrimusGFS Auditees/First-Time PrimusGFS Auditees

- **In operations that operate for more than three consecutive months throughout the year** – auditee should have at least three months of documentation (i.e. records of monitoring, training, meetings, etc.) available for review. If the auditee has less than three months of most of their documentation available for review, a pre-assessment audit is strongly advised. If the auditee has less than three months of most of their documentation available for review and decides to have a regular scheduled audit, they should be aware that they **cannot receive full conformance for paperwork questions relating to monitoring and that the down score will be based on the amount of paperwork available.**
- **In short season operations that operate for less than three consecutive months throughout the year** - auditee should have at least three months of documentation (i.e. records of monitoring, training, meetings, etc.) available for review (this may include last season’s documentation). Where an operation does not have three months of records available (e.g., they are in operation for one month out of the year), the auditee should have at least the previous season’s records available for review. If the auditee has less than three months of most of their documentation available for review and decides to have a regular scheduled audit, they should be aware that they **may not receive full compliance for paperwork questions relating to monitoring and that the down score will be based on the amount of paperwork available.**

**Existing PrimusGFS Auditees**

- **In operations that operate for more than three consecutive months throughout the year** – auditee should have documentation available from the date of the prior audit.
- **In short season operations that operate for less than three consecutive months throughout the year** – auditee should have at least three months of documentation and documentation at least since the last audit (which includes the last season). Where an operation does not have three months of records available (e.g. they are in operation for one month out of the year), the auditee should have at least the previous season’s records available for review.

	Operates <three months/year	Operates >three months/year
New PrimusGFS Auditee	Three months of records (may include last season’s records). <b>Where an operation does not have three months of records available (e.g., they are in operation for one month out of the year), the auditee should have at least the previous season’s records available for review.</b>	Three months of records (may include last season’s records).
Existing PrimusGFS Auditee	Records at least since the last audit (or longer) to meet the minimum requirement of three consecutive months of records.	Records since the last audit.

**Visual versus Verbal Confirmation**

Visual confirmation is the default method of auditing, whether on the visual inspection portion or the paperwork section. Scores and comments are assumed to have been visually confirmed, unless stated otherwise. Verbal confirmation should be the exception to the rule and, if auditing properly, these should be rarely used. If a verbal confirmation is accepted, the auditor should write this in the comments section of the report for that specific question.

**How to Use Point Assignment Guidelines**

The following sections of this guidance manual are designed to help auditors choose the right score for each question, thereby helping to ensure consistency. This document does not cover all situations and is intended to be a guideline, as opposed to a rule. Auditors are expected to follow the guidelines as much as possible, but it is understood that there will be situations where an auditor should use their discretion. If an auditor does have to make a judgment call and/or tackle a situation not covered by this manual, then the auditor should note the circumstances in the audit report with full justifications. (The auditor should also forward these details to their Certification Body and Azzule Systems, LLC in a separate note, so that this can be reviewed for future versions of the manual.)

In order to be consistent with the voluntary nature of requesting a third-party audit, and in order not to seem to be a legal document, the requirements within the questions are written as “should” and can be scored against. In other questions that use the term “ideally”, these statements cannot be scored against, but give the auditee an opportunity for improvement.

Notes in “red” are where the questions and/or **compliance** criteria have changed significantly since the previous version. Many of the changes are to improve clarification, but some are changes to the actual requirements. Please read carefully to see if these changes impact your particular situation.

## Module 4: Harvest Crew

### General

#### 4.01.01: Is there a designated person responsible for the operation's food safety program?

Total compliance (10 points): 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. **Cross reference with 1.01.04.**

Minor deficiency (7 points) if:

- Single/isolated instance(s) of errors and omissions in the records showing person/persons in charge of the operation's food safety program's training and/or their relevant experience in food safety.

Major deficiency (3 points) if:

- Numerous instance(s) of errors and omissions in the records showing person/persons in charge of the operation's food safety program's training and/or their relevant experience in food safety.

Non-compliance (0 points) if:

- Fundamental failure to document person/persons in charge of the operation's food safety program's training and/or their relevant experience in food safety.
- No one is in charge of food safety programs including food safety document control and verification of sanitation activities.

#### 4.01.02: Does the operation have a written food safety hygiene and health policy covering at least worker and visitor hygiene and health, infants and toddlers, animal presence in growing and storage areas, fecal matter, dropped product, blood and bodily fluids?

Total compliance (15 points): There should be a written food safety policy regarding worker and visitor personal hygiene, GAPs and health requirements. The policy should cover the rules related to hygiene and health (e.g., hand washing, eating/drinking, smoking, specific clothing rules, foreign material issues, cuts/wounds, illness rules, etc.), what to do in the case of evidence of animals and/or fecal matter in the growing and/or storage areas, and what to do in the case of dropped product and if the product comes into contact with blood or other bodily fluids. All workers should be issued a list of rules in the relevant languages and confirm by signing that they understand and agree to abide.

Minor deficiency (10 points) if:

- Single/isolated instance(s) of errors and omissions in **the food safety** hygiene and health policy.
- **The policy is** not in the relevant language(s).
- Single/isolated instance(s) of workers and visitors not signing a document stating that they will comply with the operations' personal hygiene and health policies.

Major deficiency (5 points) if:

- Numerous instances of errors and omissions in the records or food safety hygiene and health policy.
- Numerous cases of workers and visitors not signing a document stating that they will comply with the operations' personal hygiene and healthy policy.

Non-compliance (0 points) if:

- No records **are available**.
- Failure to maintain records.
- The company does not have a document for workers and visitors to sign stating that they will comply with the operations' personal hygiene and health policies.
- Fundamental failure of workers and visitors to sign **a document** stating that they will comply with the operations' personal hygiene and health policies.



## Inspection

### 4.02.01: Is there documented evidence of the internal audits performed, detailing findings and corrective actions?

Total compliance (15 points): 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 (not just checked ✓ or all Y/N), 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 also 1.04.01 for specific details.

Frequency Details for Farm, Indoor Agriculture and Harvest Crew: at least a pre-season growing area assessment and a full GAP self-assessment during harvest season covering growing and harvesting operations should be on file. If growing and harvest activities are under the same organizational authority the self-assessment should be on file covering both growing and harvesting and conducted during the harvest season. A harvesting company not under the authority of a grower should have self-assessments on file during harvest season covering each type of harvest process utilized for the crew(s), i.e. crew can harvest product in-field semi-processing and bulk/final packing in the growing area. A more frequent self-assessment frequency should be used depending on the crop type, farm or indoor agriculture location, any associated risk pressures, and/or if required by any national, local or importing country legal requirements, or customer requirements. These factors will also affect the need for pre-harvest inspections. Farm(s), indoor agriculture growing area(s), storage, harvesting, worker and visitor hygiene, agricultural water sources, training program, etc., and all associated paperwork should be included.

Minor Deficiency (10 points) if:

- Single/isolated instance(s) of follow up/corrective actions not noted.
- Single/isolated instance(s) of incomplete answers or missing records.
- Single/isolated instance(s) of areas/issues missing on the inspection.

Major Deficiency (5 points) if:

- Numerous instances of follow up/corrective actions not noted.
- Numerous instances of incomplete answers or missing records.
- Inspection frequency is not adequate relative to the type of business and the number of issues that require monitoring.
- Numerous instances of areas/issues missing on the inspection.

Non-compliance (0 points) if:

- Fundamental failure to maintain records.
- Fundamental failure to complete inspection records with detailed responses.
- No documented internal audits have been performed.

### 4.02.02: Are there records of pre-harvest inspections and do they show that the current block (or coded area) is cleared for harvest? If there are no pre-harvest inspections go to 4.02.03.

Total compliance (5 points): A pre-harvest block inspection should have been performed no more than 7 days prior to harvest and if harvesting is occurring, it should show if there are any harvesting restrictions, etc. (e.g. evidence of animal intrusion, changes in weather conditions or weather events, pesticide application events). The harvest crew might not have a copy of the actual inspection, but they should have a document indicating which blocks have been inspected and cleared for harvest. If there are no pre-harvest inspections, go to 4.02.03.

Minor Deficiency (3 points) if:

- Single/isolated instance(s) of incomplete or missing records.

Major Deficiency (1 point) if:

- Numerous instances of incomplete or missing records.

Non-compliance (0 points) if:

- No documented pre-harvest inspections have been performed.
- No evidence that the current block being harvested had been cleared for harvest.

**4.02.02a: Where pre-harvest inspections have discovered issues, have buffer zones been clearly identified and at the time of the audit, are those buffer zones being respected?**

Total compliance (15 points): Where pre-harvest inspections have discovered issues (e.g., flooding, animal intrusion issues) buffer zones should be implemented (e.g., 30ft (9.1m) from flooded areas, 5ft (1.5m) from evidence of pest activity). Use larger buffer zones if national and local laws are more stringent. Not applicable if no issues have been found.

Minor Deficiency (10 points) if:

- Single/isolated instance(s) of an issue being detected, and no corrective actions being performed prior to harvest.
- Single/isolated instance(s) of incomplete or missing records.

Major Deficiency (5 points) if:

- Numerous instances of issues being detected, and no corrective actions being performed prior to harvest.
- Numerous instances of incomplete or missing records.

Non-compliance (0 points) if:

- Fundamental failure to perform corrective actions.
- A single instance of a serious issue detected during the pre-harvest inspection and no corrective actions were performed prior to harvest.

**4.02.03: Is there a pre-operation inspection log?**

Total compliance (10 points): Pre-operation inspections should identify potential problems with the harvesting operation, including equipment hygiene, tool hygiene, and worker hygiene. These inspections and corrective actions should be recorded. Use of ATP is an ideal practice and if used, should be recorded properly along with any required corrective actions.

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of incomplete or missing records.
- Single/isolated instance(s) of a hygiene section missing from the pre-operation inspections.

Major Deficiency (3 points) if:

- Numerous instances of incomplete or missing records.
- Numerous instances of hygiene sections missing from the pre-operation inspections.

Non-compliance (0 points) if:

- Fundamental failure to perform pre-operation inspections prior to starting the shift.
- No documented pre-operation inspections have been performed.

## Training

**4.03.01: Is there a food safety hygiene training program covering new and existing workers and are **there** records of these training events?**

Total compliance (15 points): There should be a formal training program to inform all workers of the current policies and procedures and requirements of the company regarding hygiene. Trainings should be in the language understood by the workers, and training type and intensity should reflect the risks associated with the products/processes. Frequency should be at the start of the season **before starting work** then some topics covered at least quarterly, but ideally monthly. Full annual food safety refresher

training sessions are encouraged but do not replace the ongoing more frequent training. Training material covering the content of the company policies and requirements regarding food safety and hygiene (4.01.02) and training should cover food safety and hygiene topics (e.g. toilet use, hand washing, protective clothing (where applicable), recognizing and reporting injury and illness, blood and other bodily fluids, jewelry, dropped product, animal intrusion, food consumption/taking breaks, foreign material requirements, food defense, etc.), the importance of recognizing and detecting food safety and/or hygiene issues with co-workers and visitors, and all food safety or hygiene issues for which they are responsible (e.g. recognizing contaminated produce that should not be harvested, inspecting harvest containers and equipment for contamination issues), correcting problems and reporting problems to a supervisor. Workers should also be trained on any new practices and/or procedures and when any new information on best practices becomes available. There should be records of training with date of training, clearly defined topic(s) covered, trainer(s), material(s) used/given and the names and signatures of workers trained.

Minor Deficiency (10 points) if:

- Single/isolated instance(s) of logs having errors or incomplete information e.g. missing one of the following: training topic, trainer or material information.
- Training does not include the importance of recognizing food safety and/or hygiene issues with co-workers and visitors and/or correcting problems and reporting problems to a supervisor.
- Training has occurred but, on a few occasions, full attendance logs have not been kept and/or not all workers were covered.
- Training materials and/or company food safety policy are not in the relevant language(s).
- Training occurring, not before starting to work but within the first week.
- Single/isolated instance(s) of workers not being trained or not signing a document stating that they will comply with the operations' food safety hygiene program.

Major Deficiency (5 points) if:

- Numerous instances of logs having errors or incomplete information e.g. missing one of the following: training topic, trainer or material information.
- Training has occurred but, on many occasions, full attendance logs have not been maintained.
- Up to three key topics e.g. hand washing, reporting injury/illness, blood and other bodily fluids, jewelry, dropped produce, animal intrusion, etc., have been omitted from the training.
- Only annual refresher training has occurred, and the operation runs for more than 3 months of the year.
- Training occurring, not before starting to work but within the first month.
- Numerous instances of workers not being trained.

Non-compliance (0 points) if:

- Failure to maintain records.
- No records of training or workers not being trained.
- More than three key topics e.g. hand washing, reporting injury/illness, blood and other bodily fluids, jewelry, dropped produce, animal intrusion, etc., have been omitted from the training program.
- No specific orientation given or given after the worker has been working for more than one month.

#### **4.03.02: Is there a documented training program with training logs for the sanitation workers, including best practices and chemical use details?**

Total compliance (5 points): Sanitation training should ensure that the workers understand the importance of proper sanitation, cleaning efficacy, how to use the cleaning chemicals and how to understand Sanitation Standard Operating Procedures. Unless sanitation workers attend regular food safety trainings, sanitation training should also include elements of food safety training pertinent to sanitation operations (e.g., hand washing, restroom use, foreign material etc.). Training logs should have a clearly defined topic(s) covered, trainer(s) and material(s) used/given and who attended the training (name and signature). Training would also ideally include worker safety issues (e.g., use of personal protective equipment, accident prevention, what to do in case of an accident, procedures for avoiding electrical hazards when cleaning, etc.). Recorded training should occur at least on a 12-month basis.

Minor Deficiency (3 points) if:

- Single/isolated instance(s) of logs having errors or incomplete information e.g. missing one of the following: training topic, trainer or material information.
- Training has occurred, but on a few occasions full attendance logs have not been kept and/or not all workers were covered.

Major Deficiency (1 point) if:

- Numerous instances of logs having errors or incomplete information e.g. missing one of the following: training topic, trainer or material information.
- Training has occurred but, on many occasions, full attendance logs have not been maintained.

Non-compliance (0 points) if:

- No records or no training has occurred.
- Failure to maintain records.

**4.03.03: Are there written and communicated procedures in place that require food handlers to report any cuts or grazes and/or if they are suffering any illnesses that might be a contamination risk to the products being produced, and return to work requirements? (In countries with health privacy/confidentiality laws, e.g. USA, auditors can check procedure/policy but not the actual records).**

Total compliance (10 points): There should be documented procedures that are communicated (e.g., worker signature on a training log) to food handlers, requiring them to report any cuts, grazes and/or any illnesses that might be a food safety cross contamination risk. The procedures should indicate return to work requirements for affected workers: to whom the food handlers should report, how the issue is recorded and appropriate actions to be taken for a particular issue. Auditors should not request to review records where countries have laws covering privacy/confidentiality of health records, and therefore, a verbal confirmation should be gained.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of errors or omissions in procedure.
- **Single/isolated instance(s) of evidence that workers are unaware of the procedure requirements.**

Major deficiency (3 points) if:

- Numerous instances of errors or omissions in the procedure.
- **Numerous instances of evidence that workers are unaware of procedure requirements.**

Non-compliance (0 points) if:

- There is not a documented procedure in place.
- A procedure is in place, but it has not been communicated to food handlers.

**4.03.04: Are there worker food safety non-conformance records and associated corrective actions (including retraining records)?**

Total compliance (3 points): **There should be a disciplinary system in place.** A worker non-conformance should be recorded when workers are found **not following food safety requirements**. The auditee should have a record for worker non-compliance, corrective actions and evidence that retraining has occurred (where relevant). Auditee records might be viewed as confidential, and therefore, a verbal confirmation should be gained. There might be a tier system, which includes re-training, verbal and written disciplinary actions and allowance for immediate termination for gross misconduct.

Minor Deficiency (2 points) if:

- **Single/isolated instance(s) of follow up/corrective action not noted.**

Major Deficiency (1 point) if:

- **Numerous instance(s) of follow up/corrective actions not noted.**

Non-compliance (0 points) if:

- No records or no disciplinary system.
- Widespread failure to record follow up/corrective actions.

## Harvest Worker Hygiene

### **4.04.01: Are toilet facilities adequate in number and location? A ZERO POINT (NON-COMPLIANCE) DOWNSCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**

Total compliance (15 points): 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 harvesting is actively occurring with groups of three or more workers. Where there are two or less workers present and workers have transportation that is immediately available to toilets within a 5-minute drive, it is acceptable to score as total compliance.

#### **Reference:**

United States Department of Labor 1928 Title Field Sanitation

<https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.110>

Minor deficiency (10 points) if:

- The toilet facilities are not within ¼ mile or 5 minutes walking distance for crews of three or more.
- The toilet facilities are not within a 5-minute driving distance for crews of two or less.

Major deficiency (5 points) if:

- The operation is not meeting the 1 toilet per 20 workers criteria.

#### **Automatic failure (0 points) if:**

- **There are insufficient or inadequate toilet facilities.**

### **4.04.01a: Are toilet facilities in a suitable location to prevent contamination to product, packaging, equipment, and growing areas?**

Total compliance (15 points): Placement of toilet facilities should be in a suitable location to prevent contamination to product, packaging, equipment, water sources, and growing areas. Consideration should be given when portable units are used that they are not situated too close to the edge of the crop and have a minimum 15 ft (4.5 m) buffer distance in the event of a spill or leak. If pit toilets are used, consider proximity to crop and water sources.

Minor deficiency (10 points) if:

- Option for minor down score exists but at present, no known good examples exist.

Major deficiency (5 points) if:

- Toilet facilities pose a potential risk to product, packaging and equipment areas.

Non-compliance (0 points) if:

- Toilet facilities are located too close to the growing area or water source.

### **4.04.01b: Are toilet facilities designed and maintained to prevent contamination (e.g., free from leaks and cracks)?**

Total compliance (5 points): Toilet facilities should be free from cracks and leaks and any waste holding tanks from toilets must be designed and maintained properly to prevent contamination. Waste holding tanks should be free of leaks, cracks and constructed of durable materials (e.g. plastic) that will not degrade or decompose (no wood). Each toilet should be ventilated to the outside. Note: pit toilets cannot be considered to be properly designed to prevent contamination.

Minor deficiency (3 points) if:

- Single observation of one of the waste holding tank(s) not designed or maintained improperly.
- Single observation of a toilet facility not being well maintained (e.g. cracks, holes, leaks) or not vented to outside.

Major deficiency (1 point) if:

- More than one observation of the waste holding tank(s) designed or maintained improperly.
- More than one observation of a toilet facility not being well maintained (e.g. cracks, holes, leaks) or not vented to outside.

Non-compliance (0 points) if:

- Waste holding tank(s) poses a risk of contamination to the growing area, product, packaging, and equipment, such as observing leaks or being improperly constructed.
- Failure to provide adequately maintained toilet facilities.

**4.04.01c: Are toilet facilities constructed of materials that are easy to clean?**

Total compliance (3 points): Toilet facilities should be constructed of non-porous materials that are easy to clean and sanitize. The floors, walls, ceiling, partitions and doors should be made of a finish that can be easily cleaned.

Minor Deficiency (2 points) if:

- Single/isolated instance of toilet facilities not being constructed of non-porous materials.

Major Deficiency (1 point) if:

- Numerous instances of toilet facilities not being constructed of non-porous materials.

Non-compliance (0 points) if:

- Toilet facilities are not constructed of non-porous materials.

**4.04.01d: Are the toilet facility materials constructed of a light color allowing easy evaluation of cleaning performance?**

Total compliance (3 points): Toilet facilities should be constructed of materials light in color, allowing easy evaluation of cleaning performance.

Minor Deficiency (2 points) if:

- Single/isolated instance of toilets not being constructed of light materials.

Major Deficiency (1 point) if:

- Numerous instances of toilets not being constructed of light materials.

Non-compliance (0 points) if:

- Toilets are not constructed of light materials.

**4.04.01e: Are toilet facilities supplied with toilet paper and is the toilet paper maintained properly (e.g., toilet paper rolls are not stored on the floor or in the urinals)?**

Total compliance (5 points): Toilet paper should be provided in a suitable holder in each toilet facility. Toilet paper should be maintained properly (e.g., toilet paper rolls are not stored on the floor, sink or in the urinals).

Minor Deficiency (3 points) if:

- Single/isolated instance of toilet paper rolls not being maintained properly (e.g., stored on the floor, sink or in the urinals).

Major Deficiency (1 point) if:

- Numerous instances of toilet paper rolls not being maintained properly (e.g., stored on the floor, sink or in the urinals).
- One of the toilet facilities is out of toilet paper and has not been restocked.

Non-compliance (0 points) if:

- There was no toilet paper available at the time of the audit.

**4.04.01f: Where used, is there a documented procedure for emptying the waste holding tanks in a hygienic manner and also in a way that prevents product, packaging, equipment, water systems and growing area contamination?**

Total compliance (5 points): If toilets **have waste holding tanks, they** should be emptied, pumped, and cleaned in a manner to avoid contamination to product, packaging, equipment, water systems and growing area(s). Equipment used in emptying/pumping must be in good working order. A documented procedure should exist and should include a response plan for major leaks or spills, as well as indicating where pumped waste is disposed of **and requiring communication to the designated person(s) responsible for the food safety program regarding the actions taken when a major leak or spill occurred.**

Minor Deficiency (3 points) if:

- Single/isolated instance(s) of incomplete or missing details in the procedure.

Major Deficiency (1 point) if:

- Numerous instances of incomplete or missing details in the procedure.

Non-compliance (0 points) if:

- There is no documented procedure.

**4.04.01g: Are the toilet facilities and hand washing stations clean and are there records showing cleaning, servicing and stocking is occurring regularly?**

Total compliance (10 points): Toilet facilities should be cleaned and sanitized on a regular basis. Servicing records (either contracted or in-house) should be available for review showing toilet cleaning, servicing and stocking is occurring regularly. Soiled tissue should be flushed down the toilet/placed in the holding tank (not be placed in trash cans and/or on the floor).

- Toilet facility (including hand washing stations) fixtures are in good operating condition and clean.
- Cleaning and sanitizing is occurring on a regular basis.
- No soiled toilet tissue either on the floor or in trash cans.
- Trash cans are available for hand wash paper towels.
- Hand washing stations are clean and not blocked.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of non-compliance to above requirements.
- Single/isolated instance(s) of soiled toilet tissues being placed in trash can.
- **Single/isolated instance(s) of incomplete or missing records.**

Major deficiency (3 points) if:

- Numerous instances of non-compliance to the above requirements.
- Widespread observation of soiled toilet tissues being placed in trash cans.
- **Numerous instances of incomplete or missing records.**

Non-compliance (0 points) if:

- Failure to properly maintain areas.
- Single instance of soiled toilet tissues being left on the floor of the toilet facility.
- No cleaning and service records available.

**4.04.02: Is hand washing signage posted appropriately?**

Total compliance (5 points): Toilet facilities should have hand washing signs as a reminder to wash hands before and after eating, returning to work and after using the toilet. Signs need to be posted visibly and in

the language of the workers (picture signs are allowed). The signs should be permanent and placed in key areas where workers can easily see them.

Minor deficiency (3 points) if:

- Single/isolated instance of signage not being permanent.
- Single/isolated instance of signage not being in the language of the workers.
- Single/isolated instance of signage not posted visibly.

Major deficiency (1 point) if:

- Numerous instances of signage not being permanent.
- Numerous instances of signage not being in the language of the workers.
- Numerous instances of signage not posted visibly.

Non-compliance (0 points) if:

- There is no signage.

**4.04.03: Are hand washing stations adequate in number and appropriately located for worker access and monitoring usage? A ZERO POINT (NON-COMPLIANCE) DOWNSCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**

Total compliance (15 points): 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 be 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 within 1/4 mile or 5 minutes walking distance of where workers are located.

Reference:

United States Department of Labor 1928 Title Field Sanitation

<https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.110>

Minor deficiency (10 points) if:

- Only about 75% of needed hand washing stations are present.

Major deficiency (5 points) if:

- Only about 50% of needed hand washing stations are present.

**Automatic failure (0 points) if:**

- **Hand washing stations are inadequate in both number and location (less than 25% of the needed hand washing stations are provided).**
- **There are no functioning hand wash stations.**

**4.04.03a: Are the hand wash stations designed and maintained properly (e.g., ability to capture or control rinse water to prevent contamination onto product, packaging, and growing area, free of clogged drains, etc.)?**

Total compliance (5 points): Hand wash stations should be free of clogged drains, designed and maintained properly to capture or control rinse water that could cause contamination onto product, packaging, equipment and growing area(s).

Minor Deficiency (3 points) if:

- Single/isolated instance of hand wash stations not draining properly.

Major Deficiency (1 point) if:

- Numerous instances of hand wash stations not draining properly.

Non-compliance (0 points) if:

- Widespread failure for hand wash stations to drain properly.
- Widespread failure for hand wash stations not containing a system to catch the rinse water.



**4.04.03b: Are hand wash stations clearly visible (e.g., situated outside the toilet facility) and easily accessible to workers?**

Total compliance (5 points): Hand wash stations should be clearly visible (i.e. situated outside the toilet facility) in order to verify hand washing activities, and easily accessible to workers.

Minor Deficiency (3 points) if:

- Single/isolated instance of a hand wash station located inside a toilet facility.

Major Deficiency (1 point) if:

- Numerous instances of hand wash stations located inside the toilet facilities.

Non-compliance (0 points) if:

- All hand wash stations are located inside the toilet facilities.

**4.04.03c: Are hand wash stations adequately stocked with unscented soap and paper towels?**

Total compliance (5 points): All hand washing facilities should be properly stocked with liquid unscented/non-perfumed, neutral or antiseptic soap. Single use paper towels should be used, and units should be properly located. There should be an adequate stock of soap and paper towels.

Minor Deficiency (3 points) if:

- Single/isolated instance of a hand wash station out of soap and/or paper towels.

Major Deficiency (1 point) if:

- Numerous instances of hand wash stations out of soap and/or paper towels.

Non-compliance (0 points) if:

- There is no soap and/or paper towels available to workers.

**4.04.03d: In the event of running out of toilet materials (e.g., water, soap, toilet tissue, hand paper towels), are there extra supplies readily available so that toilets can be restocked quickly?**

Total compliance (5 points): Extra stocks of fresh water, soap, toilet paper and paper towels, etc., should be readily available in the event that replenishment is needed while harvesting is occurring.

Minor Deficiency (3 points) if:

- Single/isolated instance of extra supplies missing.

Major Deficiency (1 point) if:

- Numerous instances of extra supplies missing.

Non-compliance (0 points) if:

- No extra supplies were available.

**4.04.04: Are total coliforms (TC) and generic *E. coli* tests conducted on the water used for hand washing at the required and/or expected frequency?**

Total compliance (15 points): Total coliforms (TC) and generic *E. coli* testing should occur on a routine basis. All water sources used for hand washing throughout the harvesting season should be tested. One sample per water source should be collected and tested prior to use and then at least quarterly, ideally monthly. **Water samples should be taken from as close to the point of use as is practical e.g. hand wash spigot/faucet. At least one sample per source is required. If there are multiple hand wash units, then samples should be taken from a different location each test (randomize or rotate locations). If there are multiple sources for hand wash water, testing should also account for each source used.**

Reference:

<https://extension.psu.edu/coliform-bacteria>

<https://safewater.zendesk.com/hc/en-us/sections/202366208-Total-Coliforms>  
<https://www.govinfo.gov/content/pkg/CFR-2011-title40-vol23/pdf/CFR-2011-title40-vol23-part141.pdf>  
<https://www.epa.gov/dwstandardsregulations>

Minor deficiency (10 points) if:

- Single instance of water testing not occurring at the right frequency.
- **Sample(s) was not taken from the closest practical point of use.**
- **A single water source (where there is more than one) has not been tested.**

Major deficiency (5 points) if:

- Numerous instances of water testing not occurring at the right frequency.
- **More than one water source (where there are more than two) has not been tested.**

Non-compliance (0 points):

- No microbiological test results are available.
- Last test was done over 12 months ago.

**4.04.04a: Do written procedures (SOPs) exist covering proper sampling protocols, which include where samples should be taken and how samples should be identified?**

Total compliance (10 points): There should be a documented procedure in place detailing how water samples are to be taken, including stating how samples should be identified i.e. clearly naming the location that the sample was taken, identifying the hand wash station, the water source and the date.

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of incomplete or missing details in the procedure.

Major Deficiency (3 points) if:

- Numerous instances of incomplete or missing details in the procedure.

Non-compliance (0 points) if:

- There is no documented procedure.

**4.04.04b: Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?**

Total compliance (10 points): Written procedures (SOPs) should exist covering corrective measures, not only for the discovery of unsuitable or abnormal water testing results, but also as a preparation on how to handle such findings.

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of incomplete or missing details in the procedure.

Major Deficiency (3 points) if:

- Numerous instances of incomplete or missing details in the procedure.

Non-compliance (0 points) if:

- There is no documented procedure.

**4.04.04c: If unsuitable or abnormal results have been detected, have documented corrective measures been performed?**

Total compliance (15 points): For total coliforms (TC) and generic *E. coli*, there should be negative or < detection limit (MPN or CFU/100mL). Where thresholds have been exceeded, there should be recorded corrective actions, including investigations and water retests.

Minor Deficiency (10 points) if:

- Single/isolated instance(s) of records showing **unsuitable or** abnormal test results for total coliforms without adequate documented corrective actions.

Major Deficiency (5 points) if:

- Numerous instances of records showing **unsuitable or** abnormal test results for total coliforms without adequate documented corrective actions.

Non-compliance (0 points) if:

- No corrective actions have been performed.
- A single out of specification result for generic *E. coli* without proper corrective actions.

**4.04.05: Are workers washing and sanitizing their hands before starting work each day, after using the restroom, after breaks, before putting on gloves and whenever hands may be contaminated?**

Total compliance (15 points): Worker conformance to hand washing and sanitizing procedures should be assessed, as washing hands is the first step in avoiding food contamination. Workers should be observed washing their hands prior to beginning work, after breaks, after using the toilet, before putting on gloves, and whenever hands may have become a source of contamination (e.g., after eating, after using a handkerchief or tissue, smoking, drinking, etc.).

Auditors are expected to view hand washing disciplines. Hand washing is a critical part of the food suppliers' food safety program – this should be stressed to the auditee.

Potentially useful website:

A "Safe Hands" Hand Wash Program, <http://www.hi-tm.com/Documents/Handwash-FL99.html>

Minor deficiency (10 points) if:

- Single/isolated instance(s) of a worker who is not complying with the hand washing policy.

Major deficiency (5 points) if:

- Numerous instances of workers that are not complying with the hand washing policy.

Non-compliance (0 points) if:

- Majority of or widespread failure of workers to comply with hand washing policies.

**4.04.06: Are secondary hand sanitation stations (e.g., hand dips, gels or spray stations) adequate in number and location, and are the stations maintained properly?**

Total compliance (5 points): Secondary hand sanitation is required for items that may be "ready-to-eat" (e.g., herbs, stone fruit, tomatoes, citrus, edible flowers, etc.). Secondary hand sanitizers are optional for root vegetable crops or a commodity that requires cooking prior to eating. Secondary hand sanitation (hand dips, gels or sprays) does not replace hand washing requirements (lack surfactant qualities).

Secondary hand sanitation stations should be non-perfumed/unscented, have 60% to 95% ethanol or isopropanol (**benzalkonium chloride is also acceptable**) and should be located near hand washing and other easily accessible areas. **Hand dips (if used) should contain a food grade sanitizer at a determined concentration. Refer to hand sanitizer manufacturer label for dilutions. Hand dips should be regularly monitored (recorded anti-microbial strength checks) to ensure their effectiveness with corrective actions recorded (e.g. dip solution replenishment and anti-microbial additions).** Hand gel / spray stations should be well stocked and tested regularly to ensure they are at the required strength - checks should be recorded. **The auditor should check that gel pack type stations are stocked and have the auditee check the strength of anti-microbial chemicals in hand dips.** Strength checks do not need to be performed for commercially purchased sanitizers that have been purchased already mixed.

<http://www.qualityassurancemag.com/qa0612-proper-hand-sanitation-practices.aspx>

<https://www.cdc.gov/handwashing/index.html>

<https://nelsonjameson.com/learn/sanitation-maintenance/hand-hygiene/>

<http://www.hi-tm.com/Documents/Handwash-FL99.html>

<https://www.fda.gov/food/guidanceregulation/retailfoodprotection/industryandregulatoryassistanceandtrainingsources/ucm113827.htm>

Minor deficiency (3 points) if:

- Single/isolated instance(s) of secondary hand sanitation stations not in place or being empty.
- Single/isolated instance(s) of hand dips containing under-strength solutions.
- Single/isolated instance of dispensers not properly located.

Major deficiency (1 point) if:

- Numerous instances of hand secondary hand sanitation stations not in place or being empty.
- Numerous instances of hand dips containing under-strength solutions.
- Numerous instances of dispensers not properly located.
- Use of hand gel or spray sanitizer that is not approved for direct hand to food contact (e.g., USDA approved or national equivalent).

Non-compliance (0 points) if:

- There are no secondary hand sanitation stations where needed or all are empty.
- All hand dips checked found containing under-strength solutions.

**4.04.07: Is it evident that corrective actions are taken when workers fail to comply with hand washing guidelines?**

Total compliance (5 points): It should be evident that corrective actions are taken by a supervisor in charge when workers fail to comply with hand washing requirements.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of corrective actions not being taken.

Major deficiency (1 point) if:

- Numerous instances of corrective actions not being taken.

Non-compliance (0 points) if:

- Corrective actions are not taken.

**4.04.08: Are workers who are working directly or indirectly with food, free from evidence of boils, sores, open wounds and are not exhibiting signs of foodborne illness?**

Total compliance (10 points): Workers who have exposed boils, sores, exposed infected wounds, foodborne illness or any other source of abnormal microbial contamination should not be allowed to work in contact with the product, packaging or food contact surfaces. Workers should be requested to notify their supervisors if they have any concerning symptoms. All bandages should be covered with a non-porous covering such as non-latex or vinyl gloves.

Minor deficiency (7 points) if:

- **A single instance of a worker with exposed boils, sores, exposed infected wounds, foodborne illness or any other source of abnormal microbial contamination. There is not a threat of product or packaging contamination.**

Major deficiency (3 points) if:

- **More than one instance of workers with exposed boils, sores, exposed infected wounds, foodborne illness or any other source of abnormal microbial contamination. There is not a threat of product or packaging contamination.**

Non-compliance (0 points) if:

- One or more workers are observed working in contact with food, food contact surfaces or packaging that has or have exposed boils, sores, infected wounds, showing signs of food borne illness or any other source of abnormal microbial contamination that is a hazard.
- **The auditor should consider whether this is adulteration and whether to apply Q 4.05.09 and score an automatic failure.**

**4.04.09: Is jewelry confined to a plain wedding band and watches, studs, false eyelashes, etc., are not worn?**

Total compliance (5 points): Workers are not observed wearing jewelry (including earrings, ear gauges, necklaces, bracelets, rings with stones, rings or studs in nose, lip and eyebrow, watches) in the growing area. Plain wedding bands are the only exception. Other examples of foreign items that may be a source of foreign material contamination include studs, false finger nails and finger nail polish, false eye lashes, eye lash extensions, etc.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of a worker observed wearing jewelry or watches or any other personal item that may be a foreign contaminant.

Major deficiency (1 point) if:

- Numerous instances of workers observed wearing jewelry or watches or any other personal item that may be a foreign contaminant.

Non-compliance (0 points) if:

- Majority of workers wearing jewelry or watches or any other personal item that may be a foreign contaminant i.e. jewelry policy does not exist and/or jewelry policy exists but is not being implemented.

**4.04.10: Are worker personal items being stored appropriately (i.e. not in the growing area(s) or material storage area(s))?**

Total compliance (5 points): Workers should have a designated area for storing personal items such as coats, shoes, purses, medication, phones, etc. Areas set aside for workers' personal items should be far enough away from growing area(s) and material storage area(s) to prevent contamination and avoid food defense risks.

Minor deficiency (3 points) if:

- Single or isolated instance(s) of personal belongings, personal food, etc. being found in the growing or material storage area(s).

Major deficiency (1 point) if:

- Numerous instances of personal belongings, personal food, etc. being found in the growing or material storage area(s).

Non-compliance (0 points) if:

- Fundamental failure to prevent personal belongings, personal food, etc. being taken into the growing or material storage area(s).

**4.04.11: Is smoking, eating, chewing and drinking confined to designated areas, and spitting is prohibited in all areas?**

Total compliance (5 points): Smoking, chewing tobacco, chewing gum, drinking and eating is permitted in designated areas that are away from growing and storage areas. Spitting should be prohibited in all areas. Smoking should not be permitted in eating and drinking areas.

21 CFR Part 110.10 <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=110.10>  
29 CFR Part 1910.41

[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=9790](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9790)

Minor deficiency (3 points) if:

- Single/isolated instance(s) are observed of non-compliance to the above (includes evidence of smoking, eating, spitting, chewing gum, improper storage of break time food or drinking containers in refuse containers located in the growing area).
- Single/isolated instance(s) of designated area not meeting appropriate GAP standards.

Major deficiency (1 point) if:

- Numerous instances are observed of non-compliance to the above (includes evidence of smoking, eating, spitting, chewing gum, improper storage of break time food or drinking containers in refuse containers located in the growing area).
- No designated smoking area (unless the site has a non-smoking policy).
- Numerous instances of designated area not meeting appropriate GAP standards.

Non-compliance (0 points) if:

- Widespread consumption of food and beverages outside of designated areas.
- Widespread evidence of smoking outside the designated area.
- Widespread evidence of using chewing tobacco in growing and storage areas.
- Designated area lacks access to a hand wash station.
- Widespread non-compliance to the above criteria.

#### **4.04.12: Are workers wearing effective hair nets that contain all hair?**

Total compliance (5 points): If the operation requires the use of hair nets, the harvest workers should be wearing appropriate hair nets that restrain all hair. Baseball caps and head coverings are allowed in the harvesting area only if they are clean and worn with a clearly visible hair net that restrains all hair (where operation requires use of hair nets).

21 CFR Part 110.10 <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=110.10>

Minor deficiency (3 points) if:

- Single/isolated instance(s) of workers observed not wearing an appropriate hair restraint or not wearing them properly.

Major deficiency (1 point) if:

- Numerous instances of workers observed not wearing an appropriate hair restraint or not wearing them properly.

Non-compliance (0 points) if:

- Hairnets and/or beard-nets are not available for workers.

#### **4.04.13: Are all items removed from garment (shirt, blouse, etc.) top pockets, and unsecured items are not worn (e.g., pens, glasses on top of head, Bluetooth devices, etc.)?**

Total compliance (3 points): There should be no items stored in workers' shirt, blouse and smock top pockets. Items in pockets and otherwise unsecured have the potential to fall into the product. Ideally, top pockets are sewn up or non-existent.

Minor deficiency (2 points) if:

- Single/isolated instance(s) of items observed in shirt, blouse or smock top pocket.

Major deficiency (1 point) if:

- Numerous instances of items observed in shirt, blouse or smock top pockets.

Non-compliance (0 points) if:

- Widespread use of shirts, blouse or smock top pockets.

#### **4.04.14: Are all workers wearing protective outer garments suitable for the operation (e.g. appropriate clean clothes, smocks, aprons, sleeves and non-latex gloves)?**

Total compliance (5 points): 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, non-latex 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. **Foot protection should also be considered where it could lead to contamination of the product (e.g., during watermelon harvest where workers stand inside harvest bins/trailers/buses); auditor discretion applies.**

Minor deficiency (3 points) if:

- Single/isolated instance(s) of outer garments or gloves being taken home.
- Single/isolated instance(s) of gloves not being replaced when contaminated.
- Single/isolated instance(s) of protective garments not being worn where required.
- Single/isolated instance(s) of outer clothing not clean or being a potential source of contamination.

Major deficiency (1 point) if:

- Numerous instances of outer garments or gloves being taken home.
- Numerous instances of gloves not being replaced when contaminated.
- Numerous instances of protective garments not being worn where required.
- Numerous instance(s) of outer clothing not clean or being a potential source of contamination.

Non-compliance (0 points) if:

- Widespread failure to replace gloves when contaminated.
- Widespread failure to wear protective garments where required.
- Widespread non-compliance to the above and/or company policy.
- Widespread failure to wear clean outer clothing or of clothing being a potential source of contamination.

**4.04.15: Do workers remove protective outer garments (e.g., smocks, aprons, sleeves and gloves) when on break, before using the toilets and when going home at the end of their shift?**

Total compliance (5 points): When worn, protective clothing (e.g., aprons, smocks, sleeves, and gloves) should be removed when workers leave the work area (e.g., when they go to the toilet facility, break areas, etc.). Workers cannot smoke, eat, or use the restroom while wearing these garments. Hairnet removal when leaving the work area is not mandated by this audit.

Minor deficiency (3 points) if:

- Single/isolated instance(s) are observed of non-compliance to the above.

Major deficiency (1 point) if:

- Numerous instances are observed of non-compliance to the above.

Non-compliance (0 points) if:

- Widespread non-compliance to the above.

**4.04.15a: Is there a designated area for workers to leave protective outer garments (e.g., smocks, aprons, sleeves, and gloves) when on break and before using the toilet?**

Total compliance (5 points): There should be a designated area for workers to leave protective clothing when they are worn (e.g., aprons, smocks, sleeves, and gloves). Workers are observed using the

designated area when they leave the work area (e.g., when they go to the toilet facility, break areas, etc.). Workers should not leave protective outer garments on equipment or packaging materials. Designated area should not be within the toilet facilities, break area, or any other area that might be a risk to the outer garments. Garments should not be left touching product, packaging or food contact surfaces.

Minor deficiency (3 points) if:

- Single/isolated instance(s) are observed of non-compliance to the above.

Major deficiency (1 point) if:

- Numerous instances are observed of non-compliance to the above.

Non-compliance (0 points) if:

- There is not a designated area for workers to leave aprons, sleeves and gloves when on a break.
- There is a designated area; however, no workers use this area.
- Widespread non-compliance to the above.

#### **4.04.16: Is fresh potable drinking water readily accessible to workers?**

Total compliance (10 points): 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. Water should be suitably cool and in sufficient amounts, taking into account the air temperature, humidity and the nature of the work performed, to meet the needs of all workers. 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.**

Minor deficiency (7 points) if:

- Single/isolated instance(s) of an unclean water container being used.

Major deficiency (3 points) if:

- Numerous instances of an unclean water containers being used.

Non-compliance (0 points) if:

- There is no water provided.
- The water provided is not potable.

#### **4.04.16a: Are single use cups provided (unless a drinking fountain is used) and made available near the drinking water?**

Total compliance (5 points): Single use cups should be provided so that cross contamination issues are avoided from person to person. Examples include **single-use cups**, drinking fountains, etc. **Common drinking cups and other common utensils are prohibited.**

Minor deficiency (3 points) if:

- Single/isolated instance(s) of single-use cups missing from one of the water containers.

Major deficiency (1 point) if:

- Numerous instances of single-use cups missing from the water containers.
- A drinking fountain is being used but is not in a sanitary condition.

Non-compliance (0 points) if:

- Single-use cups are not provided for the water containers.

#### **4.04.17: Are first aid kits adequately stocked and readily available?**



Total compliance (5 points): First aid kit(s) should be adequately supplied to reflect the kinds of injuries that occur (including any chemicals stored on-site) and should be stored in an area where they are readily available for emergency access. Date-coded materials should be within dates of expiration. Gloves should be worn over all band aids on hands. Auditors should verify by checking the first-aid kit(s).

Minor deficiency (3 points) if:

- Single/isolated instance(s) of first aid kit(s) not having adequate supplies, supplies out-of-date or kit not readily accessible.

Major deficiency (1 point) if:

- Numerous instances of first aid kit(s) not having adequate supplies, supplies out-of-date or kit not readily accessible.

Non-compliance (0 points) if:

- Widespread failure to provide first aid kit(s) with adequate supplies, supplies out-of-date or kit not readily accessible.

**4.04.18: Are all commodities that come in contact with blood and/or other bodily fluids destroyed? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): Any commodity that comes into contact with blood and/or other bodily fluids must be destroyed. If this occurs during the time of inspection, auditor must witness that product is destroyed.

**Automatic Failure (0 points) if:**

- **A single incidence of a commodity coming into contact with blood and/or other bodily fluids without being destroyed.**

**4.04.19: Are there adequate trash cans placed in suitable locations?**

Total compliance (5 points): There should be adequate measures for trash disposal so that the growing, harvesting and storage areas are not contaminated. Containers (e.g., dumpsters, cans) should be available and placed in suitable locations for the disposal of waste and trash, e.g., near handwash stations. All dumpsters and garbage receptacles should have a cover and be kept covered to prevent the attraction of insects, rodents and other pests. N/A option available if there is no work taking place at the time of the audit.

Minor deficiency (3 points) if:

- Single/isolated instance of containers not available and/or being maintained to protect against potential contamination of the crop.

Major deficiency (1 point) if:

- Numerous instances of containers not available and/or being maintained to protect against potential contamination of the crop.

Non-compliance (0 points) if:

- Fundamental failure to provide adequate trash disposal.
- Fundamental failure to maintain containers to protect against potential contamination of the crop.

**4.04.20: Are any potential foreign material issues (e.g., metal, glass, plastic) controlled?**

Total compliance (5 points): There should be no foreign material issues that are or could be potential risks to the product. Examples include, but are not limited to, glass bottles, unprotected lights on equipment, staples on wooden crates, hair pins, using “snappable” blades instead of one-piece blades, broken and brittle plastic issues on re-useable totes.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of a foreign material issue.

Major deficiency (1 point) if:

- Numerous instances of foreign material issues.

Non-compliance (0 points) if:

- Widespread failure to prevent against foreign material issues.

## Harvest Practices

### **4.05.01: Is the harvest area free from animal presence and/or animal activity (wild or domestic)? If Total compliance, go to 4.05.02.**

Total compliance (15 points): Animals can represent potential contamination to the harvesting area, to the crop, to **the equipment**, etc., and therefore, should not be present in the operations. Evidence of animal presence can include tracks, fecal matter, feathers, etc.

Minor deficiency (10 points) if:

- Single/isolated instance of evidence of animal presence and/or animal activity.

Major deficiency (5 points) if:

- Numerous instances of evidence of animal presence and/or animal activity.

Non-compliance (0 points) if:

- Widespread failure to prevent animal presence and/or animal activity in the harvesting area.

### **4.05.01a: Is the harvest area free from any evidence of animal fecal matter? A ZERO POINT (NON-COMPLIANCE) DOWNSCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**

Total compliance (15 points): Fecal matter is a potential contaminant to the product being grown. Produce that has come into direct contact with fecal material 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 material is found, a food safety assessment should be conducted by a qualified worker. 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 (scored in **4.05.02**).

Minor deficiency (10 points) if:

- Single/isolated instance of fecal matter found in the harvesting area **and a food safety risk assessment was implemented correctly.**
- A "no harvest zone" is implemented but the radius is less than 5 ft.

Major deficiency (5 points) if:

- **More than one instance of fecal matter found in the audited area and a food safety risk assessment was implemented correctly.**
- **Any instance of fecal matter is found in the audited area and a "no harvest zone" was not implemented.**
- **Any instance of fecal matter is found, and a food safety assessment is not conducted.**

### **Automatic Failure (0 points) if:**

- **Any observation of widespread animal fecal contamination in the audited area is an automatic failure.**
- **Any observation of any human fecal matter in the audited area is an automatic failure. Score under 4.05.02.**

### **4.05.02: Is the harvesting area free from any evidence of human fecal contamination? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): There should be no evidence of human fecal contamination in the harvesting area, area being harvested, packaging area, equipment area, or in any other area that would cause a contamination issue. **Any evidence of human fecal matter in the harvesting or associated area is an automatic failure.**

**Automatic Failure (0 points) if:**

- **There is a single incidence of human fecal matter found in the harvesting or associated area.**

**4.05.03: Is the harvest area free from evidence of infants or toddlers?**

Total compliance (10 points): Infants and toddlers can represent potential contamination to the growing area, to the crop, to packaging and should not be present in the operations, including chemical or equipment storage areas.

Minor deficiency (7 points) if:

- Single/isolated instance or evidence of infants or toddlers in the harvesting area.

Major deficiency (3 points) if:

- Numerous instances or evidence of infants or toddlers in the harvesting area.

Non-compliance (0 points) if:

- Widespread failure to keep infants or toddlers out of the harvesting area.

**4.05.04: Are all chemicals (pesticides, sanitizers, detergents, lubricants, etc.) stored securely, safely and are they labeled correctly?**

Total compliance (15 points): Chemicals located on-site and used by the harvest operation(s) are required to be stored in a designated area. Access to chemicals needs to be controlled, so that only workers who understand the risks involved and have been trained properly are allowed to access these chemicals. The chemical storage area should be located away from any raw materials, packaging & finished food products. Spill controls should be in place for opened in use containers. All chemical containers should have legible labels of contents; this includes chemicals that have been decanted from master containers into smaller containers. Empty containers should be stored and disposed of safely.

Minor deficiency (10 points) if:

- Single/isolated instance(s) of chemicals not properly stored.
- Single/isolated instance(s) of improperly labeled or unlabeled chemical containers.
- Single/isolated instance(s) of empty containers either not being stored properly or disposed of properly.
- The chemical storage area is not marked to indicate its use.
- **Single isolated instance(s) of chemicals being used without proper attention to chemical spillage.**

Major deficiency (5 points) if:

- Numerous instances of improperly stored chemicals.
- Numerous instances of improperly labeled or unlabeled chemical containers.
- Chemical storage is segregated in an **enclosed**, designated area, but not locked.
- Chemical storage area(s) has inadequate liquid containment systems.
- Numerous instances of empty containers either not being properly stored or disposed of properly.
- **Numerous instances of chemicals being used without proper attention to chemical spillage.**

Non-compliance (0 points) if:

- **Failure to properly store chemicals.**
- There is no designated area for chemicals.
- There is a designated area for chemicals, but it is not an enclosed or locked area.
- **Spilled chemicals found in the chemical storage areas (not cleaned up properly)**

**4.05.05: Are "food grade" and "non-food grade" chemicals used appropriately, according to label and not commingled?**

Total compliance (10 points): All chemicals applied by the harvesting operation(s) should be approved by the prevailing authority (e.g., US: EPA/FDA, Canada: CFIA/Health Canada, Chile: SAG, Mexico: COFEPRIS) for their designated use and used according to label instructions. Only food grade lubricants should be used anywhere near product and packaging materials. "Food grade" and "non-food grade" materials should be stored in separate designated areas and adequately labeled. Grease guns and containers should be labeled adequately. Access to non-food grade materials should be limited to those entrusted with correct use of chemicals.

NSF International: Nonfood Compounds

<http://info.nsf.org/USDA/PSNCListings.asp>

<https://extension.tennessee.edu/publications/Documents/SP798-A.pdf>

<https://www.sclubricants.com/food-grade-lubrication/>

Minor deficiency (7 points) if:

- Single/isolated instance(s) of commingling of non-food grade with food grade chemicals.
- Single/isolated instance(s) of grease guns not being coded for food grade/non-food grade materials.
- Single/isolated instance(s) of a chemical being used contrary to label.

Major deficiency (3 points) if:

- Numerous instances of commingling of non-food grade with food grade chemicals.
- Numerous instances of grease guns not coded for food grade/non-food grade materials.
- Numerous instances of a chemical(s) being used contrary to label.

Non-compliance (0 points) if:

- No attempt to split non-food grade from food grade materials.
- Widespread use of a chemical(s) used contrary to label.

**4.05.06: Are there records of microbial testing for water used for postharvest product contact (e.g., washing, re-hydrating) and product contact surfaces (e.g., cleaning grading packing tables and harvest tools) showing that there is no detectable total coliforms and generic *E. coli* in the water?**

Total compliance (15 points): All water sources that are used for postharvest contact **with the edible portion of a crop** (e.g., washing, re-hydrating) and product contact surfaces (e.g., cleaning grading or packing tables and harvest tools) **should be tested on a routine basis. One sample per water source should be collected and tested prior to use and then at least quarterly thereafter, or at a frequency relative to the associated risks.** For commodities under the Leafy Greens Marketing Agreement, one sample per water source should be collected and tested prior to use if >60 days since the last test of the water source. Additional samples shall be collected at intervals of no less than 18 hrs. apart and at least monthly during use. Results of water testing for total coliforms and *E. coli* should meet the US EPA drinking water microbiological specification. For total coliforms and generic *E. coli*, there should be negative or < detection limit (MPN or CFU/100mL). If out of specification results are detected, then full details of corrective actions should be noted, including investigations and water retests.

**Reference:**

<https://extension.psu.edu/coliform-bacteria>

<https://safewater.zendesk.com/hc/en-us/sections/202366208-Total-Coliforms>

<https://www.govinfo.gov/content/pkg/CFR-2011-title40-vol23/pdf/CFR-2011-title40-vol23-part141.pdf>

<https://www.epa.gov/dwstandardsregulations>

Minor deficiency (10 points) if:

- Single instance of water testing not occurring at **the required frequency.**

Major deficiency (5 points) if:

- **More than one** instance of water testing not occurring at **the required frequency**

Non-compliance (0 points):

- No microbiological test results are available.
- Last test was done over 12 months ago.

**4.05.06a: Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?**

Total compliance (10 points): Written procedures (SOPs) should exist covering corrective measures not only for the discovery of unsuitable or abnormal water results, but also as a preparation on how to handle such findings.

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of incomplete or missing details in the procedure.

Major Deficiency (3 points) if:

- Numerous instances of incomplete or missing details in the procedure.

Non-compliance (0 points) if:

- There is no documented procedure.

**4.05.06b: If unsuitable or abnormal results have been detected, have documented corrective measures been performed?**

Total compliance (15 points): For total coliforms and generic *E. coli*, there should be negative or < detection limit (MPN or CFU/100mL). Where thresholds have been exceeded, there should be recorded corrective actions, including investigations, water retests, and if required, crop testing (*E. coli* O157:H7 and *Salmonella* < detection limits or Negative-zero tolerance).

Minor Deficiency (10 points) if:

- **Single instance** of records **showing unsuitable or** abnormal test results **for total coliforms** without adequate documented corrective actions.

Major Deficiency (5 points) if:

- **More than one** instance of records showing **unsuitable or** abnormal test results **for total coliforms** without adequate documented corrective actions.

Non-compliance (0 points) if:

- No corrective actions have been performed.
- **A single out of specification result for generic *E. coli* without proper corrective actions.**

**4.05.07: Is the product harvested and transported to a facility for additional handling and/or final packing?**

Total points 0: **Information gathering question.** This question refers to product that is **harvested** and then taken to a facility for additional handling and/or packing.

**4.05.08: Is the product packed in the final packing unit in the growing area? If no, go to 4.05.09.**

Total points 0: **Information gathering question.** This question refers to product packed in the **growing area** that is in the final unit for shipping (i.e. clamshell, wrapped products, carton boxes, etc.), that usually bypasses any selection packing lines in a facility i.e. goes to a cooling process as opposed to a packing line.

**4.05.08a: Is packing material (e.g. cartons, bags, clamshells, sacks, RPCs) intended for carrying product used for that purpose only?**

Total compliance (5 points): All containers intended for product 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. If a product container is used for any other reason than the storage of product, it should be clearly differentiated as such (e.g., painted another color and labeled).

Minor deficiency (3 points) if:

- Single/isolated instance(s) of single service containers used for other than intended purpose.

Major deficiency (1 point) if:

- Numerous instance(s) of single service containers used for other than intended purpose.

Non-compliance (0 points) if:

- Widespread misuse of single services containers used for other than intended purpose.

**4.05.08b: Is packing material inspected prior to use and is product and packing material free from handling contamination and exposure to ground?**

Total compliance (10 points): Avoid stacking soiled bins on top of each other if the bottom of the bin has had direct contact with soil/**substrate**. Product and packing materials used in the harvesting process should be placed with protection underneath and handled in a manner to eliminate contamination from the ground or from inappropriate human handling, which includes commodities where it is industry practice to place the products on the ground after harvest. Crops down scored for exposure to the ground do not include root crops that are grown underground (e.g., carrots, potatoes, onions, garlic, etc.) or crops that are grown **with harvested portion in contact with the ground or plastic (e.g., melons)**. Examples of handling contamination **include** using cloths or towels to remove dirt and/or debris from **packing and/or product, standing on the sides of beds/trays during mushroom harvest, standing in bins of product on trucks, etc.** Automatic failure question 4.05.09 should be used when observing evidence of product or packaging foreign material, hazardous materials or adulteration issues.

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of packing material **or product** coming in direct contact with the ground.
- Single/isolated instance(s) of packing material not being inspected prior to use.
- Single/isolated instance(s) of inappropriate handling practices.

Major Deficiency (3 points) if:

- Numerous instances of packing material **or product** coming in direct contact with the ground.
- Numerous instances of packing material not being inspected prior to use.
- Numerous instances of inappropriate handling practices.

Non-compliance (0 points) if:

- No inspections of packing material are being performed prior to use.
- Widespread failure to keep packing material **or product** from directly contacting the ground.
- Widespread failure to prevent handling contamination.

**4.05.08c: If packing material is left in the growing area unattended, is it stored secured and protected?**

Total compliance (5 points): All containers, cartons, packing material should be stored in a protected area to reduce the risk of contamination and tampering that can occur if packing material is left in the **growing area** unattended.

Minor Deficiency (3 points) if:

- Single/isolated instance(s) of **packing material** not being stored secure and protected.

Major Deficiency (1 point) if:

- Numerous instances of **packing material** not being stored secure and protected.

Non-compliance (0 points) if:

- Widespread failure to store **packing material** in a secured and protected manner.

**4.05.09: Is the crop, harvested product, ingredients (including water), food contact packaging and food contact surfaces within accepted tolerances for spoilage and free from adulteration? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): The crop, harvested product, ingredients (including water), food contact packaging and food contact surfaces should be free from spoilage, adulteration and/or gross contamination (21 CFR 110.3g). If legislation exists, then the contamination should be viewed against this legislation (e.g., USDA Grading Standards often include decay tolerances). Spoilage and adulteration would include any physical, chemical or biological contamination including blood and bodily fluids. Measures should be taken to prevent any known or reasonably foreseeable hazard (e.g., *Clostridium botulinum* in mushrooms). This question is designed to allow an auditor to halt an audit when finding gross contamination issues. Examples might include glass, trash/litter, motor oil in products, etc. Is the issue widespread or a one-off issue?

Where an issue is observed by an operator in the normal process, auditor should observe the actions of the operator before scoring. Auditors should use their discretion and decide whether the frequency of the contamination warrants an automatic failure.

Food Defect Levels Handbook

<https://www.fda.gov/food/ingredients-additives-gras-packaging-guidance-documents-regulatory-information/food-defect-levels-handbook>

CPG Sec. 555.425 Foods, Adulteration Involving hard or Sharp Foreign Objects

<https://www.fda.gov/ucm/groups/fdagov-public/@fdagov-afda-ice/documents/webcontent/ucm074554.pdf>

US FDA/CFSAN Defect Levels Handbook, The Food Defect Action Levels

<http://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/sanitationtransportation/ucm056174.htm>

US EPA Water Quality Standards for Coastal and Great Lakes Recreation Waters

<https://www.epa.gov/beach-tech/final-water-quality-standards-bacteria-rule-coastal-and-great-lakes-recreation-waters>

Minor deficiency (10 points) if:

- There is no minor deficiency category for this question

Major deficiency (5 points) if:

- There is no major deficiency category for this question.

**Automatic Failure (0 points) if:**

- Numerous incidences of spoilage or adulteration of product.
- There is a single gross incidence of evidence of unacceptable limits of spoilage or adulteration in the crop, harvested product, ingredients (including water), food contact packaging or food contact surfaces.

**4.05.10: Are grading and packing surfaces, carts, ladders and other harvest aids used? If No, go to 4.05.11.**

Total points 0: **Information gathering question.** This refers to food contact surfaces used to grade, inspect, re-pack, or pack product (e.g., picking carts, grading tables, mushroom grading platforms, ladders, etc.).

**4.05.10a: Does the design and condition of the grading and packing surfaces (e.g., smooth surfaces, smooth weld seams, nontoxic materials, no wood) facilitate effective cleaning and maintenance?**

Total compliance (10 points): Grading and packing surfaces should be made of materials suitable for food contact that can be easily cleaned, sanitized and maintained. Equipment should be designed to allow access and easy cleaning (including hollow structures on supports, rollers, racks, etc.), with no hard to get to (debris catching) areas. Surfaces that are porous, trap debris, or are badly damaged should be replaced. Wood, for example, is porous and can trap moisture. Welds should be smooth and not "bobbly".

Minor deficiency (7 points) if:

- Single/isolated instance(s) of “bobbly” welds, rough surfaces, poorly designed equipment that traps debris.
- Single/isolated instance(s) of hard to reach areas where cleaning is made difficult.
- Single/isolated instance(s) of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Major deficiency (3 points) if:

- Numerous instances of “bobbly” welds, rough surfaces, poorly designed equipment that traps debris.
- Numerous instances of hard to reach areas where cleaning is made difficult.
- Numerous instances of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Non-compliance (0 points) if:

- Condition and/or design of equipment will not allow for effective cleaning under normal conditions.
- Widespread poor welding, rough surfaces, poorly designed equipment that traps debris.

**4.05.10b: Are there written cleaning and sanitation procedures (Sanitation Standard Operating Procedures) for the grading and packing surfaces that include the frequency of cleaning and sanitizing, and the procedures used, including chemical use details?**

Total compliance (5 points): Food contact surfaces used to grade, inspect, re-pack, or pack product (e.g., picking carts, grading tables, ladders, etc.) should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs). The program should state the frequency of cleaning and sanitizing, detail what, who, how and when, including chemical details (name, dilution/strength), and cleaning verification procedures.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of information missing from the SSOPs.

Major deficiency (1 point) if:

- Numerous instances of information missing from the SSOPs.

Non-compliance (0 points) if:

- There are no documented SSOPs.

**4.05.10c: Are cleaning and sanitation logs on file for grading and packing surfaces that show what was done, when, by who and detail strength testing of anti-microbial solution used to sanitize surfaces?**

Total compliance (10 points): Sanitation logs should include: date, list of areas/equipment that were cleaned and sanitized, sanitizer strength tests, and the individual accountable who signed-off for each task completed.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of incomplete records, discrepancies against the SSOPs or other omissions.

Major deficiency (3 points) if:

- Numerous instances of incomplete records, discrepancies against the SSOPs or other omissions.

Non-compliance (0 points) if:

- No sanitation logs.
- Sanitation logs exist but they are not reflecting what actually occurs.

**4.05.11: Are re-useable containers (e.g. buckets, totes, lugs, RPCs, bins) used in the harvesting operation? If No, go to 4.05.12.**



Total points 0: **Information gathering question.** This refers to any re-useable containers used in the harvesting operation (e.g., buckets, totes, lugs, RPCs, bins, gondolas, etc.) used in the harvesting operation.

**4.05.11a: Does the design and condition of re-useable containers (e.g., smooth surfaces, smooth weld seams, nontoxic materials, no wood, no fabric) facilitate effective cleaning and maintenance?**

Total compliance (10 points): All re-useable containers (totes, bins, buckets, etc.) should be made of easy to clean, smooth seamed materials that do not flake or oxidize. Efforts should be made to eliminate wooden surfaces because of its porous nature. Where wood containers are used, they should be in a state of good repair and covered by a documented repair program.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of “bobbly” welds, rough surfaces, poorly designed equipment that traps debris.
- Single/isolated instance(s) of hard to reach areas where cleaning is made difficult.
- Single/isolated instance(s) of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Major deficiency (3 points) if:

- Numerous instances of “bobbly” welds, rough surfaces, poorly designed equipment that traps debris.
- Numerous instances of hard to reach areas where cleaning is made difficult.
- Numerous instances of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Non-compliance (0 points) if:

- Condition and/or design of equipment will not allow for effective cleaning under normal conditions.
- Widespread poor welding, rough surfaces, poorly designed equipment that traps debris.

**4.05.11b: Are re-useable containers free from any handling contamination?**

Total compliance (10 points): Re-useable containers used in the harvesting process should be managed to eliminate contamination from inappropriate handling practices. **Handling contamination could also be caused using cloths or towels to remove dirt and/or debris from containers. Avoid stacking soiled bins on top of each other if the bottom of the bin has had direct contact with soil.**

Minor Deficiency (7 points) if:

- Single/isolated instance(s) of inappropriate handling practices.

Major Deficiency (3 points) if:

- Numerous instances of inappropriate handling practices.

Non-compliance (0 points) if:

- Widespread failure to prevent handling contamination.

**4.05.11c: Are there written cleaning and sanitation procedures (Sanitation Standard Operating Procedures) for the reusable containers that includes the frequency of cleaning and sanitizing, and the procedures used, including chemical use details?**

Total compliance (5 points): **Re-usable containers should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs).** The program should state the frequency of cleaning and sanitizing, **detail what, who, how and when, including chemical details (name, dilution/strength), and cleaning verification procedures.**

Minor deficiency (3 points) if:

- Single/isolated instance(s) of information missing from the **SSOPs.**

Major deficiency (1 point) if:

- Numerous instances of information missing from the **SSOPs**.

Non-compliance (0 points) if:

- There are no documented **SSOPs**.

**4.05.11d Are cleaning and sanitation logs on file for reusable containers that show what was done, when, by who and detail strength testing of anti-microbial solution used to sanitize surfaces?**

Total compliance (10 points): Sanitation logs should include: date, list of areas/equipment that were cleaned and sanitized, sanitizer strength tests, and the individual accountable who signed-off for each task completed. Where cleaning & sanitizing is handled by a 3rd party (packinghouse, contract RPC company) auditee is expected to provide evidence of cleaning & sanitizing activities.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of incomplete records, discrepancies against the **SSOPs** or other omissions.

Major deficiency (3 points) if:

- Numerous instances of incomplete records, discrepancies against the **SSOPs** or other omissions.

Non-compliance (0 points) if:

- No sanitation logs.
- Sanitation logs exist but they are not reflecting what actually occurs.

**4.05.12: Are tools (e.g. knives, clippers, scissors, etc.) used in harvesting? If No, go to 4.05.13.**

Total points 0: **Information gathering question**. This refers to harvest tools (e.g. knives, clippers, scissors, etc.) used in harvesting.

**4.05.12a: Does the design and condition of harvest tools (e.g., smooth surfaces, smooth weld seams, nontoxic materials, no wood, no fabric) facilitate effective cleaning and maintenance?**

Total compliance (10 points): To prevent foreign contamination issues, harvest tools (e.g., knives, coring rings, etc.) should be constructed of easy to clean materials. Tools should be shard free, and smooth seamed so that they do not have the ability to flake or oxidize.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of “bobbly” welds, rough surfaces, poorly designed tools that trap debris.
- Single/isolated instance(s) of tools where cleaning is made difficult.
- Single/isolated instance(s) of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Major deficiency (3 point) if:

- Numerous instances of “bobbly” welds, rough surfaces, poorly designed tools that trap debris.
- Numerous instances of tools where cleaning is made difficult.
- Numerous instances of inferior materials e.g. (porous material construction, wood, non-food grade materials).

Non-compliance (0 points) if:

- Condition and/or design of tools will not allow for effective cleaning under normal conditions.
- Widespread poor welding, rough surfaces, poorly designed tools that trap debris.

**4.05.12b: Are harvest tools free from exposure to the ground and/or any handling contamination?**

Total compliance (5 points): Harvest tools (e.g., knives, clippers, scissors, coring rings, holsters, etc.) should be free from exposure to the ground and/or any handling contamination.

Minor Deficiency (3 points) if:

- Single/isolated instance(s) of handling contamination (e.g., exposure to the ground).

Major Deficiency (1 point) if:

- Numerous instances of handling contamination (e.g., exposure to the ground).

Non-compliance (0 points) if:

- Widespread failure to prevent handling contamination.

**4.05.12c: Is there a tool accountability, storage and control program for knives and similar cutting hand tools used in the harvest area when not in use?**

Total compliance (5 points): There should be an accountability, storage and control program in place for knives and similar cutting hand tools to identify potential product contamination. Tool accountability should include the inspection of the cutting surfaces for wear and tear, as well as a tool inventory check at the start and end of each shift. Workers should not take tools, such as knives, from the work area and should be required to use knife scabbards that can easily be cleaned i.e. non-porous. Leather scabbards should not be used.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of errors or omissions in the tool inventory check.

Major deficiency (1 point) if:

- Numerous instances of errors or omissions in the tool inventory check.

Non-compliance (0 points) if:

- There are no records for tool accountability.
- Production hand tools do not remain under the control of the company (e.g., taken home by workers).

**4.05.12d: Are there written cleaning and sanitation procedures (Sanitation Standard Operating Procedures) for harvest tools that includes the frequency of cleaning and sanitizing, and the procedures used, including chemical use details?**

Total compliance (5 points): Harvest tools should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs). The program should state the frequency of cleaning and sanitizing, detail what, who, how and when, including chemical details (name, dilution/strength), and cleaning verification procedures.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of information missing from the SSOPs.

Major deficiency (1 point) if:

- Numerous instances of information missing from the SSOPs.

Non-compliance (0 points) if:

- There are no documented SSOPs.

**4.05.12e Are cleaning and sanitation logs on file for harvest tools that show what was done, when, by who and detail strength testing of anti-microbial solution used to sanitize surfaces?**

Total compliance (10 points): Sanitation logs should include: date, list of areas/equipment that were cleaned and sanitized, sanitizer strength tests, and the individual accountable who signed-off for each task completed.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of incomplete records, discrepancies against the SSOPs or other omissions.

Major deficiency (3 points) if:

- Numerous instances of incomplete records, discrepancies against the SSOPs or other omissions.

Non-compliance (0 points) if:

- No sanitation logs.
- Sanitation logs exist but they are not reflecting what actually occurs.

**4.05.12f: Are harvesting tool dips being maintained properly in terms of anti-microbial solution strength and are records of the solution checks being maintained? AUDITORS SHOULD REQUIRE A TEST AT THE TIME OF THE AUDIT.**

Total compliance (5 points): There should be records to show that the tool dip solutions (e.g., knife dips) are being maintained on a regular basis. The strength of the sanitizers should be checked on a regular basis (e.g. hourly) and recorded, with a minimum strength for a chlorinated system of  $\geq 10$  ppm free chlorine. All test solutions/strips should be within date code, appropriate for the concentrations used and stored correctly (especially light and temperature sensitive materials). Total chlorine does not measure the "available chlorine" after the tool dip has started to be used. Auditors are instructed to require the auditee to check the strength of anti-microbial chemicals during the audit.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of strength tests not being performed at the required frequency.
- Single/isolated instance(s) of missing or incomplete records.
- Single/isolated instance(s) of corrective actions not being performed.
- Single/isolated instance(s) of testing not being done correctly.

Major deficiency (1 point) if:

- Numerous instances of strength tests not being performed at the required frequency.
- Numerous instances of missing or incomplete records.
- Numerous instances of corrective actions not being performed.
- Numerous instances of testing not being done correctly.

Non-compliance (0 points) if:

- There is no strength testing being performed or fundamental failure to perform tests correctly.
- Fundamental failure to maintain records.
- Corrective actions are not being performed.

**4.05.13: Is machinery used in the harvesting process? If No, go to 4.05.14.**

Total points 0: Information gathering question. This includes equipment with the potential to affect product (e.g., conveyor belts, mechanical harvesting units, field packing rigs, field packing buses, live bottom trailers, coring rigs and any "in-field" processing rigs including tractors/trucks pulling in-field equipment). Please note that there are some more specific questions for coring rigs and any "in-field" processing rigs in a later section.

**4.05.13a: Are food contact machinery surfaces free of flaking paint, corrosion, rust and other unhygienic materials (e.g., tape, string, cardboard, etc.)?**

Total compliance (15 points): Food contact surfaces on machinery should be free of flaking paint corrosion, rust, and/or unhygienic materials, as they can pose foreign material and/or microbiological hazards. Food contact surfaces should be made of non-toxic, non-porous materials. Surfaces should be maintained in good condition.

Minor deficiency (10 points) if:

- Single/isolated instance(s) of flaking paint, rust or other unhygienic materials which do not pose a threat to product or packing contamination.

Major deficiency (5 points) if:

- Single/isolated instance(s) of flaking paint, rust or other unhygienic materials which may pose a threat to product or packing contamination.

- Numerous instances of flaking paint, rust or other unhygienic materials which do not pose a threat to product or packing contamination.

Non-compliance (0 points) if:

- Inspection shows numerous areas of flaking paint, rust or other unhygienic materials, which may pose a threat to product or packing contamination.
- **Any observation of direct gross widespread contamination of product, ingredient or packaging materials (revert back to Q 4.05.09, automatic failure).**

#### **4.05.13b: Are food contact machinery surfaces clean?**

Total compliance (15 points): Unsanitary food contact surfaces can directly lead to contamination of the product. All equipment surfaces that make contact with product should be kept in a clean condition to avoid cross contamination. Food debris, bio films, excessive dust, etc., should be cleaned off equipment.

*21 CFR 110.3 g Definition. Food-contact surfaces are those surfaces that contact human food and those surfaces from which drainage onto the food or onto surfaces that contact the food ordinarily occurs during the normal course of operations. "Food-contact surfaces" includes utensils and food-contact surfaces of equipment, tables, etc.*

Minor deficiency (10 points) if:

- Single/isolated instance(s) of food contact surface that is unclean.

Major deficiency (5 points) if:

- Numerous instances of food contact surfaces that are unclean.
- Some equipment is not cleaned after the harvesting operation has ceased for that run time e.g. after final shift.

Non-compliance (0 points) if:

- Widespread observations of food contact surfaces that are unclean.
- Equipment is not cleaned after the harvesting operation has ceased for that run time e.g. after final shift.

#### **4.05.13c: Are non-food contact machinery surfaces free of flaking paint, corrosion, rust and other unhygienic materials (e.g., tape, string, cardboard, etc.)?**

Total compliance (10 points): Non-food contact surfaces should be free from any potential source of contamination such as flaking paint, corrosion, rust and/or other unhygienic materials (e.g., tape, string, cardboard, etc.). The surface should be made of smooth material that can be cleaned and sanitized easily. Where possible, equipment framework is not penetrated by bolts or studs.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of flaking paint, rust or other unhygienic materials e.g. tape.

Major deficiency (3 points) if:

- Numerous instances of flaking paint, rust or other unhygienic materials e.g. tape.

Non-compliance (0 points) if:

- Widespread evidence of rusting, flaking paint, use of unhygienic materials e.g. tape.
- **Any observation of direct gross widespread contamination of product, ingredient or packaging materials (revert back to Q 4.05.09, automatic failure).**

#### **4.05.13d: Are non-food contact machinery surfaces clean?**

Total compliance (10 points): Unsanitary non-food contact surfaces can indirectly lead to contamination of the product. All equipment surfaces that do not make contact with product should be kept in a clean condition to avoid cross contamination. Food debris, bio films, excessive dust, etc., should be cleaned off non-food contact equipment.

21 CFR 110.3 g Definition. Food-contact surfaces are those surfaces that contact human food and those surfaces from which drainage onto the food or onto surfaces that contact the food ordinarily occurs during the normal course of operations. "Food-contact surfaces" includes utensils and food-contact surfaces of equipment, tables, etc.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of a non-food contact surface that is unclean.

Major deficiency (3 points) if:

- Numerous instances of non-food contact surfaces that are unclean.
- Some equipment is not cleaned after the production has ceased for that run time e.g. after final shift.

Non-compliance (0 points) if:

- Widespread observations of non-food contact surfaces that are unclean.
- Equipment is not cleaned after the harvesting operation has ceased for that run time e.g. after final shift.

**4.05.13e: Does the design and condition of the machinery (e.g., smooth surfaces, smooth weld seams, nontoxic materials, no wood) facilitate effective cleaning, sanitation and maintenance?**

Total compliance (10 points): Machinery should be made of appropriate materials that can be easily cleaned and maintained, that are not porous or toxic and can withstand the cleaning process. Equipment should be designed to allow access and easy cleaning (including hollow structures on supports, rollers, racks, etc.), with no hard to get to (debris catching) areas. Surfaces that are porous, trap debris, badly damaged should be replaced. Wood, for example, is porous and can trap moisture. Welds should be smooth and not "bobbly".

Minor deficiency (7 points) if:

- Single/isolated instance(s) of "bobbly" welds, rough surfaces, poorly designed equipment that traps debris.
- Single/isolated instance(s) of hard to reach areas where cleaning is made difficult.
- Single/isolated instance(s) of inferior materials e.g. porous material construction, wood, non-food grade materials).

Major deficiency (3 point) if:

- Numerous instances of "bobbly" welds, rough surfaces, poorly designed equipment that traps debris.
- Numerous instances of hard to reach areas where cleaning is made difficult.
- Numerous instances of inferior materials e.g. porous material construction, wood, non-food grade materials).

Non-compliance (0 points) if:

- Condition and/or design of equipment will not allow for effective cleaning under normal conditions.
- Widespread poor welding, rough surfaces, poorly designed equipment that traps debris.

**4.05.13f: Is machinery designed and used properly to minimize product contamination (e.g. drip pans utilized, dedicated tractor pathways)?**

Total compliance (5 points): Overhead contamination from materials such as hydraulic fluid can result in product and packaging contamination, and therefore, equipment should be fitted with catch pans. Dedicated tractor pathways should also be used to minimize product contamination.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of possible overhead contamination.

Major deficiency (1 point) if:

- Numerous instances of possible overhead contamination.

Non-compliance (0 points) if:

- No protective devices have been installed to eliminate potential contamination.

**4.05.13g: Are all glass issues on harvesting machines, in-field trucks, and tractors protected in some manner?**

Total compliance (3 points): Glass located on the harvesting machinery (e.g., lights, night lights) that may pose a threat of contamination onto product, packaging, and re-useable containers should be protected. Machinery includes tractors and other equipment that may come into contact with product. There should be no evidence of cracked lenses.

Minor deficiency (2 points) if:

- Single/isolated instance(s) of unprotected glass.

Major deficiency (1 point) if:

- Numerous instances of unprotected glass.

Non-compliance (0 points) if:

- Widespread failure to control glass on harvesting machines, in-field trucks and/or tractors.
- More than one instance of a broken glass item found during the audit.

**4.05.13h: Are all platforms above product, packaging, or food contact surfaces (e.g., belts) on the harvest machinery and in-field trucks fitted with protection to prevent product contamination?**

Total compliance (3 points): Overhead contamination of exposed product areas can result in microbiological, chemical and/or physical contamination. Measures should be taken to eliminate or reduce potential contamination by fitting protection on **platforms and food contact surfaces above** exposed product, food contact surfaces, and belts.

Minor deficiency (2 points) if:

- Single/isolated instance(s) of possible overhead contamination **from unprotected food contact platforms or surfaces.**

Major deficiency (1 point) if:

- Numerous instances of possible overhead contamination **from unprotected product platforms or surfaces.**

Non-compliance (0 points) if:

- No protective devices have been installed to eliminate potential contamination.

**4.05.13i: Are there written cleaning and sanitation procedures (Sanitation Standard Operating Procedures) for the harvest machinery that includes the frequency of cleaning and sanitizing, the procedures used including chemical use details?**

Total compliance (5 points): **Harvest machinery should be cleaned and sanitized on a regularly scheduled basis, based on written Sanitation Standard Operating Procedures (SSOPs).** The program should state the frequency of cleaning and sanitizing, **detail what, who, how and when, including chemical details (name, dilution/strength), and cleaning verification procedures.** Frequency should reflect the type of machinery, type of harvesting practice and the risk associated with the crop involved. **This includes water tanks used for post-harvest water use.** For "in-field" processing, clean and core, etc., at least daily cleaning should be performed.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of information missing from the **SSOPs.**

Major deficiency (1 point) if:

- Numerous instances of information missing from the **SSOPs.**

Non-compliance (0 points) if:

- There are no documented **SSOPs**.

**4.05.13j Are cleaning and sanitation logs on file for harvest machinery that show what was done, when, by who and detail strength testing of anti-microbial solution used to sanitize surfaces?**

Total compliance (10 points): Sanitation logs should include: date, list of areas/equipment that were cleaned and sanitized, sanitizer strength tests, and the individual accountable who signed-off for each task completed.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of incomplete records, discrepancies against the SSOPs or other omissions.

Major deficiency (3 points) if:

- Numerous instances of incomplete records, discrepancies against the SSOPs or other omissions.

Non-compliance (0 points) if:

- No sanitation logs.
- Sanitation logs exist but they are not reflecting what actually occurs.

**4.05.13k: Is there written documentation showing that only food grade lubricants are used on the critical parts of the harvesting machinery that have the potential to contaminate product?**

Total compliance (3 points): In order to prevent or reduce contamination to product/packaging, food grade lubricants (i.e. incidental food contact compounds or H1 materials) should be used on critical areas of the equipment where product exposure exists. Proof must be available that food grade lubricants are being used.

Minor deficiency (2 points) if:

- Single/isolated instance(s) of missing or incomplete evidence.

Major deficiency (1 point) if:

- Numerous instances of missing or incomplete evidence.

Non-compliance (0 points) if:

- There is no documented evidence that food grade lubricants are being used on the critical parts of the harvest machinery.

**4.05.14: Is water used directly on product contact (e.g. re-hydration, core in field)? If No, go to 4.05.15.**

Total points 0: **Information gathering question.** This refers to water that is used directly on product contact. Examples may include but are not limited to re-hydration, core in field.

**4.05.14a: Are there specific Standard Operating Procedures (SOPs) for the monitoring of anti-microbial parameters in single-pass and/or recirculated/batch water systems and changing of recirculated and batch water systems (e.g., dump tanks) and for monitoring pH and water temperature (if applicable)?**

Total compliance (10 points): There should be specific SOPs describing the process of performing and recording anti-microbial strength testing in water systems (including parameters, testing frequency, methodology and corrective action requirements), methods and monitoring procedures for measuring build-up of organic material (turbidity) in recirculated and batch water systems and monitoring pH and water temperature (if applicable). Water should be changed when it is dirty or when switching products. There should be documentation that validates the water changing frequency. Minimum frequency for water changing is at least daily; records of changes are kept. Water may be used for longer if a validated regeneration system (e.g., a water pasteurization/filtration system) is being used. The water temperature



should be appropriate for the products and processes being performed. Measuring total chlorine is not viewed as acceptable for recycled water systems. Single pass systems must have a stated anti-microbial level. For chlorine, the criteria should be  $\geq 10$  ppm free chlorine. Lower concentrations should be properly justified with supporting documents, rationale and evidence. Note, US (NOP) regulations allow for chlorine use in wash water at levels sufficient to control microbial contaminants and higher than 4 ppm free chlorine, where there is a final through rinse with potable water to meet their  $\leq 4$  ppm free chlorine product contact requirement. Other anti-microbials include peracetic acid, chlorine dioxide, etc.

**Reference:**

[https://www.canr.msu.edu/news/turbidity\\_in\\_post\\_harvest\\_wash\\_water\\_monitor\\_and\\_change\\_when\\_needed](https://www.canr.msu.edu/news/turbidity_in_post_harvest_wash_water_monitor_and_change_when_needed)

Gomez-Lopez, V.M., Lannoo A.S., Gil, M.I. Allende, A., 2014. Minimum free chlorine residual level required for the inactivation of *Escherichia coli* O157:H7 and trihalomethane generation during dynamic washing of fresh-cut spinach. Food Control 42, 132-138.

Haute, S.V., Luo, Y., Bolten, S., Gu, G., Nuo, X., 2020. Survival of *Salmonella enterica* and shifts in the culturable mesophilic aerobic bacterial community as impacted by tomato wash water particulate size and chlorine treatment. Food Microbiology 90, 103070.

<https://www.ams.usda.gov/rules-regulations/organic/handbook/5026>

Minor deficiency (7 points) if:

- Single/isolated instance(s) of errors or omissions within the SOPs for water monitoring and changing.
- Single/isolated instance(s) of errors or omissions in the validation documentation for water monitoring and changing.

Major deficiency (3 points) if:

- Numerous instances of errors or omissions within the SOP's for water monitoring and changing.
- Numerous instances of errors or omissions in the validation documentation for water monitoring and changing.

Non-compliance (0 points) if:

- SOPs for water monitoring and changing do not exist.
- SOPs do not address the frequency of water monitoring and changing.
- SOPs require changing less than daily and there is not a validated regeneration system used.
- There is no validation documentation for water monitoring and changing frequency.

**4.05.14b: Are there records (with corrective actions) that show anti-microbial (e.g., free chlorine, peroxyacetic acid) strength testing of wash water prior to start up and throughout the run?**

Total compliance (10 points): Water systems using anti-microbial agents should have records showing that the strength of the solution is within stated parameters. For "single pass" systems, this should be every batch of anti-microbial solution that is mixed. Recirculated/batch water systems should be checked hourly by measuring the "free anti-microbial" as opposed to bound microbial (e.g., testing for free chlorine as opposed to total chlorine). Re-circulated/ batch water systems using sodium/calcium hypochlorite should have records showing the pH is controlled. Where out of specification results are recorded, there should be corrective action records, including root cause analysis and preventive actions (where relevant).

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[http://edocket.access.gpo.gov/cfr\\_2009/aprqtr/pdf/21cfr173.315.pdf](http://edocket.access.gpo.gov/cfr_2009/aprqtr/pdf/21cfr173.315.pdf)

<http://archive.onfarmfoodsafety.org/wp-content/uploads/2011/05/Chlorination-of-Water-for-Fluming-and-Cleaning-Fresh-Fruits-and-Vegetables-and-Cleaning-Equipment.pdf>

UC Davis, <https://ucfoodsafety.ucdavis.edu/sites/g/files/dgvnsk7366/files/inline-files/26414.pdf>

LGMA Metrics, <https://limatech.com/resources/>

<https://producesafetyalliance.cornell.edu/resources/general-resource-listing/>

Minor deficiency (7 points) if:

- Single/isolated instance(s) of records showing solution strength out of parameters without adequate documented corrective actions.
- Single/isolated instance(s) of errors or omission in the records.
- Single/isolated instance(s) of total chlorine being recorded when free chlorine **should** have been **used** e.g. in chlorinated recycled water systems
- Single/isolated instance(s) of checks not carried out at the required frequencies.

Major deficiency (3 points) if:

- Numerous instances of records showing solution strength out of parameters without adequate documented corrective actions.
- Numerous instances of errors or omission in the records.
- Numerous instances of total chlorine being recorded when free chlorine **should** have been **used** e.g. in chlorinated recycled water systems.
- Numerous instances of checks not carried out at the required frequencies.

Non-compliance (0 points) if:

- Water testing is not being recorded.
- Recorded solution strengths consistently out of parameters i.e. an unstable system (even if documented corrective actions exist).
- Widespread errors and omissions in the records.
- Total chlorine has been recorded throughout the system, when free chlorine should have been recorded e.g. in chlorinated recycled water systems.
- Frequencies of checks consistently do not meet requirements of prior to start up and throughout the production runs.
- Single pass water system is in use without anti-microbial being used. **The auditor should consider whether to apply 4.05.09 and score an automatic failure in view of the risk of cross contamination.**
- **Recycled/reused water system is in use without an anti-microbial being used. The auditor should consider whether to apply 4.05.09 and score an automatic failure in view of the risk of cross contamination.**

**4.05.14c: Are there records of monitoring for build-up of organic material (turbidity) and changing of recirculated and batch water systems (e.g., dump tanks, flumes, hydrovacuums, hydrocoolers, etc.)?**

Total compliance (5 points). There should be records of visual monitoring or testing and changing of recirculated and batch water systems **during use. Water should be changed at least daily and when it is dirty and when switching products.** Water may be used for longer if a validated regeneration system (e.g., a water pasteurization/filtration system) is being used.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of omissions or incorrect data in the records.
- Single/isolated instance(s) of monitoring not taking place on a consistent basis.

Major deficiency (1 point) if:

- Numerous instances of omissions or incorrect data in the records.
- Numerous instances of monitoring not taking place on a consistent basis.

Non-compliance (0 points) if:

- No records.
- Failure to maintain records.

**4.05.14d: Does the operation use the appropriate test strips, test kits or test probes for verifying the concentrations of anti-microbial chemicals (e.g., postharvest product contact water, dip stations, etc.) being used, are they in operational condition and are they being used correctly?**

Total compliance (15 points): The strength (concentration, pH, etc.) of anti-microbial chemicals should be checked using an appropriate method for the anti-microbial in use (e.g., chemical reaction-based test, test

probe, or as recommended by the disinfectant supplier). Water samples for testing should be taken from, and/or probes located in, areas farthest from the antimicrobial injection/addition site. Any water treatment at the source (e.g., well, canal) should be monitored. Solutions that are too weak will be ineffective, while those too strong may be harmful to workers or product. Where necessary, pH of solutions should also be checked. Methods include dip sticks, test strip papers, conductivity meters, titration, color comparison methods (e.g., tintometers, etc.). All test solutions/strips should be within date code, appropriate for the concentrations used and stored correctly (especially light and temperature sensitive materials). If an ORP meter controls the pumps that are injecting the anti-microbial and/or buffer, free chlorine levels should be verified by an independent method (e.g., titration, appropriate test strips). Probe sensors should be properly located, have periodic cleaning and calibration and may become temporarily saturated by over-injection of anti-microbial or buffer. The auditor should have the auditee check the strength of anti-microbial chemicals while touring the operation.

Potentially useful websites:

<http://postharvest.ucdavis.edu/files/260798.pdf>

<http://ucfoodsafety.ucdavis.edu/files/26414.pdf>

<http://postharvest.tfrec.wsu.edu/pages/J411B>

<https://www.fda.gov/media/129790/download>

Minor deficiency (10 points) if:

- Single/isolated instance(s) of a method not being used correctly.
- Single/isolated instance(s) of a testing procedure being used that is not appropriate for the concentration and/or sanitizer in use.
- Single/isolated instance(s) of out of date verifying chemicals being used.

Major deficiency (5 points) if:

- Numerous instances of a method not being used correctly.
- Numerous instances of a testing procedure being used that is not appropriate for the concentration and/or chemical in use.
- Numerous instances of out of date verifying chemicals being used.
- ORP meter used to control pumps injecting anti-microbial and or/buffer without an independent method to verify readings.

Non-compliance (0 points) if:

- Chemical concentrations are not monitored.
- Equipment to monitor anti-microbial chemical concentrations is not available or is not being used correctly.

**4.05.15: Is the harvested product "in-field processed" or "in-field semi-processed" (e.g., core in field, top & tail, florets)?**

Total points 0: Information gathering question. "In-field processed" products are subject to all the questions in this audit and these extra requirements below. "In-field processed" usually refers to product having multiple cut surfaces created in the field (e.g., coring in field, topping & tailing, florets).

**4.05.15a: Where harvested product is "in-field processed" or "in-field semi-processed," does the process flow, machine layout, worker control, utensil control, etc. ensure that processed products are not contaminated by unprocessed products?**

Total compliance (5 points): The design, worker management, utensil management and general practice should avoid contact between processed and unprocessed product, contact surfaces and tools.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of worker/utensil/machine layout cross contamination.
- Minor process issues where processed materials come into the same area as raw materials, but the two products do not touch in any way, i.e. no potential risk of cross contamination.

- Some potential space issues where the process flow is being forced to bring finished and raw material into close proximity.

Major deficiency (1 point) if:

- Numerous instances of worker/utensil cross contamination.
- Serious process flow issues where raw material can potentially cross contaminate finished goods.
- Numerous space issues where the process flow is being forced to bring finished and raw material into close proximity.

Non-compliance (0 points) if:

- Widespread issues with worker and/or utensil cross contamination.
- Process flow issues are observed to result in product raw/finished goods cross contamination.

**4.05.15b: Are all plastic bin liners closed immediately after harvest to avoid contamination of the harvested product?**

Total compliance (3 points): All plastic bin liners should be closed immediately and appropriately secured after harvest to avoid product contamination.

Minor deficiency (2 points) if:

- Single/isolated instance(s) of a bin liner not being closed immediately after harvest.

Major deficiency (1 point) if:

- Numerous instances of bin liners not being closed immediately after harvest.

Non-compliance (0 points) if:

- Widespread failure to close bin liners immediately after harvest.

## Post-harvest Treatments

**4.06.01: Is there any post-harvest treatment performed to the product in the growing area? If No, go to 4.07.01.**

Total points 0: Information gathering question. This refers to any post-harvest treatments taking place in the growing area (e.g. blueberries packed in the field with sodium metabisulphite pads, tables grapes packed in the field treated/gassed with sulfur dioxide, etc.).

**4.06.01a: Are there up-to-date records of all pesticides applied in the growing area to the harvested product? A ZERO POINT (NON-COMPLIANCE) DOWNSCORE IN THIS QUESTION RESULTS IN AUTOMATIC FAILURE OF THIS AUDIT.**

Total compliance (15 points): The growing operation should follow a post-harvest pesticide application record keeping program that at least includes the following: date of application, product identity (e.g. Lot or batch number/code), brand/product name, EPA registration number (or country of production equivalent registration information), active ingredient, amount applied (rate/dosage), applicator identification, application equipment identification "and/or" type of treatment, and target pest/disease. Information may be recorded on separate documents providing all information is available and consistent.

Minor deficiency (10 points) if:

- Single/isolated instance(s) of missing required information (e.g. missing target pest, applicator identification, equipment identification or type of treatment, etc.)

Major deficiency (5 points) if:

- Numerous instances of missing required information (e.g. missing target pest, applicator identification, equipment identification or type of treatment, etc.)

**Automatic Failure (0 points) if:**

- **Any failure to record critical required information. (e.g. brand/product name, date, amount applied, product identity, etc.)**
- **Fundamental failure to record required information.**

**4.06.01b: Are all pesticides applied post-harvest authorized/registered by the authority/government of the country of production? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): Application records show all pesticides applied post-harvest are officially registered by the country of production for the target crop (e.g. EPA in the US, COFEPRIS in Mexico, SAG in Chile, Pest Management Regulatory Agency (PMRA) in Canada). In countries where there is approval for its use, this is acceptable when operated by the government and considers as a minimum the target crop, pesticide trade name and active ingredient, formulation, dosage, pre-harvest intervals and target pest(s) or in cases where the government authorizes an active ingredient but not a trade name, there must be evidence of compliance with the MRLs of the destination countries for the applied "authorized" active ingredient (see 4.06.01d)

When pesticide product registration/authorization information does not exist for the target crop in the country of production or there are not enough products registered/authorized to control a pest or disease (partial registration/authorization), extrapolation is possible if that practice is allowed by the country of production (e.g. in Mexico "Anexo Técnico 1. Requisitos Generales para la Certificación y Reconocimiento de Sistemas de Riesgos de Contaminación (SRRC) Buen Uso y Manejo de Plaguicidas (BUMP) o Buenas Prácticas Agrícolas en la Actividad de Cosecha (BPCo) durante la producción primaria de vegetales – Section 12.3 should be considered. ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.

Minor deficiency (10 points) if:

- There is no minor deficiency category for this question

Major deficiency (5 points) if:

- There is no major deficiency category for this question.

**Automatic Failure (0 points) if:**

- **There is a single incidence of pesticides being used without being registered or authorized by the country of production government.**

**4.06.01c: Are all pesticides applied post-harvest used as recommended/directed in the label? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): Application records should show all post-harvest pesticides are applied in accordance with label directions and any federal, state or local regulation.

In operations applying post-harvest pesticides "authorized" by the government, where use directions are not in the label, application records should show "authorization program" use/applications directions are followed.

Minor deficiency (10 points) if:

- There is no minor deficiency category for this question

Major deficiency (5 points) if:

- There is no major deficiency category for this question.

**Automatic Failure (0 points) if:**

- **There is a single incidence of pesticides being used without following label directions.**

**4.06.01d: Where products are destined for export, is there information for post-harvest pesticide Maximum Residue Limits (MRLs) compliance considering, country of destination, target crop(s) and active ingredients applied?**

Total compliance (15 points): Where products are destined for export, the operation should have documented evidence about the MRL requirements for each country of destination for each post-harvest pesticide (active ingredient) applied. If there is no MRL defined by the country of destination for any active ingredient applied, the operation shall have documented evidence of the applicable regulations in that country (e.g. default MRL, Codex Alimentarius, non-detectable, etc.). In the case where the MRLs have been standardized or harmonized for a group of countries (i.e. European Union) it is acceptable that the operation demonstrate compliance by referencing the "list" of MRLs issued from the formal body that represents those countries for this purpose.

**This question is Not Applicable if the product is only sold in the country of production (domestic market).**

Minor deficiency (10 points) if:

- Single/isolated instance(s) of missing required information (e.g. missing MRL information for an active ingredient)

Major deficiency (5 points) if:

- Numerous instances of missing required information (e.g. missing MRL information for 3 or more active ingredient)

Non-Compliance (0 points) if:

- There is no MRL information for the destination countries (or widespread missing information)

**4.06.01e: Where products are destined for export, is there evidence that Maximum Residue Levels (MRL's), of the intended markets are met? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.**

Total compliance (15 points): Maximum Residue Limits (MRLs) analysis should be performed when the MRL of the destination countries are lower (stricter) than the country of production. This assumes that grower is meeting country of origin MRL and label requirements. MRL test results and records should demonstrate that products/crops meet MRL regulations in those intended markets and any non-conforming product is diverted from those markets.

The auditor should review MRL laboratory reports to ensure MRL entry requirements are met for the country of destination or the applicable regulation in the country of destination when there is no MRL set for any active ingredient, (e.g. the Codex Alimentarius Commission, default MRL, under the limit of detection [LOD], etc.) MRL laboratory reports shall be traceable to the operation and consider at least the active ingredients applied post-harvest.

Other alternative or complementary methods to demonstrate MRL compliance for an active ingredient include:

- i) Documented analysis of degradation curves and corresponding dosage and/or pre-harvest interval modifications. Degradation curves used as reference should be issued/provided by the manufacturer of the pesticide or country of production government and correspond to the degradation of the pesticide active ingredient in the agroclimatic zone where the Plant Protection Product was applied.
- ii) Industry guidelines (e.g. "Agenda de Pesticidas" From ASOEX Chile).

Following a procedure for when and where to pull samples for MRL testing based on risk considering factors such as active ingredients applied, timing of the application and harvest, pre-harvest intervals, dosage, etc., is an ideal practice.

**This question is Not Applicable if the product is only sold in the country of production (domestic market).**

Minor deficiency (10 points) if:

- There is no minor deficiency category for this question

Major deficiency (5 points) if:

- There is no major deficiency category for this question.

**Non-compliance (0 points) if:**

- **There is a single incidence of an active ingredient with an exceeded MRL.**
- **There is no evidence of MRL compliance for any active ingredient applied.**
- **Evidence provided is not sufficient to support MRL compliance.**
- **Automatic failure if corrective actions are not provided and accepted by the certification body.**

**4.06.01f: Is there a documented procedure for the post-harvest pesticide applications, considering mixing and loading, applying, and equipment cleaning?**

Total compliance (15 points): There should be a documented procedure describing how to mix and load post-harvest pesticides, how to apply post-harvest pesticides and how to rinse and clean post-harvest pesticide application equipment. The procedure should include adhering to the product label.

Mixing and loading procedures should require activity to be in a well-ventilated, well-lit area away from unprotected people, food and other items that might be contaminated.

Application procedures should include information about the necessary Personal Protective Equipment (PPE), re-entry intervals, excessive winds, posting of treated areas, etc.

Equipment cleaning procedures should include measuring devices, mixing containers, application equipment (e.g. spray bar), rinseable containers, etc., and should address: rinsing empty equipment immediately to prevent residues from drying and becoming difficult to remove, and adding the rinsate (water from rinsing containers or equipment) to spray tanks as part of the pesticide mixing process.

If any of these practices are observed during the inspection, it should be evident that the procedures are being followed.

This procedure could be partially applicable or non-applicable depending the type of post-harvest treatment used (e.g. SO<sub>2</sub> Generator pads do not require mixing/loading instructions)

Minor deficiency (10 points) if:

- Single/isolated instance(s) of an error or omission in the procedure or practice.

Major deficiency (5 points) if:

- Numerous instances of an error or omission in the procedure or practice.

Non-Compliance (0 points) if:

- Widespread errors or omissions in the procedure or practice.
- There is no procedure.

**4.06.01g: Is there documentation that shows the individual(s) making decisions for post-harvest pesticide applications is competent?**

Total compliance (15 points): Current valid certificates, licenses, or another form of proof of training recognized by prevailing national/local standards and guidelines should be available for the individual(s) making decisions on post-harvest pesticide applications (e.g., choice of pesticides, application rates, etc.)

Minor deficiency (10 points) if:

- Single/isolated instance(s) of missing documentation.

Major deficiency (5 points) if:

- Single/isolated instance of a proof of training/certificate/license being out of date.
- Numerous instances of missing documentation.

Non-compliance (0 points) if:

- There is no documentation for the individual(s) making the decision.

**4.06.01h: Is there documentation that shows that individuals who handle post-harvest pesticide materials are trained and are under the supervision of a trained person?**

Total compliance (15 points): All workers who handle pesticides must have current certificates, licenses, or other forms of proof of training (recognized by prevailing national/local standards and guidelines) qualifying them to do so independently or they must have proof of training and be under the supervision of a worker who can do so independently.

Minor deficiency (10 points) if:

- Single/isolated instance(s) of missing training documentation.

Major deficiency (5 points) if:

- Numerous instances of missing training documentation.
- Worker who is not qualified to handle pesticide materials independently has training but no supervision

Non-compliance (0 points) if:

- There is no documentation showing training for individuals handling pesticides materials.
- There is no documentation for the supervising person

**Transportation and Tracking****4.07.01: Are the vehicles loading and transporting fresh produce from growing area to facility limited to this function only, maintained in proper condition, and adequate for the purpose?**

Total compliance (5 points): Vehicles transporting product should be limited to this function only and should be adequate for transporting produce. Vehicles should be part of the sanitation program, in a good state of repair, clean, odor free, free from personal items, and free from chemical and microbiological contamination. If loads are tied down, tarps, belts, ropes, etc., should also be in good working order, without contamination risk to product.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of an issue with a transport vehicle.

Major deficiency (1 point) if:

- Numerous instances of issues with transport vehicle(s).

Non-compliance (0 points) if:

- Fundamental failure to maintain transport vehicles in good repair, in good working order and/or to prevent contamination risk to the product.

**4.07.02: Is there a system in place to track product from the growing area?**

Total points (10 points): There should be a tracking system in place to ensure that product can be traced back to each exact growing location and harvest date (e.g., grower identification, farm identification, block, harvesting date, etc.).

Minor deficiency (7 points) if:

- Single/isolated instance(s) of missing required information for harvested commodities i.e. growing location or harvest information.

Major deficiency (3 point) if:

- Numerous instances of missing required information for harvested commodities i.e. growing location or harvest information.

Non-compliance (0 points) if:

- There is no tracking information for harvested commodities.



**4.07.02a: If product is being packed in the **growing area**, are the cartons, boxes, RPCs or any other packaging material used, identified with the harvesting date and growing location information? This question does not apply for raw material/bulk product destined for further handling in a packinghouse or processing facility.**

Total compliance (10 points): For finished goods packed in the **growing area**, there should be date coding on each external package, as cartons, boxes, reusable plastic containers or any other. The information should be enough to identify the date of harvest and the exact location of where the product was grown. This question is not applicable for raw material/bulk product destined for further handling in a packinghouse or processing facility.

Minor deficiency (7 points) if:

- Single/isolated instance(s) of missing or incomplete tracking information on the packaging.

Major deficiency (3 points) if:

- Numerous instances of missing or incomplete tracking information on the packaging.

Non-compliance (0 points) if:

- Fundamental failure to label packaging with complete tracking information.
- There is no labeling taking place on packaging.

**4.07.02b: If product is being packed in the **growing area** and individual packing units are used (e.g., clamshells, bags, baskets or others), are these individual units identified with the harvesting date and growing location information on them? This question does not apply for raw material/bulk product destined for further handling in a packinghouse or processing facility.**

Total compliance (10 points): For finished goods packed in the **growing area**, there should be date coding on each individual unit package, as clamshells, bags, baskets or others. The information should be enough to identify the date of harvest and the exact location of where the product was grown. This question is not applicable for raw material/bulk product destined for further handling in a packinghouse or processing facility.

Reference:

<https://www.produce TRACEABILITY.org/>

Minor deficiency (7 points) if:

- Single/isolated instance(s) of missing or incomplete tracking information on the individual unit package.

Major deficiency (3 points) if:

- Numerous instances of missing or incomplete tracking information on the individual unit package.

Non-compliance (0 points) if:

- Fundamental failure to label individual unit package with complete tracking information.
- There is no labeling taking place on the individual unit packages.

## **On-site Storage**

**4.08.01: Is there an on-site storage for items and/or equipment used in the harvesting process (e.g., packing material, cartons, clamshells, re-usable containers, disinfectants, grading/packing tables, RPCs, harvesting equipment, etc.)?**

Total points 0: Information gathering question. This question refers to an on-site storage for items and/or equipment used in the harvesting process (e.g., packing material, cartons, clamshells, re-usable containers, disinfectants, grading/packing tables, RPCs, harvesting equipment, etc.).

**4.08.01a: Is on-site storage for items and/or equipment used in the harvesting process (e.g., packing material, cartons, clamshells, re-usable containers, disinfectants, grading/packing tables, RPCs, harvesting equipment, etc.) clean and secure?**

Total compliance (10 points): On-site storage (including inside vehicle storage) for items and/or equipment used in the harvesting process should be secure, clean, and maintained properly to reduce pest and foreign material contamination.

Minor deficiency (7 points) if:

- Single/isolated instance of unclean and/or unsecure storage areas.

Major deficiency (3 points) if:

- Numerous instances storage of unclean and/or unsecure storage areas.

Non-compliance (0 points) if:

- Fundamental failure to maintain a clean and secure storage area.

**4.08.02: Are packaging, containers, and harvesting equipment stored to prevent cross contamination (this includes RPCs, cartons, clamshells, bins, and other harvesting type of containers that are single use or reusable, etc.)?**

Total compliance (5 points): Packaging, containers, etc., should be stored away from farm chemicals, sanitizers, fertilizers, etc. All packaging materials should be stored off the ground (i.e. on racks, pallets, shelves, etc.). Cartons and other packing materials should be properly protected during storage to prevent contamination.

Minor deficiency (3 points) if:

- Single/isolated instance of improper storage.

Major deficiency (1 point) if:

- Numerous instances of improper storage.

Non-compliance (0 points) if:

- Fundamental failure to prevent cross contamination during storage.

**4.08.03: Are there cleaning logs for the storage area(s)?**

Total compliance (5 points): All storage areas should have a sanitation program in place and there should be records of the cleaning and sanitation activities performed, including areas cleaned, dates and person performing the activity.

Minor deficiency (3 points) if:

- Single/isolated instance of missing or incomplete records.

Major deficiency (1 point) if:

- Numerous instances of missing or incomplete records.

Non-compliance (0 points) if:

- Fundamental failure to keep records.
- There are no records.
- There is no sanitation program in place.

**4.08.04: Is there a documented and effective pest control program in place for fixed location storage areas?**

Total compliance (15 points): There should be a documented and effective, proactive pest control program (in-house or contracted) to control rodents (also insects, reptiles and birds where necessary) and prevent infestation in all fixed (permanent/dropped in place) storage areas. There should be a written scope of the program, indicating target pests and frequency of checks.

Potentially useful website:

National Pest Management Standards, Pest Management Standards for Food Plants

<http://nmpapestworld.org/default/assets/File/2016%20Pest%20Management%20Standards%20for%20Food%20Processing-Electronic.pdf>

Minor deficiency (10 points) if:

- **Single/isolated omission(s) in the written program.**

Major deficiency (5 points) if:

- **Numerous omissions in the written program,**

Non-compliance (0 points) if:

- There is no **documented** pest control program in place for fixed location storage area(s).
- **Written program does not resemble what is happening in practice at all.**

**4.08.04a: Are pest control devices located away from items and/or equipment used in the harvesting process (e.g., packing material, cartons, clamshells, re-usable containers, disinfectants, grading/packing tables, RPCs, harvesting equipment, etc.), and poisonous bait stations are not used inside the storage areas?**

Total compliance (5 points): Pest control devices should be located away from items or equipment with food contact surfaces to prevent any physical or microbial contamination. Poisonous bait **stations** should not be used inside any storage areas. Care should be taken to place pest control devices in such a manner that they do not pose a threat of contaminating product, packing or raw materials. This includes the following restrictions:

- There should be no domestic fly sprays used within the storage areas.
- Block bait **or soft, pouch-style 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.
- 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 the 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.
- **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 4.08.04h), 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 storage area 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.**

Minor deficiency: (3 points) if:

- Single/isolated instance(s) of improperly positioning or maintaining electrical fly traps or insect light traps.
- Single/isolated instance(s) of a fly swatter found in growing or storage area.

- Single/isolated instance(s) of grain or pellet baits being used in an outside bait station (external trap).
- Single can of fly spray (or other insecticide) found in the growing/storage areas (including chemical/sanitation storage).
- Snap traps being used outside the operation (not presenting risk to product or packaging) and are lacking weekly inspection logs or being used for routine monitoring (as opposed to short term eradication).
- Single/isolated instance(s) of any other issues noted on the compliance criteria.

Major deficiency (1 point) if:

- Numerous instances of improperly positioning or maintaining electrical fly traps or insect light traps.
- Numerous instances fly swatters found in growing or storage area.
- Numerous instances of grain or pellet bait being used in an outside bait station (external **device**).
- More than one can of fly spray (or other insecticide) found in the growing/storage areas (including chemical/sanitation storage).
- Single instance of bait/poison found outside of a **device**.
- Snap traps being used for a short-term eradication process with weekly inspection logs but using an allergenic bait.
- Numerous instance(s) of any other issues noted on the compliance criteria.

Non-compliance (0 points) if:

- More than one instance of bait/poison found outside of a **device**.
- More than one major deficiency.
- Numerous (more than three snap traps) being used inside the operation and are lacking weekly inspection logs or being used for routine monitoring (as opposed to short term eradication).
- **The use of poisonous rodent bait within storage areas (buildings) 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.**

#### **4.08.04b: Are pest control devices maintained in a clean and intact condition and marked as monitored (or bar code scanned) on a regular basis?**

Total compliance (5 points): 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 (unless barcode scanned), as well as kept on file. **For digital monitoring systems, auditors should review time-stamped digital monitoring records and periodic physical inspection records to ensure program is working as intended.**

The following criteria should be 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.
- 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 multiple-catch devices should be checked at least weekly – these checks to be recorded.
- Any snap traps **used should be** inside stations **and** should be checked at least weekly – these checks to be recorded.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of traps, bait stations and glue boards not working properly or adequately maintained (check cards, cleanliness, etc.)
- Single/isolated instance(s) of unsecured bait inside bait stations.
- Single/isolated instance(s) of bait stations having moldy bait.
- **Single/isolated instance(s) of any other issues noted on the compliance criteria.**

Major deficiency (1 point) if:

- Numerous instances of traps, bait stations or glue boards not working properly or adequately maintained (check cards, cleanliness, etc.)
- Numerous instances of unsecured bait inside bait station.
- Numerous instances of bait stations having moldy bait.
- **Numerous instance(s) of any other issues noted on the compliance criteria.**

Non-compliance (0 points) if:

- **Widespread failure to maintain the pest control devices.**
- **Widespread failure to monitor the pest control devices.**

#### 4.08.04c: Are pest control devices adequate in number and location?

Total compliance (5 points): The location of the **devices** should be based on a risk assessment of the storage area and surrounding area.

- 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.
- Snap traps in stations may be used if necessary in certain areas e.g., in areas with high dust levels (e.g., potatoes, onions), covered breezeways or box mezzanines where large traps or glue boards are not practical. Snap traps in stations should be positioned between 20 to 40 feet (6 to 12 meters) intervals though spacing may be affected by the structure, storage and types activities occurring.
- Inside the storage area, 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). **Device** 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 meters) of structures. This may impact fence line/property boundary baiting i.e. bait stations must be within 100 feet (30 meters) 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.

<https://www.epa.gov/rodenticides/restrictions-rodenticide-products#types>

<http://nmpapestworld.org/default/assets/File/2016%20Pest%20Management%20Standards%20for%20Food%20Processing-Electronic.pdf>

Minor deficiency (3 points) if:

- Single/isolated instance(s) of **devices** positioned at longer intervals than mentioned above.
- Single/isolated instance(s) of **devices** missing or not within 6 feet (about 2 meters) of exit/entry doors.

Major deficiency (1 point) if:

- Numerous instances of **devices** positioned at longer intervals than mentioned above.
- Numerous instances of **devices** missing or not within 6 feet (about 2 meters) of exit/entry doors.

Non-compliance (0 points) if:

- **Device** positioning is such that the number of **devices** is nowhere near adequate in terms of spacing and coverage of entry points.
- **Device** not located in numerous areas that should be trapped.

#### **4.08.04d: If storage areas are fully enclosed, are measures taken to prevent pest entry?**

Total compliance (5 points): Fully enclosed storage buildings should have measures in place to prevent pest entry (i.e. pest proof doors, screened openings, etc.). Main doors should be kept closed unless in use.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of doors left open.
- Single/isolated instance(s) of a damaged pest proof door, screened opening or any other preventive measure taken.

Major deficiency (1 point) if:

- Numerous instances of doors left open.
- Numerous instances of damaged pest proof doors, screened openings or any other preventive measures taken.

Non-compliance (0 points) if:

- Fundamental failure to prevent pest entry.

#### **4.08.04e: Are all pest control devices identified by a number or other code (e.g., barcode)?**

Total compliance (5 points): 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 map numbering and **device** positions, match reality. All internal **rodent devices**, should be located with a wall sign (that states the **device** number and that it is a **pest control device** identifier), in case they are moved.

Minor deficiency (3 points) if:

- Single/isolated instance(s) pest control devices having no visible numbers on them or on the station location.
- Single/isolated instance(s) of missing wall signs.
- Wall signs are not unique i.e. not clear that they are trap identifiers e.g. just a number.

Major deficiency (1 point) if:

- The devices are marked on the map but the devices themselves are not numbered or the numbering sequence is incorrect.
- Numerous instances of pest control devices having no visible numbers on them or the station location
- Numerous instances of missing wall signs.

Non-compliance (0 points) if:

- None of the devices are numbered.

#### **4.08.04f: Are all pest control devices effective and bait **stations** secured?**

Total compliance (5 points): **All devices** should be correctly orientated with openings parallel with and closest to walls. Bait stations should be secured to minimize movement of the device and be tamper resistant. Bait stations should be secured with a ground rod, chain, cable or wire, or glued to the wall/ground, or secured with a **patio stone** to prevent the bait from being removed by shaking, washed away, etc. Bait stations should be tamper resistant through the use of screws, latches, locks, or by other

effective means. Note – **only devices** containing bait are required to be secured. Live traps used indoors are not required to be secured to the ground; auditee may use metal “sleeves” or similar solutions to prevent displacement, crushing by forklifts, etc. Glue boards should be inside a device (e.g. trap box, PVC pipe, etc.) rather than loose on the floor. Auditor discretion applies to traps placed on curbing.

Minor deficiency (3 points) if:

- Single/isolated instance(s) of bait stations not being secured.
- Single/isolated instance(s) of devices “out of position” **or incorrectly orientated.**

Major deficiency (1 point) if:

- Numerous instances of bait stations not being secured.
- Numerous instances of devices “out of position” **or incorrectly orientated.**

Non-compliance (0 points) if:

- Widespread failure to secure bait stations.
- **Widespread failure to properly position interior traps.**

**4.08.04g: Is there a schematic drawing/plan of the storage area showing numbered locations of all pest monitoring devices, both inside and outside the storage area?**

Total compliance (5 points): A schematic drawing or map is on file, current and details internal and external traps. All devices should be numbered and clearly identified on the map. Map numbers should match physical placements. The document should be accurate, dated and should show the type of device.

Minor deficiency (3 points) if:

- The location map does not distinguish between the different types of devices.
- Single/isolated instance(s) of trap(s) being missed off the plan.
- Single/isolated instance(s) of trap(s) numbering being incorrect.

Major deficiency (1 point) if:

- Numerous instances of traps being missed off the plan.
- Numerous instances of traps numbering being incorrect.

Non-compliance (0 points) if:

- No map available for review.
- Majority of traps are not included on the map.
- Map does not represent actual physical placement of traps at all.

**4.08.04h: Are service reports created for pest control checks detailing inspection records, application records, and corrective actions of issues noted (in-house and/or contracted)?**

Total compliance (5 points): Service reports from the contract pest control company should be available for review if pest control is contracted out. In-house inspection records should be available for review if pest control is conducted in-house. Records should include services performed, date of service, chemicals used (see below), signs of activity with corrective actions, and trend reports. Where chemicals are used, records should detail:

- Product name of materials applied
- The EPA or product registration number (as required by law)
- Target pest
- Rate of application (percent of concentration)
- Location or site of application
- Method of application (if applicable)
- Amount of pesticide used
- Date and time of application
- Signature of applicator

- Corrective actions
- Trend reports

National Pest Management Standards, Pest Management Standards for Food Plants  
<http://npmapestworld.org/default/assets/File/2016%20Pest%20Management%20Standards%20for%20Food%20Processing-Electronic.pdf>

Minor deficiency (3 points) if:

- Single/isolated instance(s) of missing or incomplete information/records e.g. pest activity, trap replacement, etc.
- Single/isolated instance(s) where contracted pest operators action points have not been acknowledged and completed.
- Single/isolated instance(s) of not noting chemical use details.

Major deficiency (1 point) if:

- Numerous instances of missing or incomplete information/records e.g. pest activity, trap replacement, etc.
- Numerous instances where contracted pest operators action points have not been acknowledged and completed.
- Numerous instances of not noting chemical use details.

Non-compliance (0 points) if:

- No service reports.
- Fundamental failure to maintain service reports.
- Fundamental failure to record chemical use details.

Document Revision History		
Date	Rev.#	Description
2/18/21	0	Initial
12/9/21	1	Changes to question 4.06.01a
12/28/21	2	Removed text "If no, go to 4.05.16" from question 4.05.15