



**Version 07.08-2 Green House Rev.1**

## **Audit Scoring Guidelines**

Primus Standard Audits  
3030 Industrial Parkway  
Santa Maria, CA 93455

## Table of Contents

### General Introduction

<u>Audit Template Definitions, Audit Structures and Scoring Systems</u>	4
<u>Automatic Failure</u>	5
<u>Special Circumstances</u>	6
<u>Audit Termination</u>	6
<u>Change of Audit Service</u>	6
<u>Commodity Selection</u>	6
<u>Field Audit Agenda</u>	7
<u>Primus Standard Audits Documentation Requirements</u>	7
<u>Visual Versus Verbal Confirmation</u>	8
<u>Tools and Supplies</u>	8
<u>Glossary</u>	8
<u>Acronyms and Abbreviation</u>	9
<u>How to Use Point Assignment Guidelines</u>	10

### Point Assignment Guidelines

<u>1) Self- Inspection</u>	12
<u>2) Traceability</u>	12
<u>3) Ground History</u>	13
<u>4) Adjacent Land</u>	14
<u>5) Pest and Foreign Material Controls</u>	15
<u>6) Growing Media</u>	17
<u>7) Fertilizer / Crop Nutrition</u>	17
<u>8) Irrigation/Water Use</u>	22
<u>9) Plant Protection</u>	31
<u>10) Employee Hygiene</u>	35
<u>11) Food Security</u>	39

**This document is for guidance purposes only and in no way replaces any regulatory legislation or other legal guidance documentation or viewed as giving legal advice. Primus Standard Audits, owned by Azzule Systems LLC accepts no liability for the contents of this document, nor how an individual chooses to apply this document. This document is owned by Azzule Systems LLC, and as such must not be copied in whole or in part for any other use. Under no circumstances can this document be copied by or to any person without Azzule Systems' expressed permission.**

The Primus Standard Audit Scoring Guidelines are not exhaustive and detail minimum requirements only by means of short statements related to the Standard questions. There will be variations in applicability to commodities involved. Auditors should interpret the questions and conformance criteria in different situations, with food safety and risk minimization being the key concerns.

Where laws, 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 conformance than those included in the standard system.

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 email [primusstandard@azzule.com](mailto:primusstandard@azzule.com) if you discover that links are no longer active or have been redirected.

Please be aware that there is additional information on the website, including the actual Standard templates at <http://www.primuslabs.com/Services/StandardGAP.aspx>

This document is designed to be used by all interested parties, especially:

**1<sup>st</sup> Party Auditors**, e.g. a QA Manager to audit his/her own operation.

**2<sup>nd</sup> Party Auditors**, e.g. a QA Manager who is auditing his/her supplier(s).

**3<sup>rd</sup> Party Auditors**, e.g. an auditor/auditing company who is/are independent of the organization being audited.

Useful websites that help further investigate food safety requirements include:

FDA "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables"

<http://www.fda.gov/downloads/food/guidancecomplianceregulatoryinformation/guidancedocuments/produceandplantproducts/ucm169112.pdf>

2013 FDA Food Code

<http://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf>

Guidance on Inspection of Firms Producing Food Products Susceptible to Contamination with Allergenic Ingredients <http://www.fda.gov/ICECI/Inspections/InspectionGuides/ucm074944.htm>

USDA/FDA Food Safety Information Center, <http://www.usda.gov/wps/portal/usda/usdahome?navid=food-safety>

California Leafy Green Handler Market Agreement G.A.P. Metrics

<http://www.lgma.ca.gov/wp-content/uploads/2014/09/California-LGMA-metrics-08-26-13-Final.pdf>

## Standard Audit Template Definitions, Standard Structures and Scoring System

A field operation is a growing operation carried out in an open or in a covered area for the production of fresh produce for human consumption. The type of field operation can be classified as “Ranch” or “Greenhouse”. They can both include or not include a “Harvest Crew”. In addition, standalone “Harvest Crew” audits can also be performed not in conjunction with a “Ranch” or “Greenhouse” audit. An example may be a contracted harvesting company.

- **Ranch:** A "ranch" is defined as a parcel of ground (not necessarily a "lot" for production purposes) with the following characteristics: common management, common water supply and contiguous grounds.
- **Greenhouse:** A greenhouse is defined as a temporary or permanent enclosed structure where crops are grown in a controlled environment. Does not include shade or hoop houses. Product grown under this type of operation is commonly marketed as “Greenhouse grown”.
- **Harvest Crew:** A "Harvest crew" is defined as a group of harvesting personnel under common management.

## Standard Template Structure

- Self- Inspection
- Traceability
- Ground History
- Adjacent Land
- Fertilizer/Crop Nutrition
- Irrigation/Water Use
- Crop Protection
- Employee Hygiene
- Food Security

The Standard format is updated as needed. This may include the layout, the questions themselves and point assignments. The following is the scoring system used for the Primus Standard GAP audits:

Point System for Individual Questions			
Possible Question Points	Total compliance	Non- compliance	Not applicable
20 Point Question	20	0	0
15 Point Question	15	0	0
10 Point Question	10	0	0
7 Point Question	7	0	0
5 Point Question	5	0	0
3 Point Question	3	0	0
2 Point Question	2	0	0
0 Point Question	0	0	0

<b>Compliance Categories</b>	
<b>Total compliance</b> (can be Yes or No, depending on the question)	To meet the question and/or compliance criteria in full. This is when the answer Yes or No is the same as the “earning points answer”.
<b>Non-compliance</b> (can be Yes or No, depending on the question)	The question or compliance criteria has not been fully met. This is when the answer Yes or No is NOT the same as the “earning points answer”.
<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 certain questions located in various sections of the audit that if down scored will lead to an automatic failure and an overall score of 0%. These questions are of greatest food safety areas of concern. A report will include a breakdown of the scores for each section (summary chart), even if an automatic failure occurs. **On being immediately informed of the non-conformance resulting in an automatic failure by the auditor during the audit, the auditee has the option to have the auditor continue to complete the audit or to have the audit halt at that point (all charges will apply).**

7.03c	Is there a Certificate(s) of Analysis (COA) from the biosolid supplier(s) certifying compliance with prevailing national/ local standards and guidelines (microbiological analysis)? If this question is answered No, automatic failure of this audit will result.
7.03e	Are biosolids being applied to crops where the country of production regulations/guidelines ban the use such materials e.g. Leafy Green Commodity Specific Guidelines in California? If this question is answered Yes, automatic failure of this audit will result.
7.04d	Are untreated animal manures being used where the country regulations/guidelines ban the use such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? If this question is answered Yes, automatic failure of this audit will result.
9.05	Does the growing operation follow a pesticide application recording program of all plant protection products (including soil and substrate pre-plant treatments)? If No, go to 9.06. If this question is answered No, automatic failure of this audit will result.

9.06	Are plant protection products registered in the country of use for the target plant where official registration is in place? If this question is answered Yes, skip to question 9.07. If no official registration system is utilized answer this question N/A and go to 9.06a. Where a system exists, but a plant protection chemical being used is not registered for the target plant the response to this question is No. If this question is answered No, automatic failure of this audit will result.
9.06a	Does the country of production allow the use of plant protection products that are registered for the target plant in another country, as long as the use of this chemical does not contravene any prevailing national and local laws in the destination country (e.g. maximum residue limit, banned lists, etc.)? If this question is answered No, automatic failure of this audit will result.
9.07	Are crop protection product applications restricted by the guidelines established by the product label, manufacturer recommendation, or by prevailing national/ local standards and guidelines? If this question is answered No, automatic failure of this audit will result.
9.08	Where harvesting is restricted by pre-harvest intervals (as required on the crop protection chemical product labels, manufacturer recommendations and/or by prevailing national/ local standards) is the grower adhering to these pre-harvest interval time periods? If this question is answered No, automatic failure of this audit will result.
10.03	Does the growing operation have a documented and implemented procedure in place requiring for all commodities that come in contact with blood and/or bodily fluids to be destroyed? If this question is answered No, automatic failure of this audit will result.
10.06	Are there operational toilet facilities provided? If NO, go to 10.07. If this question is answered No, the audit will result in an automatic failure.
10.07	Is there evidence of human fecal contamination in the growing facility(s)? If this question is answered Yes, automatic failure of this audit will result.

## Special Circumstances

Under special circumstances Azzule reserves the right for a certificate not to be issued. These circumstances include the inability to complete the audit, detection of serious food safety issues (in the audit or corrective action processes), deliberate illegal activities, physical acts/threats to an auditor, attempted bribery, falsified records, etc.

## Audit Termination

Once an audit has been started, should the auditee wish to stop the audit for any reason other than an automatic failure (see Non-compliance section text above) the auditor will complete the report for as many questions as they were able to verify. Questions that the auditor was unable to verify will be marked as non-compliance and receive a score of zero. For questions unable to be verified, the auditor will indicate 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 issued and all charges will apply.**

## Change of Audit Service

**Once an audit has been started it cannot be converted into a pre-assessment audit. This includes when an automatic failure question has been reported as non-compliant, as noted in the non-compliance section above paragraph. Vice versa, a pre-assessment audit cannot be converted into a certificated audit once the service has begun.**

The only time a primus standard audit can be optionally turned into a pre-assessment audit is when the operation is found not to be running on the day of the audit, which can result in the cancellation of the audit (with charges) or the audit can be turned into a pre-assessment.

## Commodity Selection

The audit report will show a list of commodities that the auditee indicates they handle under the scope of the audit and a list of commodities that the auditor actually saw on the day of the audit. The two lists may or may not be the same, as the auditor indicates what is seen at the time of inspection.

**Field Audit Agenda** Audit agenda's do vary, but the normal pattern of events is as follows:

- **Opening Meeting.** Confirm the appointment details, introduce the auditor(s) and auditee team, confirm scope and the day's agenda.
- **Tour of sites under review (e.g., ranch, vineyard, grove)**
- **Food Safety Management Documents** (policies, procedures, records, etc) **Food Security Section.** The auditor will have made notes about physical security aspects when carrying out the tour of the operation. These questions are scored.
- **Auditor "Quiet" Time.** Time required for the auditor to organize notes before delivering the closing meeting.
- **Closing Meeting.** Discuss findings with the auditee team. Auditors are not able to provide either a final score or pass/fail commentary at the end of the audit due to the high number of questions that are asked in the standard template and the scoring system that is applied. However, auditors do submit audit reports quickly and auditees should contact [primusstandard@azzule.com](mailto:primusstandard@azzule.com) if reports have not been received electronically within two weeks after the audit has occurred (at the latest).

## Primus Standard Audits Documentation Requirements

### New Auditees/First Time Auditees

**In operation for more than three consecutive months** – auditee should have at least three months of documentation 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 audit, they should be aware that they **cannot receive full conformance for paperwork questions relating to monitoring and that the non-compliance will be based on the amount of paperwork available.**

**Short season operation-in operation for less than three consecutive months** - auditee should have at least three months of documentation available for review and may include last season’s documentation. Where an operation does not have three months of records available for their current season (e.g., one month of operation per year), 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 audit, they should be aware that they **may not receive full conformance for paperwork questions related to monitoring and that the down score will be based on amount of paperwork available.**

**Existing Auditees**

**In operation for more than three consecutive months** – auditee should have documentation available from the date of the prior audit.

**Short season operation, in operation for less than three consecutive months** – 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. 1 month of operation per year) auditee should have at least the previous season’s records available for review.

	<b>Operates &lt;three months/year</b>	<b>Operates &gt;three months/year</b>
New Auditee	Three months of records (may include last season’s records)	Three months of records (may include last season’s records)
Existing Auditee	Records at least since last audit (or longer) to meet minimum requirement of three consecutive months of records	Records since last audit

For further information about the field operations audit process please go to <http://www.primuslabs.com/Services/StandardGAP.aspx>

**Visual versus Verbal Confirmation**

Visual confirmation is the default method of auditing, whether on the growing operation tour or the paperwork section. Scores and comments are assumed to have been visually confirmed unless otherwise stated. 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 question.

**Tools and Supplies**

- Correct Standard template
- Audit Expectations Manual Maps, and Maps of the Growing area supplied by Farm Management
- Note paper, pens clip board
- Flashlight
- Digital Camera
- Global Positioning System (GPS device)
- Appropriate clothing for conditions

## Glossary

**Aerosolized-** The dispersion or discharge of a substance under pressure that generates a suspension of fine particles in air or other gas.

**Animal by-product-** Most parts of an animal that do not include muscle meat including organ meat, nervous tissue, cartilage, bone, blood and excrement.

**Biofertilizers-** Organisms such as bacteria, fungi, and cyanobacteria that enrich the nutrient quality of soil.

**Biosolids-** Solid, semi-solid, or liquid residues generated during primary, secondary, or advanced treatment of domestic sanitary sewage through one or more controlled processes.

**Bud-** Bud that forms in the axil of a leaf.

**Colony forming units (CFU)-** Viable micro-organisms (bacteria, yeasts & mold) capable of growth under prescribed conditions (medium, atmosphere, time and temperature) develop into visible colonies (colony forming units) which are counted.

**Composting-** Controlled breakdown or decomposition of organic materials under aerobic (i.e. with air) or anaerobic (i.e. without air) conditions.

**Concentrated Animal Feeding Operation (CAFO)-** A lot or facility where animals have been, are or will be stabled, maintained or confined and fed for a total of 45 days or more in any 12-month period and crops, vegetation forage, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. In addition, there must be more than 1,000 'animal units' (as defined in 40 CFR 122.23) confined at the facility; or more than 300 animal units confined at the facility if either one of the following conditions are met: pollutants are discharged into navigable waters through a man-made ditch, flushing system or other similar manmade device; or pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

**Coliforms-** Gram-negative, non-spore forming, rod-shaped bacteria that ferment lactose to gas. They are frequently used as indicators of process control, but exist broadly in nature.

**Cross contamination** The transfer of microorganisms, such as bacteria and viruses, from one place to another.

**E. coli-** Escherichia coli is a common bacteria that lives in the lower intestines of animals (including humans) and is generally not harmful. It is frequently used as an indicator of fecal contamination, but can be found in nature from non-fecal sources.

**Fecal coliforms-** Coliform bacteria that grow at elevated temperatures and may or may not be of fecal origin. Useful to monitor effectiveness of composting processes. Also called "thermotolerant coliforms."

**Flooding-** The flowing or overflowing of a field with water outside a grower's control that is reasonably likely to contain microorganisms of significant public health concern and is reasonably likely to cause adulteration of edible portions of fresh produce in that field.

**Food safety assessment-** A systematic procedure that identifies hazards and risks from chemical, microbial and physical sources that may be harmful from a food safety perspective. A Person Responsible and entrusted with management level decisions for conducting food safety assessments before food reaches consumers requires formal training in scientific principles and a solid understanding of the principles of food safety as applied to agricultural production.

**Fumigation-** Treatment with a pesticide active ingredient that is a gas under treatment conditions.

**Geometric mean-** Mathematical definition.: the n-th root of the product of n numbers, or: Geometric Mean = n-th root of  $(X_1)(X_2)...(X_n)$ , where  $X_1$ ,  $X_2$ , etc. represent the individual data points, and n is the total number of data points used in the calculation. Practical definition: the average of the logarithmic values of a data set, converted back to a base 10 number.

**Indicator microorganisms-** An organism used to indicate the potential presence of other (usually pathogenic) organisms. Indicator organisms are more easily sampled and measured.

**Leafy greens-** Iceberg lettuce, romaine lettuce, green leaf lettuce, red leaf lettuce, butter lettuce, baby leaf lettuce (i.e., immature lettuce or leafy greens), escarole, endive, spring mix, spinach, kale, arugula, and chard.

**Most probable number (MPN)-** Statistical estimates of the number of cells or clusters of cells in a sample.

**Non-synthetic crop treatments-** Any crop input that contains animal manure, an animal product, and/or an animal by-product that is reasonably likely to contain human pathogens.

**Oxidation reduction potential (ORP)-** The ability of water to oxidize or reduce. Measured in millivolts (mv) with an electrode and an electronic meter it gives an indication of ability of oxidizing agents in the water to control contaminants.

**Parts per million (ppm)**- A way of expressing very dilute concentrations of substances, usually in water or soil. Parts per million means “out of a million” just as per cent (%) means “out of a hundred”.

**Pathogen**- A disease causing agent such as a virus, parasite, or bacteria.

**Pesticide**- Any substance or mixture intended for preventing, destroying, repelling, killing, or mitigating problems caused by any insects, rodents, weeds, nematodes, fungi, or other pests; and any other substance or mixture intended for use as a plant growth regulator, defoliant, or desiccant.

**Pooled water**- An accumulation of standing water; not free flowing.

**Potable water**- Suitable and safe for drinking.

**Pre-harvest interval (PHI)**- The time interval between the last application of a pesticide to a crop and harvest.

**Priety**- The same as outhouse or pit toilet but is not the same as portable toilets.

**Process authority**- A regulatory body, person, or organization that has specific responsibility responsibility and knowledge regarding a particular process or method; these authorities publish standards, metrics, or guidance for these processes and/or methods.

**Reclaimed wastewater**- Wastewater that becomes suitable for a specific beneficial use as a result of treatment. See also: wastewater reclamation.

**Re-entry interval (REI)**- Minimum time between pesticide application and human re-entry to a treated area. Established by a regulatory authority to assure safety of workers from exposure to residues.

**Reservoir**- A place where water is stored until it is needed. A reservoir can be an open lake, pond or an enclosed storage tank.

**Risk mitigation**- Actions to reduce the severity/impact of a risk.

**Runoff**- Liquid water that travels over the surface of the Earth, moving downward due to the law of gravity; runoff is one way in which water that falls as precipitation returns to the ocean.

**Soil amendment**- Inorganic or organic materials which are used to improve the physical properties of soil and adjust the soil for increased fertility. May be treated or Untreated.

**Ultraviolet index (UV index)**- A measure of the solar ultraviolet intensity at the Earth's surface; indicates the day's exposure to ultraviolet rays. The UV index is measured around noon for a one-hour period and rated on a scale of 0-15.

**Validated process**- A process that has been demonstrated to be effective though a statistically-based study, literature, or regulatory guidance.

## Acronyms and Abbreviations

Some of the acronyms and abbreviations that may be found in this document

**AFOs**: Animal feeding operations

**AOAC**: The Association of Official Agricultural Chemists

**BAM**: Bacteriological Analytical Manual

**CAFOs**: Concentrated animal feeding operations

**CFU**: Colony forming units

**cGMP**: Current good manufacturing practices

**COA**: Certificate of Analysis

**DL**: Detection Limit

**FDA**: Food and Drug Administration

**GAPS**: Good agricultural practices

**GLPs**: Good laboratory practices

**HACCP**: Hazard analysis critical control point

**MPN**: Most probable number

**NRCS**: Natural Resources Conservation Service

**ORP**: Oxidation reduction potential

**PPM**: Parts per million

**RTE**: Ready-to-eat

**USEPA:** United States Environmental Protection Agency

**UV:** Ultraviolet

**WHO:** World Health Organization

## **How to Use Point Assignment Guidelines**

The following sections of this guidance manual are designed to help the users 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 [primusstandard@azzule.com](mailto:primusstandard@azzule.com) in a separate note, so that this can be accounted for in the next version of the manual.)

In order to be consistent with the voluntary nature of requesting a third party audit, and in order not to be seen as 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 questions and/or conformance criteria that 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.

[Back to Index Page](#)

# Point Assignment Guidelines

Version 07.08-2 Green House Rev.1			
#	Question	Guideline	Auditor Guidance
<b>1 Self Inspection</b>			
1.01	Have Good Agricultural Practices (GAP) manuals been developed covering each growing operation within the scope of this audit, and are they available for review?	Personalized GAP manuals should be developed for each growing facility(s) detailing all aspects of the growing facility(s) which includes ground history, adjacent land, substrate use, crop nutrition, water use, crop protection, employee hygiene expectations, etc.	A No response must be justified in comments section. It is evident that the growing operation has created and personalized GAP manuals developed for each growing facility(s) of the farming operation. Manuals need to detail all aspects of the growing operation which includes ground history, adjacent land, crop nutrition, water use, crop protection, employee hygiene expectations, etc. When new sites are added to the existing operation, GAP manuals need to be updated to include those areas. Visual confirmation (documentation) required. 5 Points No N/A.
1.02	Have documented Good Agricultural Practices (GAP) self-audits been completed for each growing operation that is within the scope of this audit?	At least a pre-plant assessment and then later a full GAP self assessment should be on file. More frequent inspections may be necessary depending on the type of crop and associated risk pressures. Surveys are designed to identify problems and/or situations which need improvement in advance (maintenance of documentation, etc.). Records should show where corrective actions have been made.	A No response must be justified in comments section. Documented self audits of the growing operation covered under 1.01 should be done at least every season or on a more frequent schedule depending on the operation's growing season and complexity. Self audits are designed to identify problems and/or situations which need improvement in advance (maintenance of documentation etc.). Records should show where corrective actions have been made. The growing operation may choose to use their own or another self auditing format (as opposed to using the PrimusLabs.com audit) which is acceptable as long as the template is relevant to GAPs. Visual confirmation (documentation) required. 7 Points No N/A.
<b>2 Traceability</b>			
2.01	Is there a documented traceability and recall program, including recall procedures, growing area(s) identification system for traceability purposes, and performing mock recalls every 12 months?	Coding details (farm name and number, growing areas, planting season etc.) should be in sufficient detail to enable trace back and trace forward through the distribution system. Details of the coding ideally will be tied to the record keeping system (e.g., pesticide, fertilizer application records, microbiological testing reports, etc.). Growers may have access to a customer trace back system or create their own such as, tracking seed/transplant to field code, application dates (water, fertilizer, pesticides) to harvest dates, delivery dates to the facility, etc. While either route is acceptable traceability system will be reviewed by the auditor. Mock recalls should be performed and documented at least every 12 months or more as per customer requirements..	A No response must be justified in comments section. Coding details (farm name and number, growing areas, planting season etc.) should be in sufficient detail to enable trace back and trace forward through the distribution system. Details of the coding ideally will be tied to the record keeping system (e.g., pesticide, fertilizer application records, microbiological testing reports, etc.). Growers may have access to a customer trace back system or create their own such as, tracking seed/transplant to field code, application dates (water, fertilizer, pesticides) to harvest dates, delivery dates to the facility, etc. While either route is acceptable traceability system will be reviewed by the auditor. Mock recalls should be performed and documented at least every 12 months or more as per customer requirements. Visual confirmation (documentation) required. 15 Points No N/A.
<b>3 Ground History</b>			
3.01	Was the growing facility(s) used for growing food crops for human consumption last season?	Land should be purchased or leased that has previously been successfully utilized for growing produce for human consumption without incidence.	A No response must be justified in comments section. Land should be purchased or leased that has previously been successfully utilized for growing produce for human consumption without incidence. Visual confirmation required (which may include documentation). 0 Points No N/A.

3.02	Has the growing facility(s) been used for any non-agricultural functions? If No, go to 3.03.	Purchase or lease of ground previously used for non-agricultural functions (e.g., toxic waste site, landfill, mining, extraction of oil or natural gas) should be avoided. Land should be purchased or leased that has previously been successfully utilized for growing produce for human consumption without incidence. <a href="http://www.epa.gov/superfund/health/index.htm">http://www.epa.gov/superfund/health/index.htm</a> .	If No, go to 3.03 and mark the following question N/A. A Yes/NA response must be justified in comments section. Examples of non-agricultural functions are toxic waste sites, landfill, mining, extraction of oil or natural gas, textile, manufacturing operations, or operations that could emit pollutants into the water and soil. <a href="http://www.epa.gov/superfund/health/index.htm">http://www.epa.gov/superfund/health/index.htm</a> . Visual confirmation required (which may include documentation). 7 Points No N/A.
3.02a	If growing facility land had been used previously for non-agricultural functions have soil tests been conducted showing soil was negative or within an appropriate regulatory agency's approved limits for contaminants?	If the land had been used previously used for non-agricultural functions soil testing should be conducted to determine if the soil is free of contaminants (e.g. heavy metals, residues of persistent organic contaminants) that may still be present in the soil.	A No or N/A response must be justified in comments section. Soil tests should be conducted showing soil was negative or within an appropriate regulatory agency's approved limits for contaminants. <a href="http://www.epa.gov/superfund/health/index.htm">.http://www.epa.gov/superfund/health/index.htm</a> . Visual confirmation (documentation) required. 15 Points
3.03	Has the growing facility(s) been used for animal husbandry or grazing land for animals? If No, go to 3.04.	If the land was used previously for animal husbandry or grazing land for livestock, there should be a sufficient buffer time before growing a crop for human consumption. A risk evaluation should be documented that includes recording the details of the animal grazing (commercial or domestic) and any risk reduction steps.	If No, go to 3.04. A Yes or N/A response must be justified in comments section. If the land was used previously for animal husbandry or grazing land for livestock, there should be a sufficient buffer time before growing a crop for human consumption. A risk evaluation should be documented that includes recording the details of the animal grazing (commercial or domestic) and any risk reduction steps. Visual confirmation required (which may include documentation) 7 Points No N/A.
3.03a	If the growing facility land was previously used for animal husbandry or grazing land for livestock, has a risk evaluation been performed?	A risk evaluation should be documented that includes recording the details of the animal grazing (commercial or domestic) and any risk reduction steps.	A No or N/A response must be justified in comments section. A risk evaluation should be documented that includes recording the details of the animal grazing (commercial or domestic) and any risk reduction steps. Visual confirmation (documentation) required. 10 Points
3.04	Has flooding from uncontrolled causes occurred on the growing facility(s) since the previous growing season? If No or if substrates are used, go to 3.05.	Definition of "flooding": The flowing or overflowing of a field with water outside a grower's control that is reasonably likely to contain microorganisms of significant public health concern and is reasonably likely to cause adulteration of edible portions of fresh produce in that field.	If No, go to 3.05 and mark the following questions N/A. A Yes response must be justified in comments section. "Flooding" refers to the flowing or overflowing of a field with water outside a grower's control that is reasonably likely to contain microorganisms of significant public health concern and is reasonably likely to cause adulteration of edible portions of fresh produce in that field. Visual confirmation required (which may include documentation). 0 Points No N/A.
3.04a	If the growing facility(s) and product was affected from the flood waters, is there documented evidence that corrective measures were taken to affected land and product?	If the growing facility(s) and/or product was affected from the flood waters, there is documented evidence (archived for 2 years) that corrective measures were taken with affected land and/or product (e.g. photographs, sketched maps, etc.). On file should be proof that affected product and product within approximately 30ft (9.1m) of the flooding should not have been harvested for human consumption and that replanting on formerly flooded production ground has not occurred for approximately 60 days if the ground has dried out unless testing as noted in 3.04b has occurred. *	A No or N/A response must be justified in comments section. Visual (documentation) confirmation required. If the growing facility(s) and/or product was affected from the flood waters, there is documented evidence (archived for 2 years) that corrective measures were taken with affected land and/or product (e.g. photographs, sketched maps, etc.). On file should be proof that affected product and product within approximately 30ft (9.1m) of the flooding should not have been harvested for human consumption and that replanting on formerly flooded production ground has not occurred for approximately 60 days if the ground has dried out unless testing as noted in 3.04b has occurred.* Visual confirmation (documentation) 15 Points

3.04b	Have soil tests been conducted on the flooded area(s) showing soil was negative or within an appropriate regulatory agency's approved limits for contaminants?	If flooding has occurred in the past on the property, soil clearance testing may be conducted prior to planting. If performed, testing must indicate soil levels of microorganisms lower than the standards for processed compost. Suitable representative samples should be collected for the entire area suspected to have been exposed. If results indicate no issues, then the replanting time line can be reduced from approximately 60 days to approximately 30 days.*	A No or N/A response must be justified in comments section. If flooding has occurred in the past on the property, soil clearance testing may be conducted prior to planting. If performed, testing must indicate soil levels of microorganisms lower than the standards for processed compost. Suitable representative samples should be collected for the entire area suspected to have been exposed. If results indicate no issues, then the replanting time line can be reduced from approximately 60 days to approximately 30 days* Visual confirmation (documentation) 20 Points
3.05	Is the growing operation under organic principles? If No , go to 3.06.	Definition for "organic principles": A system that relies on ecosystem management rather than external agricultural inputs. <a href="http://www.fao.org/ORGANICAG/fram11-e.htm">http://www.fao.org/ORGANICAG/fram11-e.htm</a>	If No , go to 3.06 and mark the following question N/A. This refers to a system that relies on ecosystem management rather than external agricultural inputs. <a href="http://www.fao.org/ORGANICAG/fram11-e.htm">http://www.fao.org/ORGANICAG/fram11-e.htm</a> . This section is for survey purposes only and does not hold a point value. Visual (documentation) confirmation required. 0 Points No N/A.
3.05a	Is current certification by an accredited organic certification organization on file and available for review?	Current certification by an accredited organic certification organization (national/local) should be on file and available for review.	A No or N/A response must be justified in comments section. Current certification by an accredited organic certification organization (national/local) should be on file and available for review. Visual confirmation (documentation) required. 0 Points
3.06	If the growing facility(s) is a new purchase or lease, has a documented risk assessment been undertaken?	Lease of ground previously used for questionable practices should be avoided. Land should be purchased or leased that has previously been successfully utilized for growing produce for human consumption without incidence.	A No or N/A response must be justified in comments section. For new sites where a new area is placed under cultivation for the first time, an up to date documented risk assessment should be available. The purpose of the risk assessment is to determine if the growing facility(s) may be vulnerable to food safety issues. Considerations may include prior use of land, adjacent land and practices, erosion, run off issues, water sources, potential non- controllable risks) such as flooding. Visual confirmation (documentation) required. 10 Points
<b>4 Adjacent Land</b>			
4.01	Is the land adjacent to the growing facility a possible source of contamination from intensive livestock production (e.g. feed lots, dairy operations, poultry houses, meat rendering operation)? If No, go to 4.02.	Adjacent refers to all parcels of land next to the growing facility or within a distance where the crop in question may be affected. Examples of intensive livestock production are cattle feed lots, dairy operations, poultry houses, etc. Consideration should be made for the topography of the land for runoff, potential flooding issues, and prevailing winds for manure related dust issues.	If No, go to 4.02 and mark the following question N/A. A Yes response must be justified in comments section. Determine if the growing facility(s) are next to the growing operation or within a distance where the crop in question may be affected. Consideration should be made for the topography of the land for runoff issues and prevailing winds for manure related dust issues. Visual confirmation required. 10 Points No N/A.
4.01a	Have appropriate measures been taken to mitigate this possible contamination source onto the growing facility(s) (e.g. buffer areas, physical barriers, foundation, fences, ditches, etc.)?	Animal or potential contaminant movement should be restricted with acceptable buffer zones, proper fencing and/or other physical barriers. A buffer zone of approximately 400 ft. (122m) from the edge of the facility which may increase or decrease depending on the risk variables i.e., topography (uphill from the crop or downhill from the crop) is needed. Rain induced runoff of animal waste should be diverted by trenching or similar land preparation. Leaking animal waste should be diverted by trenching or similar land preparation. *	A No or NA response must be justified in comments section. Animal or potential contaminant movement should be restricted with acceptable buffer zones, proper fencing and/or other physical barriers. A buffer of at least a distance of 400 ft.from the edge of the crop which may increase or decrease depending on the risk variables, e.g. topography (uphill from the crop or downhill from the crop) is needed. Rain induced runoff of animal waste should be diverted by trenching or similar land preparation. Leaking animal waste should be diverted by trenching or similar land preparation. Contamination caused by diseased or dead animals can be avoided with monitoring and a procedure for quick removal and disposal of the carcasses. Visual confirmation required. 15 Points

4.02	Is the growing facility(s) situated in a higher risk location where contamination could occur from nearby operations or functions (e.g. leach fields, runoff or potential flooding from sewers, toilet systems, industrial facilities, labor camps)? If No, go to 4.03	"Higher risk" refers to any nearby activities or operations that could pose a threat to the growing facility(s). These might include chemical, microbiological, or physical contamination or pollution. Examples include, but are not limited to runoff or potential flooding from sewers, toilet systems, industrial facilities, labor camps (issues of trash).	If No, go to 4.03 and mark the following question N/A. A Yes response must be justified in comments section. The growing facility(s) may be situated in a higher risk location where contamination could occur from other adjacent operations or activities not mentioned in the earlier questions and examples. This question might be where the auditor could respond if "other" situations are found. Examples might include labor camps or industrial facilities that might not have adequate pollution controls and could cause contamination to the growing facility(s). Consideration should also be given to potential issues of uncontrolled flooding. Visual confirmation required. 10 Points No N/A.
4.02a	Have appropriate measures been taken to mitigate risks related to nearby operations?	Mitigating measures should include a buffer area around the crop. For example with a properly designed leach field a buffer zone of approximately 30 ft. (9 m). Very high risk issues should consider approximately 400ft (122 m) or higher buffer zones. Buffer zone distances should be determined by considering the risk variables (e.g. topography, type of crop). Other mitigating measures may include physical barriers, fences, ditches, etc. *	A No or N/A response must be justified in comments section. Mitigating measures should include a buffer area around the crop. For example with a properly designed leach field a buffer zone of a 30 ft. Very high risk issues should consider 400ft or higher buffer zones. Buffer zone distances should be determined by considering the risk variables e.g. topography and the type of crop. Other mitigating measures may include physical barriers, fences, ditches, etc. Visual confirmation required. 15 Points
4.03	Is there a documented and implemented policy that infant or toddler aged children are not allowed in the growing facility? NOTE: This includes any packaging or equipment storage areas.	There is a written policy supported by visual evidence that infant or toddler aged children are not allowed in the growing operation as well as in or around any packaging, chemical or equipment storage areas.	A No response must be justified in comments section. There is a written policy supported by visual evidence that infant or toddler aged children are not allowed in the growing facility(s) as well as in or around any packaging, chemical or equipment storage areas. Evidence may include observation of infants and/or toddlers aged children, their fecal matter, and diapers in the growing facility(s) and packaging, sanitizer, or equipment storage areas. Visual confirmation (documentation) required. 10 Points No N/A.
<b>5 Pest and Foreign Material Controls</b>			
5.01	Is there a written policy supported by visual evidence that domestic and wild animals, livestock, or birds are not allowed in the growing facility; including grounds and any packaging or equipment storage areas.	There is a written policy supported by visual evidence that domestic or wild birds and animals or livestock are not allowed in the growing facility(s) as well as any packaging or equipment storage areas to prevent possible physical or microbiological contamination.	A No or N/A response must be justified in comments section. Evidence may include observation of animals in the facility or storage areas, animal tracks, animal feces or urine, and eaten plants in production areas. Visual confirmation required. 10 Points
5.02	Are all entry points to growing facility(s), storage and packaging areas protected to prevent entry of rodents or birds?	Growing facility, storage and packaging areas should be adequately constructed to prevent entry of rodents or birds. Walls, windows and screens should be maintained, doors should have no gaps greater than approximately 1/8 inch (3 mm).	A No response must be justified in comments section. Growing facility, storage and packaging areas should be adequately constructed to prevent entry of rodents or birds. Walls, windows and screens should be maintained, doors should have no gaps greater than approximately 1/8 inch (3 mm). Visual confirmation required. 10 Points
5.03	If used, are pest control devices (inc. rodent traps and electrical fly killers) located away from exposed food products? Poisonous rodent bait traps are not used within the growing facility or inside any storage or packaging areas?	Pest control devices should be located away from exposed food products, packaging materials, or equipment to prevent any physical or microbial contamination. Poisonous rodent bait traps should not be located within the growing facility or inside any storage or packaging areas.	A No or N/A response must be justified in comments section. Pest control devices should not be located inside buildings as they pose a threat of contaminating product or packaging. Visual confirmation required. 10 Points
5.03a	If used, are pest control devices maintained in a clean and intact condition and marked as monitored (or bar code scanned) on a regular basis?	All pest control devices should be maintained clean and replaced when damaged so they will accomplish their intended use. Date of inspections (at least monthly) should be posted on the devices as well as kept on file (unless barcode scanned).	A No or N/A response must be justified in comments section. In order to function all pest control devices should be maintained clean and not damaged. Regular inspection to verify cleanliness, working order and pest activity is expected. Visual confirmation required. 10 Points

5.03b	If used, are pest control devices adequate in number and location?	Inside pest control : mechanical traps every 20-40 feet. Outside building perimeter: mechanical traps and/or bait stations every 50-100 feet (exterior/ interior traps should be placed on both sides of doorways). Outside packaging storage should be protected by adequate pest control devices.	A No or N/A response must be justified in comments section. Inside pest control : mechanical traps every 20-40 feet. Outside building perimeter: mechanical traps and/or bait stations every 50-100 feet (exterior/ interior traps should be placed on both sides of doorways). Outside packaging storage should be protected by adequate pest control devices. Visual verification required. 10 Points
5.03c	If used, are all pest control devices identified by a number or other code (e.g. barcode) ?	All traps should be clearly identified (e.g. numbered) to facilitate monitoring and maintenance. All traps should be located with wall signs (that state the trap number and also that they are trap identifier signs).	A No or N/A response must be justified in comments section. All traps should be clearly identified (e.g. numbered) to facilitate monitoring and maintenance. All traps should be located with wall signs (that state the trap number and also that they are trap identifier signs). Visual confirmation required. 10 Points
5.03d	If used, are all pest control devices properly installed and secured?	All traps should be correctly orientated with openings parallel with and closest to wall. Bait traps should be locked and tamper resistant in some way (e.g. locks, screws, etc.). Bait traps should be secured to prevent removal and only block bait (no pellets) used. If mounted on slabs, then wall signs should be used to aid location.	A No or N/A response must be justified in comments section. All traps should be correctly orientated with openings parallel with and closest to wall. Bait traps should be locked and tamper resistant in some way (e.g. locks, screws, etc.). Bait traps should be secured to prevent removal and only block bait (no pellets) used. If mounted on slabs, then wall signs should be used to aid location. Visual confirmation required. 10 Points
5.04	Is there a written pest control program, including a copy of the contract with the extermination company (if used), Pest Control Operator license (if baits are used) and insurance documents?	A pest control program is essential to the operation's sanitation. It should be maintained by a contracted company or an appropriately trained in- house employee (PCO required if baits used). Relevant documentation must be on file.	A No or N/A response must be justified in comments section. A pest control program is essential to the operation's sanitation. It should be maintained by a contracted company or an appropriately trained in-house employee (PCO required if baits used). Relevant documentation must be on file. Visual confirmation required. 15 points
5.05	Is there a schematic drawing of the plant showing numbered locations of all traps and bait stations, both inside and outside the plant?	Schematic drawing or trap 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 placement.	A No or N/A response must be justified in comments section. Schematic drawing or trap 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 placement. Visual confirmation required. 10 Points
5.06	Are service reports created for pest control checks detailing inspection records, application records, and corrective actions (if issues were noted) (in-house and/or contract)?	Inspection reports are necessary for the identification and correction of pest problem areas. Records should include service(s) performed, date of service, chemicals used (including EPA # if in the US), signs of activity and corrective actions.	A No or N/A response must be justified in comments section. Visual confirmation required. Inspection reports are necessary for the identification and correction of pest problem areas. Records should include service(s) performed, date of service, chemicals used (including EPA # if in the US), signs of activity and corrective actions. 10 Points
5.07	Has the facility eliminated or controlled any potential glass, metal or hard plastic contamination issues?	All foreign material risks must be either removed and/or accounted for and controlled. Example include metal filings (maintenance), glass lights, push pins, staples, etc.	A No or N/A response must be justified in comments section. All foreign material risks must be either removed and/or accounted for and controlled. Example include metal filings (maintenance), glass lights, push pins, staples, etc. Visual confirmation required. 10 Points
5.08	Is there a written glass policy (including glass breakage procedure and where necessary a glass register)?	Document should include site glass policy, breakage procedure and glass register if necessary.	A No or N/A response must be justified in comments section. Document should include site glass policy, breakage procedure and glass register if necessary. Visual confirmation required. 10 Points

5.09	Are the growing facility(s), including grounds and any packaging and storage areas clean and well maintained?	All facility areas should be kept clean and free from debris and other extraneous materials. This helps avoid pest attraction and contamination of products or packaging. Pest activity is easier to detect in a clean area. Litter, waste, refuse, uncut weeds or grass and standing water inside, or within the immediate vicinity of the building may constitute an attractant or breeding place for rodents, insects or other pests, as well as microorganisms that may cause contamination.	A No or N/A response must be justified in comments section. All facility areas should be kept clean and free from debris and other extraneous materials. This helps avoid pest attraction and contamination of products or packaging. Pest activity is easier to detect in a clean area. Litter, waste, refuse, uncut weeds or grass and standing water inside, or within the immediate vicinity of the building may constitute an attractant or breeding place for rodents, insects or other pests, as well as microorganisms that may cause contamination. Visual confirmation required. 10 Points
5.1	If applicable, are compost and/or substrate receiving and storage areas adequately separated from crop production and packaging and other storage areas?	Adequate separation of compost and substrates from growing and other storage areas is essential to prevent possible cross contamination.	A No or N/A response must be justified in comments section. Adequate separation of compost and substrates from growing and other storage areas is essential to prevent possible cross contamination. Visual confirmation required. 10 Points
<b>6 Growing Media</b>			
6.01	Is soil used in the growing operation?	Information gathering question.	Information gathering question. Visual confirmation required. 0 Points
6.02	Is a hydroponic system used?	Information gathering question.	Information gathering question. Visual confirmation required. For further information on this subject see <a href="http://www.oznet.ksu.edu/library/hort2/MF1169.pdf">http://www.oznet.ksu.edu/library/hort2/MF1169.pdf</a> 0 Points
6.03	If a hydroponic system is used, is it a "closed" hydroponic system (excess solution is captured and reused) ?	Information gathering question.	If not used mark this question N/A. Information gathering question. Hydroponic production is the growing of plants without soil. Systems may be "open" or "closed" and liquid only or aggregate (utilize a growing substrate). The nutrient solution supplies most of the plant nutrient requirements. Visual confirmation required. 0 Points No N/A.
6.03a	If used, are records available detailing how the solution is treated for recycling?	This refers to wastewater from the roots that is recaptured, sterilized, and reused to reduce environmental waste and contamination, and to conserve water. Growers should sterilize the recycled nutrient water by heating it to approximately 90°C (194°F), U.V., ozonation, etc.	If not used mark this question N/A. A No/NA response must be justified in comments section. This refers to wastewater from the roots that is recaptured, sterilized, and reused to reduce environmental waste and contamination, and to conserve water. Growers should sterilize the recycled nutrient water by heating it to approximately 90°C (194°F), U.V., ozonation, etc. 15 points
6.04	Are substrates (e.g. sand, gravel, vermiculite, rockwool, perlite, peat moss, coir, etc.) used? If no, go to 7.01	Information gathering question.	If No, go to 7.01 and mark the following questions N/A. Information gathering question. Examples include sand, gravel, vermiculite, rockwool, perlite, peat moss, coir, etc. Visual confirmation required. 0 Points
6.04a	If substrates are heat/steam sterilized, have the location, date of sterilization, time/temperature readings, operator's name and pre-plant interval been recorded?	When the substrates are sterilized on-site, the name or reference of the facility are recorded. If sterilized off-site then name and location of company performing service should be recorded. Information should include: date of sterilization, time/temperatures used, machinery and method operator's name and pre-planting interval.	A No or N/A response must be justified in comments section. When the substrates are sterilized on-site, the name or reference of the facility are recorded. If sterilized off-site then Name and location of company performing service should be recorded. Information should include: date of sterilization, time/temperatures used, machinery and method operator's Name and pre-planting interval. 15 points
<b>7 Fertilizer / Crop Nutrition</b>			
7.01	Is untreated human sewage sludge used in the growing operation? If this question is answered Yes, automatic failure of this audit will result.	Untreated human sewage sludge is not to be used in the growing operation.	A Yes response must be justified in comments section. If this question is answered Yes, automatic failure of this audit will result. Visual confirmation required. 20 Points No N/A.
7.02	Is compost produced from animal derived materials used by the grower? If No, go to 7.03	This question is specifically targeting compost produced from raw animal manures, as opposed to green waste.	If No, go to 7.03 and mark the following questions N/A. Composting is the controlled breakdown or decomposition of organic materials under aerobic (i.e. with air) or anaerobic (i.e. without air) conditions. Visual confirmation (documentation) required. 0 Points No N/A.

7.02a	Are compost applications incorporated into the soil prior to planting and not applied during the growing season?	If used, the applications should be incorporated into the soil prior to planting.	A No or N/A response must be justified in comments section. If records are available they should prove that the applications have been incorporated into the soil and made prior to planting. Visual confirmation (documentation) required. 10 Points
7.02b	Are there compost use records available for each growing facility(s), including application records which shows that the interval between application and harvest was not less than 45 days?	Compost records shown the date of application, the lot code of compost applied and where the compost was applied should be available. Records should show a 45 day interval between compost application and harvesting unless more stringent national or local legislation/guidelines exist.	A No or N/A response must be justified in comments section. There should be sufficient information in the records that would make it possible to trace an application back if needed. Examples of records may include invoices that contain lot numbers, delivery location, delivery date, application date, method of application, operator name, etc. The documentation should be current and available for review. Visual confirmation (documentation) required. 15 Points
7.02c	Are there Certificate(s) of Analysis (CoA) from the compost supplier(s) that covers pathogen testing (plus any other legally best practice required testing) and does the grower have relevant letters of guarantee regarding SOP's and logs?	Certificates of analysis should be available for each lot of compost (containing animal materials) used. Tests should include microbiological/heavy metal analyses. Microbial testing should include Salmonella, E.coli O157:H7 and Fecal Coliforms using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). Please see compliance criteria for further details regarding testing. All local and national legislation should also be followed. The grower should have proof that compost suppliers have cross contamination SOP's and temperature/turning logs. *	A No or N/A response must be justified in comments section. There should be current information and a detailed test analysis available from the supplied material which includes microbiological testing OR additional tests that may be required. Growers are expected to have proof (copies of, letter of agreement etc.) that shows that compost suppliers have cross contamination prevention SOPs and maintaining the required compost temperature and turning logs. Microbiological testing criteria (per lot): Fecal coliforms <1000 MPN/gram, Salmonella: Negative or < detection limit (<1/30 grams), E coli O157: H7, Negative or < detection limit (<1/30 grams). Please see for CCR Title 14 - Chapter 3.1 - Article 5. 2007. Article 5. Composting Operation and Facility Siting and Design Standards. Accessed February 15, 2007. <a href="http://www.ciwmb.ca.gov/regulations/Title14/ch31a5.htm#article5">http://www.ciwmb.ca.gov/regulations/Title14/ch31a5.htm#article5</a> for further details regarding sampling techniques. Other pathogens appropriate for the source material. Visual confirmation (documentation) required. 20 Points
7.02d	Are there Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the compost supplier(s) that covers heavy metal testing?	Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the compost supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).).	A No or N/A response must be justified in comments section. Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the compost supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).) Auditor should match the names of the materials being used with the COA's and/letters of guarantee. Visual confirmation (documentation) required. 10 Points
7.03	Are biosolids used? If No, go to 7.04. NOTE: Special attention to commodity specific guidelines rules (e.g., Californian Leafy Greens) which ban the use of biosolids, see 7.03d	This refers to organic materials resulting from the treatment of domestic sewage at a wastewater treatment facility. See <a href="http://www.epa.gov/epacfr40/chapt-l.info/">http://www.epa.gov/epacfr40/chapt-l.info/</a> .	If No, go to 7.04. A Yes response must be justified in comments section. NOTE: Special attention to commodity specific guidelines rules e.g. Leafy Greens which ban the use of biosolids, see 7.03dsection. <a href="http://www.epa.gov/owm/mtb/biosolids/503pe/index.htm">http://www.epa.gov/owm/mtb/biosolids/503pe/index.htm</a> . <a href="http://www.adas.co.uk/media_files/Publications/SSM.pdf">http://www.adas.co.uk/media_files/Publications/SSM.pdf</a> Visual confirmation (documentation) required. 0 Points No N/A.
7.03a	Are biosolids incorporated into the soil prior to planting and not applied during the growing season?	Applications should be incorporated into the soil prior to planting. Maximizing time between the application and harvest is recommended; see local legislation and best practice guidelines, e.g.. EPA Biosolid regulations in the US. <a href="http://www.epa.gov/epacfr40/chapt-l.info/">http://www.epa.gov/epacfr40/chapt-l.info/</a> <a href="http://www.epa.gov/owm/mtb/biosolids/503pe/index.htm">http://www.epa.gov/owm/mtb/biosolids/503pe/index.htm</a>	A No or N/A response must be justified in comments section. Records should prove that applications have been incorporated into the soil and made prior to planting. <a href="http://www.foodsafety.gov/~dms/prodguid.html">http://www.foodsafety.gov/~dms/prodguid.html</a> . Visual confirmation (documentation) required. 15 Points

7.03b	Are the grower's biosolids use records available for each growing facility(s), especially application records?	There should be sufficient information in the records that would make it possible to trace an application back if needed. Application records should include at least the date, lot code and application method. Examples of supporting records may include invoices that contain lot numbers, delivery location, delivery date, etc. The documentation should be current and available for review.	A No or N/A response must be justified in comments section. There should be sufficient information in the records that would make it possible to trace an application back if needed. Examples of records may include invoices that contain lot numbers, delivery location, delivery date, method of application, operator name, etc. The documentation should be current and available for review. Visual confirmation (documentation) required. 15 Points
7.03c	Is there a Certificate(s) of Analysis (COA) from the biosolid supplier(s) certifying compliance with prevailing national/ local standards and guidelines (microbiological analysis)? If this question is answered No, automatic failure of this audit will result.	Microbiological analysis should correlate with the product lot use reports (e.g. lot numbers, delivery location, delivery date). Only approved suppliers should be used limited to those firms demonstrating consistent compliance with prevailing national/ local standards and guidelines (e.g. Heavy metal and microbiological testing) including classification AA, A, B, etc. OR additional tests that may be required.	A No or N/A response must be justified in comments section. There should be current information and a detailed test analysis available from the supplied material which includes pathogen and heavy metals, classification AA, A, B, etc. OR additional tests that may be required. Information should be available that would make it possible to trace back to the source if needed therefore only approved suppliers should be used limited to those firms demonstrating consistent compliance prevailing national/ local standards and guidelines. If this question is answered No, automatic failure of this audit will result. Visual confirmation (documentation) required 20 Points
7.03d	Are there Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the biosolid supplier(s) certifying compliance with prevailing national/ local standards and guidelines (heavy metal test analysis)?	Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the biosolid supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).).	A No or N/A response must be justified in comments section. Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the biosolid supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).) Auditor should match the names of the materials being used with the COA's and/letters of guarantee. Visual confirmation (documentation) required. 10 Points
7.03e	Are biosolids being applied to crops where the country of production regulations/guidelines ban the use such materials e.g. Leafy Green Commodity Specific Guidelines in California? <u>If this question is answered Yes, automatic failure of this audit will result.</u>	Some commodity specific guidelines have rules regarding use of biosolids, e.g. Californian Leafy Green Commodity Specific Guideline the use of biosolids.	A Yes or N/A response must be justified in comments section. Some commodity specific guidelines have rules regarding use of biosolids, e.g. Californian Leafy Green Commodity Specific Guideline the use of biosolids. Where the country of production regulations/guidelines ban the use such materials (e.g., Leafy Green Commodity Specific Guidelines in California) and this question is answered Yes, automatic failure of this audit will result. Visual confirmation (documentation) required 20 Points
7.04	Is untreated animal manure used? If No, go to 7.05. NOTE: Special attention to commodity specific guidelines rules (e.g., Californian Leafy Green Commodity Specific Guidelines) which ban the use of untreated animal manures. See 7.04d	Untreated animal manure refers to manure that is raw and has not gone through a treatment process. Note that some commodity specific guidelines have rules regarding use of untreated manures (e.g. Californian Leafy Green Commodity Specific Guidelines bans the use of untreated manures).	If No, go to 7.05 and mark the following questions N/A. A Yes response must be justified in comments section. Refers to manure that is raw and has not gone through a treatment process. NOTE: Special attention to commodity specific guidelines rules (e.g., Californian Leafy Green Commodity Specific Guidelines) which ban the use of untreated animal manures. See 7.04d Visual confirmation (documentation) required. 15 Points No N/A.
7.04a	Is untreated animal manure incorporated into the soil prior to planting and not applied during the growing season?	If used, the applications should be incorporated into the soil prior to planting.	A No or N/A response must be justified in comments section. Applications should be incorporated into the soil prior to planting. Records should prove that applications have been incorporated into the soil and made prior to planting. Maximizing time between the application and harvest is recommended i.e. not less than 120 days prior to the harvest. Visual confirmation (documentation) required. 20 Points <a href="http://www.ota.com/organic/foodsafety/manure.html">http://www.ota.com/organic/foodsafety/manure.html</a>

7.04b	Are there untreated animal manure records available for each growing facility(s) including application, blend, pot/bed fill records which shows that the interval between application, blend, pot/bed fill and harvest was not less than 120 days (unless more stringent laws or guidelines exist)?	There should be sufficient information in the records that would make it possible to trace an application back if needed. Application records should include at least the date, lot code and application method. Examples of supporting records may include invoices that contain lot numbers, delivery location, delivery date, etc. The documentation should be current and available for review.	A No or N/A response must be justified in comments section. There should be sufficient information in the records that would make it possible to trace an application back if needed. Application records should include at least the date, lot code and application method. Examples of supporting records may include invoices that contain lot numbers, delivery location, delivery date, etc. The documentation should be current and available for review. Visual confirmation (documentation) required. 15 Points
7.04c	Are there Certificate(s) of Analysis (COA), specification or some other document available for review provided by the untreated animal manure supplier stating the components of the material?	There should be sufficient identification information that would make it possible to trace back to the source if needed therefore only approved suppliers should be used limited to those firms demonstrating consistent compliance with prevailing national/ local standards and guidelines.	A No or N/A response must be justified in comments section. There should be sufficient identification information that would make it possible to trace back to the source if needed therefore only approved suppliers should be used limited to those firms demonstrating consistent compliance with prevailing national/ local standards and guidelines. Visual confirmation (documentation) required. 20 Points
7.04d	Are untreated animal manures being used where the country regulations/guidelines ban the use such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? If this question is answered Yes, <u>automatic failure of this audit will result.</u>	Some commodity specific guidelines have rules regarding use of untreated animal manures, (e.g., Californian Leafy Green Commodity Specific Guidelines) bans the use of untreated animal manures.	A Yes or N/A response must be justified in comments section. Some commodity specific guidelines has rules regarding use of untreated animal manures, e.g. Californian Leafy Green Commodity Specific Guideline bans the use of untreated animal manures. If untreated animal manures are being applied to crops where the country regulations/guidelines ban the use such materials e.g. Leafy Green Commodity Specific Guidelines in California and this question is answered Yes, <u>automatic failure of this audit will result.</u> Visual confirmation (documentation) required. 20 Points
7.05	Are other nonsynthetic crop treatments used (e.g. compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers")? If No, go to 7.06.	Examples include but are not limited to compost teas, fish emulsions, fish meal, blood meal, and "bio fertilizers" that are produced from animal materials.	If No, go to 7.06 and mark the following questions N/A. Visual and verbal confirmation. Examples of "other" fertilizers include Urea, bone or blood meal, fish emulsion, animal waste (guano, poultry, animal waste) etc. Visual confirmation (documentation) required. 0 Points No N/A.
7.05a	Are nonsynthetic treatments that contain animal products or animal manures applied to the edible portions crops?	Nonsynthetic treatments that contain animal products or animal manures should not be applied to the edible portions of crops.	A Yes response must be justified in comments section. Nonsynthetic treatments that contain animal products or animal manures should not be applied to the edible portions of crops. Visual confirmation (documentation) required. 15 Points
7.05b	Are nonsynthetic crop treatment records available for each growing facility(s) including application records demonstrating the interval between application and harvest was not less than 45 days?	Nonsynthetic crop treatment records should be available for each growing facility(s) including application records demonstrating the interval between application and harvest was sufficient (i.e., not less than 45 days). There should be sufficient information in the records that would make it possible to trace an application back if needed. Application records should include at least the date, lot code and application method. *	A No or N/A response must be justified in comments section. Nonsynthetic crop treatment records should be available for each growing facility(s) including application records demonstrating the interval between application and harvest was sufficient (i.e., not less than 45 days). There should be sufficient information in the records that would make it possible to trace an application back if needed. Application records should include at least the date, lot code and application method. * Visual confirmation (documentation) required. 15 Points

7.05c	Are there Certificate(s) of Analysis available from the nonsynthetic crop treatment suppliers that covers pathogen testing (plus any other legally/best practice required testing)?	Certificates of analysis should be available for each lot of nonsynthetic crop treatment (containing animal materials) used. Test should include microbiological test analysis. Microbial testing should include Salmonella and E.coli O157:H7 using approved sampling and testing methods. e.g. AOAC. and an accredited laboratory. Please see compliance criteria for further details regarding testing. All local and national legislation should also followed. *	A No or N/A response must be justified in comments section. Suppliers of these products shall disclose on labels, certificates of analysis, or other companion paperwork whether the product contains any animal manure or products. The analysis (microbiological and heavy metal) must correlate to the product lot use reports (e.g., lot numbers, delivery location, delivery date). A letter of assurance should also be available to prove the supplier is approved meeting consistent compliance with prevailing national/ local standards and guidelines. Microbiological testing criteria (per lot): Microbiological testing criteria (per lot): Salmonella: Negative or< detection limit (<1/30 grams), E coli O157: H7, Negative or < detection limit (<1/30 grams) and other pathogens appropriate to source. Visual confirmation (documentation) required. 20 points.
7.05d	Are there Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the nonsynthetic crop treatment suppliers that covers heavy metal testing (plus any other legally/best practice required testing)?	Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the nonsynthetic crop treatment supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).).	A No or N/A response must be justified in comments section. Visual confirmation (documentation) required. Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the nonsynthetic crop treatment supplier(s) that covers heavy metal testing should be available. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).) Auditor should match the names of the materials being used with the COA's and/letters of guarantee. Visual confirmation (documentation) required. 10 Points
7.06	Are any soil amendments (except inorganic nutrients/fertilizers) used that do not contain animal products and/or animal manures? If No, go to 7.07.	This refers to soil amendments (except inorganic nutrients/fertilizers) used that do not contain animal products and/or animal manures.	If No, go to 7.07 and mark the following questions N/A. A Yes response must be justified in comments section. This refers to soil amendments (except inorganic nutrients/fertilizers) used that do not contain animal products and/or animal manures. Examples include but are not limited to plant by-products, humates, seaweed, inoculants, and conditioners. Visual confirmation (documentation) required. 0 Points
7.06a	Are the grower's soil or substrate amendment (except inorganic nutrients/fertilizers that do not contain animal products and/or animal manures) records available for review including application records?	Records should legible and at least detail date of application, type of fertilizer, amount , method of application (drip, bulk, etc.), and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.	A No or N/A response must be justified in comments section. Records should legible and at least detail date of application, type of fertilizer, amount , method of application (drip, bulk, etc.), and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. Visual confirmation (documentation) required. 10 Points
7.06b	Are there Certificate(s) of Analysis (COA) and/or letters of guarantee stating that the materials used are free from animal products and/or animal manures?	There should be Certificate(s) of Analysis and/or letters of guarantee from the fertilizer supplier, stating that the materials they are supplying are free from animal products and/or animal manures.	A No or N/A response must be justified in comments section. There should be Certificate(s) of Analysis and/or letters of guarantee from the fertilizer supplier, stating that the materials they are supplying are free from animal products and/or animal manures. A statement of ingredients or letter from suppliers attesting the this fact is acceptable. Auditor should match the names of the materials being used with the COA's and/letters of guarantee. Visual confirmation (documentation) required. 20 Points.
7.07	Are inorganic fertilizers used? If No, go to 7.08.	Examples of manufactured inorganic fertilizers include ammonium nitrate, ammonium sulfate, chemically synthesized urea, etc.	If No, go to 7.08 and mark the following questions N/A. A Yes response must be justified in comments section. Examples of manufactured inorganic fertilizers include ammonium nitrate, ammonium sulfate, chemically synthesized urea, etc. Visual confirmation (documentation) required. 0 Points No N/A.

7.07a	Are the grower's inorganic fertilizer records available for review including application records?	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed.	A No or N/A response must be justified in comments section. Examples of records may include invoices that contain lot numbers, delivery location, delivery date, application date, method of application, etc. There should be sufficient identification information that would make it possible to trace an application back to the source if needed. Visual confirmation (documentation) required. 10 Points
7.07b	Are there Certificate(s) of Analysis (COA), letters of guarantee or some other documents from the inorganic fertilizer supplier(s) that specifies all the ingredients including inert materials?	Certificate(s) of Analysis (COA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V).).	A No or N/A response must be justified in comments section. For the materials being used, a Letter of Assurance (or Letter of Guarantee or Certificate of Analysis) from the fertilizer manufacturer or supplier should be available and current. The information should specify the source of inert ingredients (substances used as "fillers" such as clay pellets, granular limestone). Auditor should match the names of the materials being used with the COA's and/letters of guarantee. Visual confirmation (documentation) required. 10 Points
7.08	If fertilizers and/or fertilizer containers are stored on the property, are they stored in a manner to prevent contamination to the growing facility(s) or any of water sources?	Fertilizers and/or fertilizer containers should be stored securely to prevent contamination issues.	A No or N/A response must be justified in comments section. Fertilizers and/or fertilizer containers should be stored securely to prevent contamination issues to the growing facility(s) (s) or any water sources. Visual confirmation required. 3 Points
<b>8 Irrigation/Water Use</b>			
8.01	Is the water used for the growing operation sourced from municipal or district water pipeline systems? If No, go to 8.02.	(No recommendation)	No, go to 8.02 and mark the following questions in this sub section N/A. Visual confirmation required. 0 Points No N/A.
8.01a	Are microbiological tests, including generic E.coli conducted on water used for crop protection/fertilizer applications, and irrigation? If No, go to 8.01c.	Microbial water testing including generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	If No, go to 8.01c. and mark the following question N/A. A No or N/A response must be justified in comments section. Microbial water testing including generic E.coli should occur for all water sources used for crop protection/fertilizer and frost or freeze prevention programs. Score "No" if test records are older than 12 months. Visual confirmation (documentation) required. 20 Points
8.01b	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. Testing should be accomplished prior to each harvest season and continued annually. Visual confirmation (documentation) required. 15 Points
8.01c	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system. Visual confirmation (documentation) required. 10 Points
8.01d	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points

8.01e	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (i.e. re-tests). For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * Useful link <a href="http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf">http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf</a> 20 Points Visual confirmation (documentation) required. 20 Points
8.01f	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.01g	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.01h	Are the crops irrigated by flood irrigation or a furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.01i	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.02	Is the water used in the growing operation sourced from wells? If No, go to 8.02.	(No recommendation)	If No, go to 8.02 and mark the following questions in this sub section N/A. Visual confirmation required. 0 Points No N/A.
8.02a	Are all well heads an adequate distance from untreated manure?	There should be approximately 200ft (61m) separation of untreated manure from wells. Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). *	A No or N/A response must be justified in comments section. There should be approximately 200ft (61m) separation of untreated manure from wells. Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). * Visual confirmation required. 15 Points
8.02b	Is the well designed to prevent contamination?	If wells are used they must designed to prevent contamination. Closed wells should be sealed and protected against contamination issues.	A No or N/A response must be justified in comments section. If wells are used they must designed to prevent contamination. Closed wells should be sealed and protected against contamination issues. Visual confirmation required. 10 Points
8.02c	Is it evident that the well(s) is free from contamination issues and are measures taken to minimize contamination of wells?	A routine maintenance and program should be in place that includes removal of all inappropriate materials (e.g. plant material, trash, animal carcasses). Filtration, disinfection systems, etc. also may be part of the measures taken to minimize contamination. Well heads should be free from cracks in the concrete.	A No or N/A response must be justified in comments section. A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g., plant material, trash, animal carcasses). Filtration, disinfection systems, etc. also may be part of the measures taken to minimize contamination. Visual confirmation required. 10 Points
8.02d	Are records kept for periodic inspections and treatment of wells (if performed) available for review?	"Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. If using a disinfection injection system (e.g. chlorination), there should be monitoring logs completed on at least a daily basis. Any well "shocking" should be recorded. The appropriate support documentation e.g. should be available for review.	A No or N/A response must be justified in comments section. "Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, disinfection activities, and any action taken. The appropriate support documentation should be available for review. Visual (documentation) confirmation required. 7 Points

8.02e	Are microbiological tests, including generic E.coli conducted on water used for irrigation, crop protection/fertilizer applications? If No, go to 8.02g	Microbial water testing including Generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	If No, go to 8.02g and mark the following question N/A. A No/NA response must be justified in comments section. Microbial water testing including Generic E.coli should occur for all water sources used for crop protection/fertilizer and frost or freeze prevention programs. Score "No" if test records are older than 12 months. Visual confirmation (documentation) required. 20 Points
8.02f	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. A routine testing program should be in place to monitor water quality. Testing should be done as required by local, national requirements and/or guidelines. A more rigorous testing program may be required if there have been abnormal test findings or there are higher risk factors (i.e. source is surface water) involved. Visual confirmation (documentation) required. 15 Points
8.02g	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system. Visual confirmation (documentation) required. 10 Points
8.02h	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points
8.02i	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (i.e. re-tests). For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * <a href="http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf">http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf</a> Visual confirmation (documentation) required. 20 Points
8.02j	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.02k	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.02l	Are the crops irrigated by flood irrigation or a furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points

8.02m	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.03	Is the water used in the growing operation sourced from ponds, reservoirs, watersheds or other surface water source? If No, go to 8.04	Water sourced from ponds, reservoirs, watersheds or other surface water systems may carry more of a risk for contamination than closed water sources. For surface waters, consider the impact of storm events on irrigation practices. Bacterial loads in surface water are generally much higher than normal, and caution should be exercised when using these waters for irrigation.	If No, go to 8.04 and mark the following questions in this sub section N/A. Water sourced from ponds, reservoirs, watersheds or other surface water systems may carry more of a risk for contamination than closed water sources. Visual confirmation required. 0 Points No N/A.
8.03a	Is surface water in adequate distance from untreated manure?	There should be approximately 100ft (30 m) separation for sandy soil and 200ft (61 m) separation for loam or clay soil (slope less than 6%;increase distance to 300ft (91 m) if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). *	A No or N/A response must be justified in comments section. There should be a 100ft separation for sandy soil and 200ft separation for loam or clay soil (slope less than 6%;increase distance to 300ft if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). 15 Points
8.03b	Do animals (domestic, livestock, or wild) have access to the water source?	Animals (domestic, livestock, or wild) should not have access to the system due to the possibility of contamination occurrences.	A Yes or N/A response must be justified in comments section. If livestock, grazing, and domestic animals have access to pond or reservoirs there could be a higher risk for contamination therefore barriers, fences, etc. that could restrict livestock /animal access to the open water source is recommended. Visual confirmation required. 7 Points
8.03c	Is it evident that the water source is free of contamination issues and are measures taken to minimize contamination of the water source?	A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g. plant material, trash, animal carcasses). Filtration, documentation of animal intrusion, disinfection systems, etc. also may be part of the measures taken to minimize contamination.	A No or N/A response must be justified in comments section. A routine maintenance program should be in place that includes implementing systems where stagnation does not occur. Removal of all inappropriate materials (e.g., plant material, trash, pesticide/fertilizer containers, animal carcasses) should be done. Filtration and/or disinfection systems also may be part of the measures taken to minimize contamination. Visual confirmation required. 10 Points
8.03d	Are records kept for the periodic visual inspections and disinfection treatments (if used) available for review?	"Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. If using a disinfection injection system (e.g. chlorination), there should be monitoring logs completed on at least a daily basis. The appropriate support documentation should be available for review.	A No or N/A response must be justified in comments section. Records may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. The appropriate support documentation should be available for review. Visual confirmation (documentation) required. 7 Points
8.03e	Are microbiological tests, including generic E.coli conducted on water used for irrigation, crop protection/fertilizer applications, and frost or freeze prevention program? If No, go to 8.03g.	Microbial water testing including generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	f No, go to 8.03g and mark the following question N/A. A No/NA response must be justified in comments section. Microbial water testing including generic E.coli should occur for all water sources used for crop protection/fertilizer and frost or freeze prevention programs. Score "No" if test records are older than 12 months. Visual confirmation (documentation) required. 20 Points
8.03f	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. A routine testing program should be in place to monitor water quality. Testing should be done as required by local, national requirements and/or guidelines. A more rigorous testing program may be required if there have been abnormal test findings or there are higher risk factors (i.e. surface water) involved. Visual confirmation (documentation) required 15 Points

8.03g	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field and handled prior to testing by a laboratory. Visual confirmation (documentation) required. 10 Points
8.03h	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points
8.03i	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (i.e. re-tests). Visual confirmation (documentation) required. For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * <a href="http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf">http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf</a> Visual confirmation (documentation) required. 20 Points
8.03j	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.03k	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.03l	Are the crops irrigated by flood irrigation or a furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.03m	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.04	Is the water used in the growing operation sourced from canals, rivers, ditches, or other open flowing water systems? If No, go to 8.05.	Water sourced from canals, rivers, ditches or other open flowing water systems may carry more of a risk for contamination than closed water sources. For surface waters, consider the impact of storm events on irrigation practices. Bacterial loads in surface water are generally much higher than normal, and caution should be exercised when using these waters for irrigation.	If No, go to 8.05 and mark the following questions in this sub section N/A. Visual confirmation required. 0 Points No N/A.
8.04a	Is surface water in adequate distance from untreated manure?	There should be approximately 100ft (30 m) separation for sandy soil and 200ft (61 m) separation for loam or clay soil (slope less than 6%;increase distance to 300ft (91 m) if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). *	A No or N/A response must be justified in comments section. There should be a 100ft separation for sandy soil and 200ft separation for loam or clay soil (slope less than 6%;increase distance to 300ft if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). Visual confirmation required. 15 Points

8.04b	Is the water source under the direction of a water authority or district?	Water sources from rivers, canals, etc., should be managed from a central authority charged with maintaining adequate water quality. Evidence like permits, invoices, etc., are useful compliance evidence.	A No or N/A response must be justified in comments section. Water sources from rivers, canals, etc., should be managed from a central authority charged with maintaining adequate water quality. Evidence like permits, invoices, etc., are useful compliance evidence. Visual confirmation required. 5 Points
8.04c	Do animals (domestic, livestock, or wild) have access to the water source?	Animals (domestic, livestock, or wild) should not have access to the system due to the possibility of contamination occurrences.	A Yes or N/A response must be justified in comments section. livestock, grazing, and domestic animals should not have access to the system due to the possibility of contamination occurrences. Visual confirmation required. 7 Points
8.04d	Is it evident that the water source is free of contamination issues and are measures taken to minimize contamination of the water source?	A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g. plant material, trash, animal carcasses). Filtration, documentation of animal intrusion, disinfection systems, etc. also may be part of the measures taken to minimize contamination.	A No or N/A response must be justified in comments section. A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g., plant material, trash, animal carcasses). Filtration, disinfection systems, etc. also may be part of the measures taken to minimize contamination. Visual confirmation required. 10 Points
8.04e	Are records kept for periodic visual inspection and disinfection (if occurring) of the water source and available for review?	"Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. If using a disinfection injection system (e.g. chlorination), there should be monitoring logs completed on at least a daily basis. The appropriate support documentation should be available for review.	A No or N/A response must be justified in comments section. "Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. The appropriate support documentation should be available for review. Visual confirmation (documentation) required. 7 Points
8.04f	Are microbial tests, including Generic E.coli conducted on water used for irrigation, crop protection/fertilizer applications, and frost or freeze prevention program? If No, go to 8.04h.	Microbial water testing including Generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	If No, go to 8.04h and mark the following question N/A. A No or N/A response must be justified in comments section. Microbial water testing including generic E.coli should occur for all water sources used for crop protection/fertilizer and frost or freeze prevention programs. Score "No" if test records are older than 12 months. Visual confirmation (documentation) required. 20 Points
8.04g	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. A routine testing program should be in place to monitor water quality. Testing should be done as required by local, national requirements and/or guidelines. A more rigorous testing program may be required if there have been abnormal test findings or there are higher risk factors (i.e. surface water) involved. Visual confirmation (documentation) required 15 Points
8.04h	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field and handled prior to testing by a laboratory. Visual confirmation (documentation) required. 10 Points
8.04i	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points

8.04j	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (i.e. re-tests). For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * <a href="http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf">http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf</a> Visual confirmation (documentation) required. 20 Points
8.04k	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.04l	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.04m	Are the crops irrigated by flood irrigation or furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.04n	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation required 0 points
8.05	Is reclaimed water used in the growing operation? NOTE: This refers to wastewater that has gone through a treatment process. If No, go to 8.06.	Wastewater that has been gone through a treatment process. Reclaimed water shall be subject to applicable local and national regulations and standards. Prior to uses this water for agricultural purposes growers should check with regulatory bodies to determine the appropriate parameters and tolerances to be used.	If No, go to 8.06 and mark the following questions in this sub section N/A. Visual confirmation required. 0 Points No N/A.
8.05a	Is the reclamation process under the direction of a water reclamation management or authority?	Reclaimed water should be treated with adequate disinfection systems and tested frequently, ideally under the direction of a water reclamation authority or other management body. Reclaimed water shall be subject to applicable local and national regulations and standards. Prior to uses this water for agricultural purposes growers should check with regulatory bodies to determine the appropriate parameters and tolerances to be used.	A No or N/A response must be justified in comments section. If recycled or reclaimed water is not treated and tested properly under the direction of a water reclamation authority or other management body, there could be more risk for contamination. Refer to local and national authorities for guidelines and parameters for irrigation water test tolerances. Visual confirmation (documentation) required. 10 Points
8.05b	Are microbial control measures for reclaimed water utilized?	Reclaimed water should be treated with adequate disinfection systems and tested frequently to ensure water quality standards are met. Reclaimed water shall be subject to applicable local and national regulations and standards. Prior to uses this water for agricultural purposes growers should check with regulatory bodies to determine the appropriate parameters and tolerances to be used.	A No/NA response must be justified in comments section. Recycled or reclaimed water should be treated with adequate disinfection systems to ensure water quality standards are met. Refer to local, national requirements and/or guidelines irrigation water test tolerances. Visual confirmation (documentation) required. 15 Points
8.05c	Are microbial tests, including generic E.coli conducted on water used for irrigation, crop protection/fertilizer applications, and frost or freeze prevention program? If No, go to 8.05e.	Microbial water testing including Generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	No, go to 8.05e and mark the following question N/A. A No/NA response must be justified in comments section. Microbial water testing including Generic E.coli should occur for all water sources used for crop protection/fertilizer and frost or freeze prevention programs. Score "No" if test records are older than 12 months. Visual confirmation (documentation) required. 20 Points

8.05d	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. Recycled or reclaimed water should be tested frequently as required by local, national requirements and/or guidelines. Visual confirmation (documentation) required 15 Points
8.05e	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field and handled prior to testing by a laboratory. Visual confirmation (documentation) required. 10 Points
8.05f	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points
8.05g	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (e.g., re-testing, switching to another water source). For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * <a href="http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf">http://www.caleafygreens.ca.gov/pdf/metrics_070418.pdf</a> Visual confirmation (documentation) required. 20 Points
8.05h	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.05i	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.05j	Are the crops irrigated by flood irrigation or a furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.05k	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.06	Are tail water (run off water) systems used in the growing operation? If No, go to 8.07.	Tail water return systems catch spilled or runoff water and pump the water back to the top of the field.	If No, go to 8.07 and mark the following questions N/A. Refers to tail water (run off water) systems used in to irrigate the crop. While it is common to see tail water pumped out of the growing operation, there may be a concern the water will be re-used for crop needs. Visual confirmation required. 0 Points No N/A.

8.06a	Is surface water in adequate distance from untreated manure?	There should be approximately 100ft (30 m) separation for sandy soil and 200ft (61 m) separation for loam or clay soil (slope less than 6%;increase distance to 300ft (91 m) if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill). *	A No or N/A response must be justified in comments section. There should be a 100ft separation for sandy soil and 200ft separation for loam or clay soil (slope less than 6%;increase distance to 300ft if slope is greater than 6%). Distance may increase or decrease depending on the risk variables e.g. topography (uphill or downhill).Visual confirmation required. 15 points.
8.06b	Do animals (domestic, livestock, or wild) have access to the tail water systems?	Animals (domestic, livestock, or wild) should not have access to the system due to the possibility of contamination occurrences.	A Yes or N/A response must be justified in comments section. Livestock and animals should not have access to the system due to the possibility of contamination occurrences. Visual confirmation required. 7 Points
8.06c	Is it evident that the water source is free of contamination issues and are measures taken to minimize contamination of the tail water system?	A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g. plant material, trash, animal carcasses). Filtration, documentation of animal intrusion, disinfection systems, etc. also may be part of the measures taken to minimize contamination.	A No or N/A response must be justified in comments section. A routine maintenance program should be in place that includes removal of all inappropriate materials (e.g., plant material, trash, animal carcasses). Filtration, disinfection systems, etc. also may be part of the measures taken to minimize contamination. Visual confirmation required. 10 Points
8.06d	Are records kept for periodic visual inspection and disinfection (if occurring) of the water source and available for review?	"Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. If using a disinfection injection system (e.g. chlorination), there should be monitoring logs completed on at least a daily basis. The appropriate support documentation should be available for review.	A No or N/A response must be justified in comments section." Records" may include calendar books with commentary regarding what was checked, the condition, unusual occurrences, and any action taken. The appropriate support documentation should be available for review. Visual confirmation (documentation) required. 7 Points
8.06e	Are microbial tests conducted, including generic E.coli on water used for irrigation, crop protection/fertilizer applications, and frost or freeze prevention program? If No, go to 8.06g.	Microbial water testing including Generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. The score for this question is "No" if test records are older than 12 months.	If No, go to 8.06g and mark the following question N/A. A No or N/A response must be justified in comments section. Microbial water testing including generic E.coli should occur on a routine basis. All water sources should be tested that are used for direct contact with the edible portion of a crop as well as non-contact water sources. Score "No" if test records are older than 12 months.Visual confirmation (documentation) required. 20 Points
8.06f	Are the microbiological tests current and conducted at the required and/or expected frequencies?	One sample per water source should be collected and tested prior to use and then ideally monthly, or at frequency relative to the associated risks.*	A No or N/A response must be justified in comments section. A routine testing program should be in place to monitor water quality. Testing should be done as required by local, national requirements and/or guidelines. A more rigorous testing program may be required if there have been abnormal test findings or there are higher risk factors (i.e. surface water) involved. Visual confirmation (documentation) required. 15 Points
8.06g	Do written procedures (SOPs) exist covering proper sampling protocols and are the SOPs being implemented? NOTE: Irrespective of water source, samples for microbial testing should be taken at a point as close to the point of use as practical, so as to test both the water source and the water distribution system.	There should be documented procedures in place detailing how water samples are taken in the field including stating how samples should be identified i.e. clearly naming the location that the sample was taken, the water source and the date (this is important in order to be able to calculate geometric means). Samples should be taken at a point as close to the point of use as possible where water contacts the crop, so as to test both the water source and the water distribution system.	A No or N/A response must be justified in comments section. There should be documented procedures in place detailing how water samples are taken in the field and handled prior to testing by a laboratory. Visual confirmation (documentation) required. 10 Points
8.06h	Do written procedures (SOPs) exist covering corrective measures for unsuitable or abnormal water testing results?	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.	A No or N/A response must be justified in comments section. 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. Visual confirmation (documentation) required. 10 Points

8.06i	If unsuitable or abnormal results have been detected, have documented corrective measures been performed?	For Generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). *	A No or N/A response must be justified in comments section. Records should show corrective action was taken when a contamination has been identified (i.e. re-tests). For generic E.coli (unless more stringent guidelines/laws in existence) <126MPN (or CFU)/100mL (rolling geometric mean n=5) and <235MPN (or CFU)/100mL for any single sample. Where thresholds have been exceeded there should be recorded corrective actions including investigations, water retests and crop testing (E.coli O157:H7 and Salmonella - zero tolerance). * Visual confirmation (documentation) required. 20 Points
8.06j	Are the crops irrigated by a micro irrigation or drip system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.06k	Is overhead irrigation (e.g. spray, hose) used to irrigate the crop? NOTE: "Irrigating the crop" refers to irrigation during the mature growing cycle. This does not include pre-planting or just after planting to create a stand.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.06l	Are the crops irrigated by flood irrigation or furrow system?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.06m	Are the crops sub irrigated (also known as seepage irrigation)?	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk.	Information gathering question. Reducing contact with edible portion of the crop is believed to reduce microbial risk. Visual confirmation 0 points.
8.07	Are check valves, anti-siphon devices, or other back flow prevention systems in use when and where necessary?	Irrigation systems should utilize effective devices which can minimize the potential risk of accidentally allowing any injected chemical/fertilizer to flow back into the irrigation well, surface water source, or to discharge onto the land where not intended.	A No or N/A response must be justified in comments section. Irrigation systems should utilize effective devices which can minimize the potential risk of accidentally allowing any injected chemical/fertilizer to flow back into the irrigation well, surface water source, or to discharge onto the land where not intended. Visual confirmation required. 10 Points
8.08	Is irrigation equipment that is not in use, free from pest contamination and stored clean, off the ground?	Irrigation equipment that is not in use should be stored in a hygienic manner, free of pest contamination and clean. Growers should check the unused irrigation periodically to make sure that it has not become a pest harborage area or become dirty due to rains.	A No or N/A response must be justified in comments section. Irrigation equipment that is not in use should be stored in a hygienic manner, free of pest contamination and clean. Growers should check the unused irrigation periodically to make sure that it has not become a pest harborage area or become dirty due to rains. Visual confirmation required. 10 Points
<b>9 Plant Protection</b>			
9.01	Is there a documented policy and/or procedures for the mixing/loading of plant protection products (insecticides, fungicides, herbicides, plant growth regulators, etc.) ?	Mixing and loading crop protection materials should be done as prescribed by prevailing national/ local standards and guidelines. All agricultural chemical additions, dilutions, etc. should be performed safely and within a distance where land and any water source may not be affected.	A No or N/A response must be justified in comments section. A documented policy and/or procedures should be available describing how mixing and loading of crop protection materials is performed. These activities should be performed safely and within a distance from land and any water sources as prescribed product label, manufacturer recommendation, or by prevailing National or local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. Visual confirmation (documentation) required. 5 Points

9.01a	Is mixing, loading, or the dilution of plant protection products performed safely and within a distance where the growing facility(s) and water sources are not affected?	Mixing and loading crop protection materials should be done as prescribed by prevailing national/ local standards and guidelines. All agricultural chemical additions, dilutions, etc. should be performed safely and within a distance where land and any water source may not be affected.	A No or N/A response must be justified in comments section. Mixing and loading of crop protection materials which should be performed safely and within a distance from land and any water sources as prescribed product label, manufacturer recommendation, or by prevailing National/ local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. <a href="http://www.usda.gov/oc/photo/opc-pest.htm">http://www.usda.gov/oc/photo/opc-pest.htm</a> NOTE: If the auditor does not verify this activity N/A should be used. Visual confirmation required. 7 Points
9.02	Is there a documented policy and/or procedures for the rinsing and cleaning of plant protection product equipment?	Rinsing and cleaning of all crop protection equipment should be done as prescribed by prevailing national/ local standards and guidelines. Care should be taken so that such activities are performed safely and within a distance where land and water sources may not be affected.	A No or N/A response must be justified in comments section. A documented policy and/or procedures should be available describing how rinsing and cleaning of crop protection equipment is performed. Rinsing and cleaning of all crop protection equipment should be done as prescribed product label, manufacturer recommendation, or by prevailing National/ local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. Visual confirmation (documentation) required. 5 Points
9.02a	Is rinsing and cleaning of plant protection product equipment performed safely and within a distance where land and water sources are not affected?	Rinsing and cleaning of all crop protection equipment should be done as prescribed by prevailing national/ local standards and guidelines. Care should be taken so that such activities are performed safely and within a distance where land and water sources may not be affected.	A No or N/A response must be justified in comments section. Rinsing and cleaning of all crop protection equipment should be performed safely and within a distance from land and any water sources as prescribed product label, manufacturer recommendation, or by prevailing National/ local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. <a href="http://www.usda.gov/oc/photo/opc-pest.htm">http://www.usda.gov/oc/photo/opc-pest.htm</a> NOTE: If the auditor does not verify this activity N/A should be used. Visual confirmation required. 10 Points 7 Points
9.03	Is there documentation that shows the individual(s) making decisions for plant protection are qualified?	Current valid certificates, licenses, another form of proof of training recognized by prevailing national/ local standards and guidelines should be available for the individual(s) making decisions on crop protection (e.g. choice of crop protection materials, application timings, rates etc.).	A No or N/A response must be justified in comments section. Valid certificates, licenses, another form of proof of training recognized by prevailing national/ local standards and guidelines should be available for the individuals making decisions on crop protection (e.g., choice of materials, chemicals, rates). The frequency of training should be up to date and in accordance with prevailing national/ local standards and guidelines <a href="http://www.epa.gov/pesticides/health/worker">http://www.epa.gov/pesticides/health/worker</a> . Visual confirmation (documentation) required. 10 Points
9.04	Is there documentation that shows employees who handle plant protection products are trained or are under the supervision of a trained individual?	Current valid certificates, licenses, or another form of proof of training recognized by prevailing national/ local standards and guidelines should be available for supervisors/ workers handling, mixing/loading/and applying crop protection products .	A No or N/A response must be justified in comments section. Valid certificates, licenses, or another form of proof of training recognized by prevailing national/ local standards and guidelines should be available for supervisors/ workers handling, mixing/loading/and applying crop protection products. The frequency of training should be up to date and in accordance with prevailing national/ local standards and guidelines <a href="http://www.epa.gov/pesticides/health/worker">http://www.epa.gov/pesticides/health/worker</a> . Visual confirmation (documentation) required. 15 Points

9.05	Does the growing operation follow a pesticide application recording program of all plant protection products (including soil and substrate pre-plant treatments)? If No, go to 9.06. If this question is answered No, automatic failure of this audit will result.	The growing operation should follow a pesticide application record keeping program that at least includes the applicator's name and certification number (if applicable). Month, day, and year of application; crop, commodity, or site to which the chemical was applied; product trade name, total amount applied; size of treatment area; and application location. Ideally records should detail active ingredient.	If No, go to 9.06 and mark the following question N/A. A No or N/A response must be justified in comments section. A pesticide application record keeping program should include at least: Applicator's name and certification number (if applicable). Month, day, and year of application; crop, commodity, or site to which the pesticide was applied; product trade name, total amount applied; size of treatment area; and application location. Ideally records should detail active ingredient however if the A.I. (active ingredient) is not recorded on the records this should not justify for the automatic failure. <u>If this question is answered No, automatic failure of this audit will result.</u> Visual confirmation (documentation) required. 20 Points
9.05a	Are plant protection product application records up to date and available for review?	Records should be up to date detailing any plant protection applications in the current season.	A No or N/A response must be justified in comments section. Records should be up to date detailing any plant protection applications (including fumigation) in the current season. Visual confirmation (documentation) required. 15 Points
9.06	Are plant protection products registered in the country of use for the target plant where official registration is in place? If this question is answered Yes, skip to question 9.07. If no official registration system is utilized answer this question N/A and go to 9.06a. Where a system exists, but a plant protection chemical being used is not registered for the target plant the response to this question is No. If this question is answered No, automatic failure of this audit will result.	Plant protection products should be registered in the country of use for the target plant where official registration is in place. If no registration system is utilized, the response to this question is N/A and 9.06a must be answered. Where a system exists, but a plant protection chemical being used is not registered for the target plant the response to this question is No.	A No or N/A response must be justified in comments section. plant protection materials should be registered in the country of use for the target plant where official registration is in place. If this question is answered Yes, skip to question 9.07. If no registration system is utilized, the response to this question is N/A and 9.06a must be answered. Where a system exists, but a plant protection chemical being used is not registered for the target plant the response to this question is No. If this question is answered No, automatic failure of this audit will result. Visual confirmation (documentation) required. 20 Points
9.06a	Does the country of production allow the use of plant protection products that are registered for the target plant in another country, as long as the use of this chemical does not contravene any prevailing national and local laws in the destination country (e.g. maximum residue limit, banned lists, etc.)? If this question is answered No, automatic failure of this audit will result.	The country of production should allow the use of crop protection products that are registered for the target crop in another country, as long as the use of this chemical does not contravene any laws in the destination country (e.g. maximum residue limit, banned lists, etc.). "Destination country" can be the country of production or the country the product is being exported to.	A No or N/A response must be justified in comments section. The country of production should allow the use of crop protection materials that are registered for the target crop in another country, as long as the use of this material does not contravene any laws in the destination country (e.g. maximum residue legislation, banned lists, etc.). "Destination country" can be the country of production or the country the product is being exported to. <u>If this question is answered No, automatic failure of this audit will result.</u> Visual confirmation (documentation) required. 20 Points
9.07	Are crop protection product applications restricted by the guidelines established by the product label, manufacturer recommendation, or by prevailing national/ local standards and guidelines? If this question is answered No, automatic failure of this audit will result.	Information should at least detail: ingredients, target pest(s)/organism(s), sites where the product may be used, application methods that are required or preferred, how much chemical should be applied, rate of application, whether there are any restrictions on use (such as temperature, time of day, season of the year, contamination of sensitive areas, exposure of nontarget species, application methods that are prohibited, how often the pesticide should or may be applied, all restricted entry intervals (REIs) pertaining to existing uses, as applicable), maximum application rates per treatment and per year, pre-planting intervals (PPIs), pre-harvest intervals (PHIs) and storage and disposal guidelines.	A No or N/A response must be justified in comments section. All crop protection applications must be restricted by the guidelines established by the product label, manufacturer recommendation, or by prevailing national/ local standards and guidelines. <u>If this question is answered No, automatic failure of this audit will result.</u> Where a proper label exists or laws are in place, these take precedent. Visual confirmation (documentation) required. 20 Points

9.08	Where harvesting is restricted by pre-harvest intervals (as required on the crop protection chemical product labels, manufacturer recommendations and/or by prevailing national/ local standards) is the grower adhering to these pre-harvest interval time periods? If this question is answered No, automatic failure of this audit will result.	Preharvest intervals specify the amount of time that must elapse between pesticide application and crop harvest. These intervals are established to allow sufficient time for the crop to metabolize (break down) the pesticide so residue levels do not exceed those originally established when the pesticide received its label.	A No or N/A response must be justified in comments section. Where harvesting is restricted by pre-harvest intervals (as required on the crop protection chemical product labels, manufacturer recommendations and/or by prevailing national/ local standards) the grower must be adhering to these pre-harvest interval time periods. In order to answer this question properly, the auditor should randomly check crop protection application records against harvesting records. <u>If this question is answered No, automatic failure of this audit will result.</u> Where a proper label exists or laws are in place, these take precedent. Visual confirmation (documentation) required. 20 Points
9.09	Are employee reentry intervals established as required by the pesticide label, manufacturer recommendation, or by prevailing national/ local standards and guidelines?	Reentry interval is the period of time immediately following the application of a pesticide during which unprotected workers should not enter a field. Failure to observe the specified interval could potentially result in agricultural worker health and safety issues.	A No or N/A response must be justified in comments section. Employee reentry intervals must be established as required by the pesticide label, manufacturer recommendation, or by prevailing national/ local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. Visual confirmation (documentation) required. 10 Points
9.1	When crop protection applications occur, does posting take place on area of treatment according to prevailing national/ local standards and guidelines?	Posting should be done in accordance to the pesticide label and prevailing national/ local standards and guidelines to protect agricultural workers from exposure to pesticides.	A No or N/A response must be justified in comments section. When crop protection applications occur posting must take place on area of treatment according to prevailing national/ local standards and guidelines. Visual confirmation (documentation) required. 10 Points
9.11	Are pesticides applied while wind speed, including gusts, are low enough to avoid drift?	Pesticides should be applied while wind speed, including gusts is low enough to avoid drift. Maximum allowable wind speeds will vary depending on the means of application (i.e. aerial, ground, electrostatic, etc.) Use of spray adjuvant with known efficacy as a drift retardant might be used.	A No or NA response must be justified in the comments section. Pesticides should be applied while wind speed including gusts are low enough to avoid drift (this includes activities of the farming operation's neighbors and custom operators crop protection applications) NOTE: If the auditor does not observe any drift issues or evidence of drift issues at the time of inspection N/A should be used. Ideally application records should note wind and/or weather conditions when the application takes place however if there are no specific recordings the auditor should not downscore this question at this time. Visual confirmation required. 10 Points
9.12	If crop protection containers are stored on the property (even temporarily), are they stored in a manner to prevent contamination and disposed of responsibly?	Crop protection containers should be stored securely even if temporarily stored. Empty crop protection containers, excess crop protection rinsate should be disposed of safely according to the product label, manufacturer recommendation or by prevailing national/ local standards and guidelines.	A No or N/A response must be justified in comments section. Crop protection containers should be stored securely even if temporarily stored. Empty crop protection containers, excess crop protection rinsate should be disposed of safely according to the product label, manufacturer recommendation or by prevailing national/ local standards and guidelines. Where a proper label exists or laws are in place, these take precedent. Visual confirmation required. 10 Points
9.13	Have documented policies and/or procedures been developed for the monitoring of crop protection application equipment (e.g. calibration procedures, inspections, replacement)?	Procedures may include regular calibration, inspections, replacement, and maintenance of the crop protection equipment.	A No or N/A response must be justified in comments section. A documented policy and/or procedures should be available describing how calibration, inspections, replacement, and maintenance of the crop protection equipment is carried out. Visual confirmation (documentation) required. 10 Points
9.13a	Is it evident that the equipment used for crop protection applications is in good working order?	All equipment used in crop protection applications should be in good working order so correct applications can be made thus reducing potential crop contamination or drift issues.	A No or N/A response must be justified in comments section. All equipment used in crop protection applications should be in good working order. Visual confirmation required. <a href="http://www.usda.gov/oc/photo/opc-pest.htm">http://www.usda.gov/oc/photo/opc-pest.htm</a> NOTE: If the auditor does not verify this activity N/A should be used. Visual confirmation required. 10 Points

<b>10 Employee Hygiene (This applies to greenhouse workers not the harvesting workers).</b>			
10.01	Does the growing operation have a documented and implemented policy for dealing with employees who appear to be physically ill, or become ill while working (actions for employees to take in the event of injury or illness)?	There should be a written policy supported by visual evidence that employees who appear to be physically ill or become ill while working are prohibited from contact with product. If labor is supplied by a contractor, a copy of the policy and/or procedures should be available.	A No response must be justified in comments section. There should be a written policy supported by visual evidence that employees who appear to be physically ill or become ill while working are prohibited from contact with product. If labor is supplied by a contractor, a copy of the policy and/or procedures should be available. Visual confirmation (documentation) required. 10 Points No N/A.
10.02	Does the growing operation have a documented and implemented policy regarding employees with open sores and wounds?	There should be a written policy supported by visual evidence that employees with exposed boils, sores, infected wounds, or any other source of abnormal contamination should be prohibited from contact with product. All bandages must be covered with a non-porous covering such as latex or plastic gloves. If labor is supplied by a contractor, a copy of the procedures should be available.	A No response must be justified in comments section. There should be a written policy supported by visual confirmation that employees with exposed boils, sores, infected wounds, or any other source of abnormal contamination should be prohibited from contact with product. All bandages must be covered with a non-porous covering such as latex or plastic gloves. If labor is supplied by a contractor, a copy of the procedures should be available. Visual confirmation (documentation) required. 10 Points No N/A.
10.03	Does the growing operation have written procedures describing the disposition of product that has come into contact with blood <b>and/or bodily fluids</b> to be destroyed? If this question is answered No, automatic failure of this audit will result.	Written procedures should be in place describing the disposition of product that has come into contact with blood <b>and/or bodily fluids</b> . If labor is supplied by a contractor a copy of the policy should be available.	A No response must be justified in comments section. There should be a written policy and procedure supported by visual confirmation that if product has come into contact with blood <b>and/or bodily fluids</b> , all affected product must be destroyed. If labor is supplied by a contractor a copy of the policy should be available. <u>If this question is answered No, automatic failure of this audit will result.</u> Visual confirmation (documentation) required. 20 Points No N/A.
10.04	Does the growing operation have documented and implemented policies prohibiting eating, drinking (including gum chewing) using tobacco in the growing facility(s)?	There should be a written policy supported by visual evidence that eating (including chewing gum, drinking (other than drinking water (avoiding glass)), and tobacco use must be restricted to areas away from the growing facility(s). If labor is supplied by a contractor, a copy of the policy should be available.	No response must be justified in comments section. There should be a written policy supported by visual confirmation that eating (including chew gum), drinking (other than water) and tobacco use must be restricted to areas away from the growing facility(s). If labor is supplied by a contractor, a copy of the policy should be available. Visual confirmation (documentation) required. 10 Points No N/A.
10.05	Is there a food safety hygiene training program covering new and existing employees and are there records of these training events?	There should be a formal training program to inform employees of the current policies and requirements of the company regarding hygiene. Frequency should be at the start of the season and then at some topics covered at least quarterly, but ideally monthly. Training material covering the content of the company policies and requirements regarding hygiene should be available.	A No response must be justified in comments section. There should be a formal training program to inform employees of the current policies and requirements of the company regarding hygiene. Frequency should be at the start of the season and then at some topics covered at least quarterly, but ideally monthly. Training material covering the content of the company policies and requirements regarding hygiene should be available. Visual confirmation (documentation) required. 15 Points No N/A.
10.06	Are there operational toilet facilities provided? If NO, go to 10.07. If this question is answered No, the audit will result in an automatic failure.	Toilet facilities should be available for employees. Privies (unplumbed outhouses) may be allowed only if they are in suitable condition meeting prevailing national/ local standards and guidelines. The term operational means that the toilets have water if they are flushing and that they flush.	If NO, go to 10.07 and mark the following questions N/A. A No response must be justified in comments section. Toilet facilities (including urinals if applicable) should be available for employees to prevent contamination to the growing facility(s). Privies (unplumbed outhouses) may be allowed only if they are in suitable condition meeting prevailing national/ local standards and guidelines. If answered No, automatic failure of audit will result. Visual confirmation required. 20 Points. No N/A.
10.06a	Are the toilet facilities placed within ¼ mile or 5 minutes walking distance of all employees?	Toilet facility placement should be within 1/4 mile or 5 minutes walking distance of where employees are located Or if more stringent, as per prevailing national/ local guidelines.	A No or N/A response must be justified in comments section. Toilet facility placement should be within 1/4 mile or 5 minutes walking distance of where employees are located Or prevailing national/ local standards and guidelines (using the higher level requirement). Visual confirmation required. 10 Points

10.06b	Are toilet facilities in a suitable location to prevent contamination to the growing facility(s)?	Placement of toilet facilities should be in a suitable location to prevent contamination to the growing facility(s).	A No or N/A response must be justified in comments section. The placement of toilet facilities should be in a suitable location to prevent contamination to the growing facility(s). Toilets should not be positioned or parked (if mobile) too close to the growing facility(s). Visual confirmation required. 15 Points
10.06c	Is a minimum of one toilet facility provided for each group of 20 employees?	At least one toilet per 20 employees should be provided Or if more stringent, as per prevailing national/ local guidelines.	A No or N/A response must be justified in comments section. At least one toilet per 20 employees should be provided Or prevailing national/ local standards and guidelines. Visual confirmation required. 5 Points
10.06d	Do toilet facilities have visuals or signs, written in the appropriate languages, reminding employees to wash their hands before returning to work?	Toilet facilities should have visuals or signs written in the appropriate languages, reminding employees to wash their hands before returning to work. The visuals or signs should be placed in key areas where employees can easily see them.	A No or N/A response must be justified in comments section. Toilet facilities should have visuals or signs written in the appropriate languages reminding employees to wash their hands before returning to work. The visuals or signs ideally should be placed in key areas such as inside portable toilet stations, posted on doors of stalls, etc. Visual confirmation required. 2 Points
10.06e	Are the toilets maintained in a clean and sanitary condition and are there records showing toilet cleaning, servicing and stocking is occurring regularly?	Toilets should be maintained in a clean and sanitary condition. Servicing records (either contracted or in-house) should be available for review showing toilet cleaning, servicing and stocking is occurring regularly. Toilet paper should be available at each toilet location and maintained in a hygienic manner (held on rolls, not be placed in urinals or on the floor). Soiled tissue should not be placed in trash cans and/or on the floor.	A No or N/A response must be justified in comments section. It should be evident that toilets are cleaned and sanitized regularly. Soiled tissue should not be placed in urinals, on the floor, or in trash containers. Communal water containers for personal cleansing should not be allowed (sometimes seen next to toilets). Visual confirmation required. 10 points
10.06f	Are the catch basins of the toilets designed and maintained to prevent contamination (e.g. free from leaks and cracks)?	Catch basins from toilets must be designed and maintained properly to prevent contamination. Catch basins should be free of leaks, cracks and constructed of materials that will not degrade or decompose. NOTE: This includes flooring of the portable toilet units where contamination could be a potential issue.	A No or N/A response must be justified in comments section. Non-applicable may be used if toilets are not self contained. Auditor needs to check underneath self-contained toilets for any leaks or cracks of the toilet catch basins/flooring to determine if the catch basins/flooring are designed and constructed properly so contamination to the growing facility(s) is avoided. Visual confirmation required. 5 Points
10.06g	Is there is a documented and implemented procedure for emptying the catch basin in a hygienic manner and also in a way that prevents product, packaging, equipment, and water system contamination?	If self contained toilets are used, the toilet basins should be emptied, pumped, and cleaned in a manner to avoid contamination to product, packaging, equipment, and growing facility(s). Equipment used in emptying/pumping must be in good working order. A documented policy should exist and if occurring at the time of the inspection, the policy should be followed. The policy should include a response plan for major leaks or spills.	A No or N/A response must be justified in comments section. Non-applicable can be used for flush type toilets connected to a sewer system. Toilet basins should be emptied in a manner that will avoid contamination to the growing facility(s). If the auditor cannot verify the emptying process during the time of the audit, then a verification of the operation's (or contracted company's) pumping /emptying procedure (SOP) must be available for review. NOTE: If the operation has their own "clean out" area on site, the facility must meet prevailing national/ local standards and guidelines. Visual confirmation required. 5 Points
10.06h	Is there a documented response plan for major leaks or spills for the sanitation units?	In the event of major leaks or spills from the sanitation units, there should be a documented response plan.	A No or N/A response must be justified in comments section. Non-applicable can be used for flush type toilets connected to a sewer system. In the event of major leaks or spills from the sanitation units, there should be a documented response plan. Visual confirmation required. 5 Points

10.07	Is there evidence of human fecal contamination in the growing facility(s)? If this question is answered Yes, automatic failure of this audit will result.	There should be no evidence of human fecal contamination in the growing facility(s), proximity to the growing facility(s) (within a distance where the crop in question may be affected), or any of the storage areas.	A Yes answer must be justified in comments section. Auditor Discretion. There should be no evidence of fecal contamination in the growing facility(s), proximity to the growing facility(s) (within a distance where the crop in question may be affected), or any of the storage areas (equipment, packaging, etc). This refers to a single account of human or domestic fecal matter and/or build-up or systematic discoveries of wild animal manure as opposed to a single isolated bird dropping in the growing facility(s). If answered Yes, automatic failure of audit will result. Visual confirmation required. 20 Points No N/A.
10.08	Are there operational hand washing facilities provided? If No, go to 10.09.	Hand wash stations should be provided for employees to wash their hands as needed. Operational meaning with water and drainage system.	If No, go to 10.09 and mark the following questions N/A. A No answer must be justified in comments section. Functioning hand washing facilities (portable or stationary) should be available for all employees. Visual confirmation required. 15 Points No N/A.
10.08a	Are the hand washing facilities placed within ¼ mile or 5 minutes walking distance of all employees?	Hand washing facilities should be within 1/4 mile or 5 minutes walking distance of where employees are located Or if more stringent, as per prevailing national/ local guidelines.	A No or N/A response must be justified in comments section. Hand washing facilities should be within 1/4 mile or 5 minutes walking distance of where employees are located Or prevailing national/ local standards and guidelines. Visual confirmation required. 10 Points No N/A.
10.08b	Are hand wash stations properly stocked with soap, paper towels and trash can?	All hand washing facilities must be stocked with soap. Liquid/foam/powder with single use pump dispenser method preferred over communal bar type. To reduce the spreading of germs, single-use towels available at all hand washing facilities. Are trash cans provided for soiled paper towels.	A No or N/A response must be justified in comments section. All hand washing facilities must be stocked with soap. Liquid/foam/powder with single use pump dispenser method preferred over communal bar type. To reduce the spreading of germs, single-use towels available at all hand washing facilities. Are trash cans provided for soiled paper towels. Visual confirmation required. 5 Points
10.08c	Are the hand wash stations designed and being maintained to prevent contamination onto the growing facility(s) ( i.e. spent water does not go straight to the ground)?	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 facility(s).	A No or N/A response must be justified in comments section. Hand wash stations should be free of clogged drains, designed and maintained properly to capture or control rinse water. There should be no broken hoses, cracked, or leaking catch basins that could cause contamination to the growing facility(s). Hand wash stations should be designed to prevent against overflow. Used water from hand washing stations should be “captured” into a holding container type system (as with toilet basins) rather than released to the ground. Visual confirmation required. 5 Points
10.08d	Does the growing operation have a documented and implemented policy and procedure in place requiring employees to wash their hands (e.g. prior to beginning work, after breaks, after toilet use)?	There should be a written policy supported by visual evidence that employees are required to wash their hands prior to beginning work, after breaks, after using the toilets etc. Other times when hand washing might be appropriate especially if around the growing crop include after using a tissue, after touching chemicals and at any point where hands maybe contaminated with a substance that if this substance was to come into contact with the edible portion of the crop, it would be a food safety concern.	A No response must be justified in comments section. There should be a written policy supported by visual evidence that employees are required to wash their hands prior to beginning work, after breaks, after using the toilets etc. Other times when hand washing might be appropriate especially if around the growing crop include after using a tissue, after touching chemicals and at any point where hands maybe contaminated with a substance that if this substance was to come into contact with the edible portion of the crop, it would be a food safety concern. Visual confirmation (documentation) required. 10 Points No N/A.
10.09	Is fresh potable drinking water provided for workers? If No, go to 10.10	Fresh potable water meeting the quality standards for drinking water should be available for employees on site to prevent dehydration.	If No, go to 10.10 and mark the following questions N/A. A No answer must be justified in comments section. Fresh potable water that is fit for human consumption should be available for employees to prevent dehydration. Visual confirmation required. 10 Points No N/A.

10.09a	If used, are water containers maintained in a clean condition?	Water containers should be maintained in a clean condition, free from residues and contamination to ensure employees are not adversely affected by contaminated water from unclean containers.	A No or N/A response must be justified in comments section. Water containers should be maintained in a clean condition, free from residues and contamination to ensure employees are not adversely affected by contaminated water from unclean containers. Attention to certain types of plastic containers that are not intended for food contact such as vinyl plastic which may leach undesirable chemicals into stored water. Water stored in plastic containers should not be stored near gasoline, pesticides, etc. because vapors from these substances could permeate the plastic and affect the water. Visual confirmation required. 5 Points
10.1	Are first-aid kits available and is the inventory maintained properly?	There should be a first-aid kit available that is stocked with inventory (e.g. disposable gloves, bandages) and accessible for employees. All date coded materials are within expiry dates.	A No answer must be justified in comments section. There should be clean and orderly first-aid kit available that is stocked with suitable inventory (e.g., fresh sanitary un-used disposable gloves, bandages). The kit should be located in a suitable area accessible to employees. There should be no expired contents, contents in poor condition (old latex gloves or used gloves). Visual confirmation required. 5 Points. No N/A.
10.1	Are there trash cans available and placed in suitable locations?	There should be adequate measures for trash disposal so that the growing and storage areas are not contaminated. Containers (e.g. dumpsters, cans) should be available and placed in suitable locations for the disposal of rubbish.	A No answer must be justified in comments section. There should be adequate measures for trash disposal. Containers (e.g. dumpsters, cans) should be available and placed in suitable locations for the disposal of rubbish. If cans are used, liners should also be used. Visual confirmation required. 5 Points. No N/A.
10.12	Are there any foreign material issues observed that are or could be potential risks to the product in the growing facility(s) (e.g., jewelry)?	There should be no foreign material issues that are or could be potential risks to the product in the growing facility(s) (e.g. jewelry).	A Yes answer must be justified in comments section. There should be no foreign material issues that are or could be potential risks to the product in the growing facility(s) (e.g. jewelry). 5 Points. No N/A.
<b>11</b>	<b>Food Security</b>		
11.01	Are entrances to restricted by gates, chains, guard stations, etc.?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. To reduce the risk of tampering access should be limited by gates, chains, guard stations, etc. Visual confirmation required. 5 points No N/A.
11.02	Are postings such as "No Trespassing" and/or "Restricted Entry" used appropriately?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Postings and/or signage to warn against trespassing should be in place and located in suitable areas. Visual confirmation required. 5 points No N/A.
11.03	Are wells or other water sources secured and designed to prohibit tampering?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Wells or other water sources should be secured and designed to prohibit tampering. Visual confirmation (documentation) required. See section 6 regarding record keeping of water sources. 0 Points No N/A. 5 points No N/A.
11.04	Are grounds and facilities monitored by either in-house or contracted personnel?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Grounds and facilities should be monitored by either in house or contracted personnel. Visual and/or verbal confirmation accepted. 5 points No N/A.
11.05	Are employees instructed to note and report suspicious activity?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Employees of the farming operation should be instructed to note and report suspicious activity. Visual and/or verbal confirmation accepted. 5 points No N/A.
11.06	Are high risk areas (e.g. spray equipment, equipment shops, sheds) monitored?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. High risk areas (e.g., crop protection equipment, disinfection systems) should be monitored on a regular basis. Visual confirmation (documentation) required. 5 points No N/A.

11.07	Is equipment examined for tampering prior to use?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Critical equipment used in the growing operation that could effect product and compromise food safety (e.g., crop protection equipment, disinfection systems) should be examined for tampering prior to use. Visual confirmation (documentation) required. 5 points No N/A. .
11.08	Are company supervisors required to undergo documented security training with attendance records?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Company supervisors should be required to undergo documented security training with attendance records. Visual confirmation (documentation) required. 5 points No N/A.
11.09	Is education material related to security made available?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No answer must be justified in comments section. Education material related to security should be made available to employees. Visual confirmation (documentation) required. 5 points No N/A.
11.1	Are inventory records of agricultural chemicals maintained? If No, go to 11.11.	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	If No, go to 11.11 and mark the following question N/A. A No/NA response must be justified in comments section. Inventory records of crop protection materials should be maintained periodically (at least on a monthly basis). Visual confirmation (documentation) required. 5 points No N/A.
11.10a	Are the inventory records periodically reconciled with physical inventory?	<a href="http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf">http://extension.psu.edu/food/safety/defense/government-agencies/PreHarvestSecurity-final-2.pdf</a>	A No or N/A response must be justified in comments section. Inventory records should periodically be reconciled with inventory on hand. Visual confirmation (documentation) required. 5 points No N/A.
11.11	Are all personal materials kept away from the growing area within the greenhouse?	Personal materials should be kept away from the growing area within the greenhouse.	A No or N/A response must be justified in comments section. Personal materials (backpacks, etc.) should be kept away from the growing area within the greenhouse. 5 points No N/A.

\*Where laws, commodity specific guidelines and/or best practice recommendations exist and are derived from a reputable source, then these practices and parameters should be used. Audit users should allow a degree of risk association if laws, guidelines, best practices, etc., have not been documented.

[Back to Index Page](#)