

## Glossary

**Accredited laboratory:** Testing laboratory with accreditation from an authoritative accrediting body to provide certification services against an international standard e.g. International Laboratory Accreditation Cooperation (ILAC), using the internationally recognized criteria and procedures outlined in ISO/IEC 17025: (General requirements for Competence of Calibration and Testing Laboratories), or having equivalent, National Regulations or State Department approvals in the country of production.

**Adenosine triphosphate (ATP) bioluminescence monitoring:** System that provides real time data measurements of residual organic matter that may remain after a surface, device or piece of equipment is cleaned. It allows the user to quickly assess the cleanliness of a surface to determine whether it is safe to begin production.

**Adjacent land:** All land that borders the growing area or is located in a way that it may have an effect on the growing area.

**Adjuvant:** Substances added to a pesticide product or spray mixture to enhance the pesticide's performance and/or the physical spray properties of the mixture.

**Agricultural material inputs:** Materials used in the production of crops including seeds, transplants, rootstock, cuttings, compost, fertilizers, pesticides, adjuvants, growth promoters, irrigation water, soil amendments and any other material inputs into the growing process.

**Agronomic inputs:** For the purposes of this audit are defined as fertilizers and other soil amendments e.g. compost.

**Air Gap:** The unobstructed vertical distance between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture, receptor, or other vessel and the flood level rim of the receptacle. These vertical, physical separations must be at least twice the diameter of the water supply outlet, never less than 25 mm (one inch) and/or in accordance with any local codes and regulations.

**Allergen:** A protein or modified protein with the potential to cause an allergic reaction in people. In the U.S. the main allergens are wheat, eggs, milk, soybeans, crustaceans (shellfish), peanuts, tree nuts (e.g. almonds, walnuts, pecans) and fish. Other countries may include other allergen listings e.g. mustard, celery and sesame. <https://farrp.unl.edu/IRChart>

**Animal Feeding Operation (AFO):** agricultural operations where animals are raised and maintained in confined situations for a total of 45 days or more (does not have to be consecutive days) in any 12-month period (does not have to be a calendar year) and crops, vegetation, or any post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Partial daily confinement counts as a whole day. Also, animals do not have to be the same animals confined for 45 days. For example, some auctions may qualify as AFOs. **An AFO is an example of an intensive livestock production system.**

**Audit:** A systematic, independent examination to determine to what extent an operation complies with the conforming scheme by reviewing the operation's food safety manual and related procedures, physical operations and processes, records and associated documents.

**Auditor Attributes and Behavior:** Include being ethical, open minded, diplomatic, observant, perceptive, versatile, tenacious, decisive, self-reliant, and having integrity.

**Audit Report:** The report submitted to a customer within 45 calendar days after each audit that includes a link to the certificate associated with the report and operation. This report includes details about the organization and its operation, the audit duration, audit scope, product information, audit scoring summary, and answers and comments for each of the applicable questions answered.

**Backflow:** Backflow is the flow of water or other liquids back into the potable water system.

**Backflow preventer:** An assembly or device which prevents the backflow of water into the potable water supply e.g. air gap, mechanical assembly.

**Back siphonage:** Backflow caused by negative or reduced pressure in the supply piping.

**Biological hazards:** Biological agents that have the capacity to cause harmful effects in humans. Common biological hazards include bacteria (pathogens), viruses and parasites.

**Biosolids:** Also known as sewage sludge. Semi-solids left over from municipal wastewater treatment.

**Calibration:** Determination of the accuracy of an instrument, usually by measurement of its variation from a standard, to ascertain necessary correction factors.

**Certified Backflow Prevention Assembly Tester:** A person who is certified by the approving authority to test, repair and maintain backflow prevention assemblies.

**Chemical hazards:** Include radiological hazards, substances such as pesticide and drug residues, natural toxins (such as mycotoxins), environmental pollutants, unapproved food or color additives, and food allergens.

**Clean in Place (CIP):** An equipment cleaning procedure that occurs on interior surfaces of equipment such as tanks and pipes that cannot be easily reached for cleaning. This procedure is sometimes part of a larger procedure where equipment is partially cleaned in some way while still assembled and then broken down for a deeper clean before being assembled again and then “flushed” through (clean in place). CIP involves circulation of a detergent solution, water rinse and sanitizing solution through equipment by use of a spray ball or spray to create turbulence and thus remove soil. CIP does not include equipment subject to in-place manual cleaning without the use of a CIP system e.g. slicers, mixers, centrifuge dryers.

**Cleanable:** Characteristic of a surface that allows effective removal of soil by normal cleaning methods, is dependent on the material, design, construction and installation of the surface and varies with the likelihood of the surface’s role in introducing pathogenic, toxigenic or other contaminants into food.

**Cleaning:** The process of removing food and other types of soil from a surface using a cleaning agent that removes food, soil, rust stains, minerals, or other deposits.

**Coliform bacteria:** Gram-negative, non-spore forming, rod-shaped bacteria are frequently used as indicators of sanitary quality of water but exist broadly in nature.

**Colony forming units (CFU):** A unit of measurement used to estimate viable microorganisms (bacteria, fungus) capable of growth under the prescribed conditions (medium, atmosphere, time and temperature) that develop into visible colonies (colony forming units).

**Commingling:** When more than one lot/batch/GTIN is combined.

**Compost:** Product of microbial decomposition of organic residues into a soil amendment.

**Concentrated animal feeding operation (CAFO):** A lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period. The number and types of animals covered by this definition can be found in the Federal Register’s definition of medium and large CAFOs (CFR Title 40, Part 122.23). [https://www.epa.gov/sites/production/files/2015-08/documents/sector\\_table.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/sector_table.pdf) A CAFO is an example of an intensive livestock production system.

**Control measure:** Any action or activity that can be used to prevent, reduce to an acceptable level, or eliminate a food safety hazard.

**Cooling/Cold Storage:** A facility that is receiving and storing finished goods and performing some kind of pre-cooling and/or cooling activities. In this type of facility, no packing or processing activities are being performed.

**Cooling Techniques: -**

**Forced-air cooling:** Fans in a refrigerated room (cooler) pull (force) air through the produce and cools the produce more rapidly than room cooling alone. Good air flow is essential so produce must not be packed too closely together.

**Hydrocooling:** Using cascading chilled water to remove the field heat from produce. Hydro-coolers can be standalone structures or cabinet-like pieces of equipment that use a refrigerated, circulated water bath to remove field heat, increasing the shelf life.

**Hydrovac cooling:** Combines techniques of vacuum cooling and hydrocooling. Water is sprayed on product just before flash point of the vacuum cycle when the water evaporates from the produce additional cold water is added so cooling produce without dehydrating.

**Ice:** Ice is applied directly to the produce as a method of removing field heat as well as providing short-term cooling for transport or display.

**Pre-cooling:** Reducing temperature of product prior to storage (i.e., removing field heat).

**Room cooling:** Produce is placed in a refrigerated room (cooler) and allowed to naturally cool to ambient temperatures. Coolers are normally designed to regulate temperature, airflow, humidity and other environmental factors. Room cooling is used for produce that has already been pre-cooled using another method and for produce that does not need to reach its minimum cooling temperature rapidly.

**Vacuum cooling:** Using low pressure to cool the produce through evaporative cooling. Produce is placed in a vacuum retort where the atmospheric pressure is reduced to a point where water boils and evaporates at 0 °C/32 °F.

**Critical control point:** A step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

**Cross connection:** A connection or a potential connection between any part of a potable water system and any non-potable water system in a manner which under any circumstances, would allow non-potable flow to enter the potable water system.

**Cross-contamination:** The transfer of microorganisms, such as bacteria and viruses, from a contaminated surface or substance to a previously uncontaminated surface or substance.

**Current Good Manufacturing Practices (cGMPs):** Regulations that are found in 21 CFR 110 (Current Good Manufacturing Practices in Manufacturing, Processing, Packing, or Holding Human Food) and enforced by the US Food and Drug Administration (FDA). cGMPs provide for systems that assure proper design, monitoring, and control of manufacturing processes and facilities.

**Dump tank:** Vessel used to wash produce before packing to remove soil and to improve its appearance and marketability. Water in a dump tank is reused and should be treated with an anti-microbial to maintain water quality.

**E. coli:** *Escherichia coli* are bacteria found in the environment, foods, and intestines of people and animals. *E. coli* are a large and diverse group of bacteria. Although most strains of *E. coli* are harmless, some strains can cause diarrhea, while others cause urinary tract infections, respiratory illness and pneumonia, and other illnesses. The presence of generic *E. coli* is frequently used as an indicator of fecal contamination.

**Facility operation:** A handling operation carried out in one or several buildings where product is being handled and/or stored. The type of Facility operation can be classified as: "Storage & Distribution Center", "Cooling/Cold Storage", "Packinghouse" or "Processing".

**Farm (Ranch):** A tract of land (not necessarily a "lot" for production purposes), under common management and common water supply, ideally contiguous (if not contiguous, similar risk is demonstrated) and used for agricultural production.

**Fecal coliforms:** Refer to "thermotolerant coliforms".

**Flooding:** The uncontrolled flowing or overflowing of a growing area with water that is reasonably likely to contain microorganisms or chemicals of significant public health concern and is reasonably likely to cause adulteration of edible portions of fresh produce in that field.

**Flume system:** A water process used to transport or for initial soil removal of produce via a trough of moving water that is circulated, or "re-circulated," using a pump.

**Food-contact surface:** Those surfaces that contact human food and those surfaces from which drainage onto the food or onto surface that contact the food ordinarily occurs during the normal course of operations; includes utensils and equipment surfaces.

**Food defense:** The process to ensure the security of food and drink from all forms of intentional malicious attack including ideologically motivated attack leading to contamination.

**Food fraud:** A collective term encompassing the deliberate and intentional substitution, addition, tampering or misrepresentation of food, food ingredients or food packaging, labelling, product information or false or misleading statements made about a product for economic gain that could impact consumer health.

**Food-grade:** Term that describes equipment, tools, materials, chemicals, etc. that are of sufficient quality to be used for food production, food storage, food preparation or food contact purposes.

**Food hazard:** A biological, chemical, or physical agent that is reasonably likely to cause human illness or injury in the absence of its control.

**Food Safety Management System (FSMS):** A set of interrelated systems that when used in combination ensure that food is safe for human consumption. It incorporates GMPs/PRPs, GHPs, HACCP and other practices such as regulatory requirements and communication to ensure food safety is maintained.

**Formal training:** A course offered by a recognized educational institution, government body or industry association/group for which a record of attendance is issued. Information about the training content is readily available from the course provider (e.g., course outline, online training materials, etc.).

**Fresh-cut produce:** Fresh fruits and vegetables for human consumption that have been minimally processed and altered in form by peeling, slicing, chopping, shredding, coring, or trimming, with or without washing, prior to being packaged for use by the consumer or a retail establishment.

**Geometric mean:** Mathematical definition: the n-th root of the product of n numbers. Practical definition: the average of the logarithmic values of a data set, converted back to a base 10 number. A geometric mean, unlike an arithmetic mean, tends to dampen the effect of very high or low values, which might bias the mean if a straight average (arithmetic mean) were calculated. This is helpful when analyzing bacteria concentrations, because levels may vary anywhere from 10 to 10,000-fold over a given period.

**Good Agricultural Practices (GAPs):** Food safety practices for farm activities related to risk mitigation of water, soil amendments, land use (previous and adjacent), animal access (domestic/wild), equipment, tools and buildings, worker health & hygiene practices.

**Good Manufacturing Practices (GMPs):** Facility operation guidelines for food handlers to mitigate potential and real risks. Key categories include HACCP methods and procedures, facility design and construction material, water supply, plumbing and toilet facilities, equipment and utensils, raw food handling and process controls, personal hygiene, pest control, and waste disposal. See also, current Good Manufacturing Practices.

**Greenhouse:** See “Indoor Agriculture”.

**Green waste:** The vegetative portion of the waste stream arising from various sources including waste from domestic and commercial premises and municipal operations.

**Ground water:** Water below the Earth’s surface, typically the source of water in springs and wells.

**HACCP plan:** A written document that explains the formal procedures for following Hazard Analysis and Critical Control Point principles and is used to identify, prevent and control food safety hazards.

**Harvest crew:** A designated group of workers under common supervision, harvesting the same product.

**Harvesting:** The physical act or process of gathering a crop from the production site (e.g., pulling or digging produce from the ground, picking it, separating it from the plant), which can be done either manually or mechanically.

**Human pathogen:** Microorganisms (bacteria, fungus, parasite, protozoa or virus) capable of causing illness or disease in people.

**Indoor agriculture (Greenhouse):** Where crops are grown in a controlled environment in a temporary or permanent enclosed structure. This does not include shade or hoop houses.

**Irrigation methods: -**

**Drip irrigation:** A type of micro-irrigation where the system emits water at a very slow rate directly to the soil where plant roots are growing. System may be on the soil surface or buried below the surface.

**Flood/furrow/surface irrigation:** Water is pumped or brought to fields and allowed to flow along the ground among the crops.

**Micro-irrigation:** A system where water is distributed under low pressure through a piped network in a pre-determined pattern and applied as a small discharge to or adjacent to each plant. Includes various systems (drip, micro-spray, micro-sprinklers, mini-bubbler) distinguished by the type of emitter device used to deliver water to the plants.

**Micro-sprinklers/sprays:** A type of micro-irrigation with fixed micro-sprays that deliver water at a higher rate and cover a larger area than drip emitters. Typically used in tree orchards, variant used in aeroponics.

**Overhead/sprinkler irrigation:** System where water is piped to one or more central locations and distributed by overhead high-pressure sprinklers or guns. Sprinklers can be fixed or mounted on moving platforms.

**Sub-irrigation/seepage irrigation:** A method of artificially raising the water table to allow the soil to be moistened from below the plant root zone. A system of canals, weirs, gates and pumps are used to increase and decrease water level in a network of ditches, controlling the water table. A variant is used in hydroponics.

**Listeria:** The major human pathogen in the *Listeria* genus is *L. monocytogenes*. It is usually the causative agent of the relatively rare bacterial disease listeriosis, a serious infection caused by eating food contaminated with the bacteria. The disease affects pregnant women, newborns, adults with weakened immune systems, and the elderly. *Listeria* bacteria can grow at refrigeration temperatures and survive freezing.

**Metrics:** Established measurable best practices and guidelines for a variety of process areas judged to be potential contributors to the risk of microbial contamination.

**Mitigation measures:** Any action or activity that can be used to prevent, reduce to an acceptable level, or eliminate a food safety risk. In order for mitigation to be effective, the risks must be identified ahead of time and a plan devised ready for implementation before or when the risk occurs.

**Mock recall:** A procedure to test the recall program and recall team’s ability to find and trace their product during a recall.

**Module:** Section of the audit where topics’ questions are grouped together under a common option.

**Monitoring:** A planned sequence of observations or measurements to assess compliance with requirements.

**Most Probable Number (MPN):** A unit of measurement of estimated numbers of microbes in a sample when present in small numbers. The MPN method involves taking the original solution or sample and subdividing it by orders of magnitude (frequently 10× or 2×) and assessing presence/absence in multiple subdivisions.

**Non-conformance:** A deficiency in compliance against the scoring criteria. For all audits, the overall total score calculated in the preliminary stage needs to be  $\geq 85\%$  in order to proceed to the subsequent certification decision phase. If the preliminary overall total score is  $<85\%$  then the audit is “not certified”. The applicant organization may submit corrective actions, but they will not achieve certification. The preliminary overall total score is the combined score from all modules, not individual scores per module. If the preliminary score is  $\geq 85\%$  but  $<90\%$ , corrective actions are required in order to become certified.

**Non-porous surface:** A smooth solid surface that limits absorption and penetration of liquid (e.g., metal, stainless steel, hard plastic material).

**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, e.g. compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers" (commonly used for pest control, greening, disease control, fertilizing).

**Outsourcing:** A firm, company or individual carrying out a process on products or service on the behalf of the auditee.

**Oxidation Reduction Potential (ORP):** Oxidation-Reduction Potential is the potential (voltage) at which oxidation occurs at the anode and reduction occurs at the cathode of an electrochemical cell. From a microbiological perspective, an oxidizing chemical pulls electrons away from the cell membrane causing it to become destabilized and leaky resulting in rapid cell death. ORP sensors allow monitoring and tracking of critical disinfectant levels in water systems. In combination with pH sensors systems can provide automated demand-based injection of an oxidizing chemical and food grade acid (muriatic or phosphoric acid).

**Packaging:** Material or package which provides protection, tampering resistance, and special physical, chemical, or biological needs to maintain food safety

**Packinghouse:** A facility where commodities are sorted and/or sized, may be minimally trimmed (not altered in form), washed or not washed, may have post-harvest treatments applied (e.g. fungicide, wax, sprout inhibitor) and packed for commercial distribution and use by consumer or retail establishment.

**Parts per million (ppm):** A unit of measurement of very dilute concentrations of substances. Usually describes the concentration of something in water or soil. One ppm is equivalent to 1 milligram of something per liter of water (mg/l) or 1 milligram of something per kilogram soil (mg/kg).

**Persistent organic contaminants:** also known as persistent organic pollutants (POPs), are organic compounds resistant to environmental degradation from chemical, physical and photolytic processes. They include chlorinated solvents, polychlorinated biphenyls (PCBs), dioxins, and certain pesticides.

**Pathogen:** A microorganism (fungus, bacteria, parasite, protozoa or virus) capable of causing illness or disease.

**Pest:** An animal, plant or other organism that is directly or indirectly injurious, noxious or troublesome, and an injurious, noxious or troublesome condition or organic function of an animal, a plant or other organism (e.g., rodents, birds, reptiles, insects, weeds, fungi, bacteria, viruses, etc.).

**Pesticides:** A substance that prevents, destroys, or controls a harmful organism ('pest') or disease, or protects plants or plant products during production, storage and transport. Includes, herbicides, fungicides, insecticides, acaricides, nematocides, molluscicides, rodenticides, growth regulators, repellents, rodenticides and biocides.

**Physical hazards:** Any extraneous object or foreign matter in a food item which may cause illness or injury to a person consuming the product.

**Pit toilets (latrines):** A sanitation technology used for onsite waste management. They consist of a hole in the ground, which may be unlined or lined, with a reinforcing material (e.g. bricks, concrete rings) to contain human excreta.

**Plant Protection Product (PPP):** Pesticides that protect crops, or desirable or useful plants. PPP have at least one active substance with one of the following functions: protect plants/plant products against pests/diseases before or after harvest; influence the life processes (growth) of plants (e.g. plant growth regulators, rooting hormones); preserve plant products; destroy or prevent growth of undesired plants or plant parts. May also contain safeners and synergists.

**Pooled water:** An accumulation of standing water.

**Potentially Ready-to-Eat/Ready-to-Use (RTU):** Food in an edible form that has been minimally processed – cleaned/sorted, trimmed, and possibly cut before being packaged, and requires further washing and/or preparation prior to consumption.

**Pre-harvest interval:** The minimum amount of time that must pass between the last pesticide application on a crop and the harvesting of the crop

**Pre-planting:** Time from harvest of prior crop to beginning of planting the current crop.

**Preventive control plan:** A written document that demonstrates how hazards to your food are identified and prevented, eliminated or reduced to an acceptable level.

**Preventive controls:** Controls to address hazards that occur in the products that are manufactured and significantly minimize or prevent and help ensure that the food is not adulterated. These include, process, allergen, sanitation and other additional controls.

**Preventive measures:** Actions taken that are intended to reduce or prevent the severity/impact of a risk.

**Processing facility:** Washing, slicing, dicing, cutting, shredding, peeling, grading, pasteurization, cooking, chilling, juicing, pressing, freezing, packing in modified atmosphere, packed in vacuum packing or any other activity that significantly transforms the product from its original whole state.

**Processing water:** Water that is used for post-harvest handling of produce, such as washing, cooling, waxing, or product transport.

**Ranch:** See “Farm”.

**Ready-to-Eat (RTE):** Food in an edible form without additional preparation needed to achieve food safety, includes raw fruits and vegetables that are thoroughly washed in water to remove soil and other contaminants before being cut, combined with other ingredients, cooked, served, or offered for human consumption.

**Recirculated/re-used water:** A closed water system, where water is used more than one time before it is discharged into a wastewater system (e.g. dump tanks, flume systems, hydrocoolers).

**Releasing:** Handing product over to another operation that is responsible for the next activity/function (e.g. labelling, icing, storing, transporting), whether the product is purchased or not

**Repacking:** Removing product from its market ready packaging, re-handling the product (e.g., re-sorting, re-grading, re-trimming, etc.), and putting it into market ready packaging materials.

**Report Types: -**

**Preliminary Audit Report:** The initial report submitted to a customer within 15 calendar days after each audit. This report type includes details about the organization and its operation, the audit duration, audit scope, product information, audit scoring summary, and answers and comments for each of the applicable questions answered. This report type does not include the customer’s evidence and/or responses to corrective action(s) or the certification body’s review response to those corrective actions.

**Non-Conformance Report:** An initial report submitted to a customer within 15 calendar days after each audit. This report type includes details about the organization and its operation, the audit duration, audit scope, product information, audit scoring summary, and answers and comments for each of the applicable non-conformance questions answered. This report type does not include the customer’s evidence and/or responses to non-conformance(s) or the certification body’s review response to those corrective actions.

**Final Audit Report:** The final report submitted to a customer within 45 calendar days after each audit that includes a link to the certificate associated with the report and operation. This report type includes the customer’s evidence and/or responses to corrective action(s) and the certification body’s review response to those corrective actions. This report includes details about the organization and its operation, the audit duration, audit scope, product information, audit scoring summary, and answers and comments for each of the applicable questions answered.

**Corrective Actions Report:** A final report submitted to a customer within 45 calendar days after each audit. This report type includes the customer’s evidence and/or responses to non-conformance(s) and the certification body’s review response to those corrective actions. This report type includes details about the organization and its operation, the audit duration, audit scope, product information, audit scoring summary, and answers and comments for each of the applicable nonconformance questions answered.

**Revocation:** A type of sanction issued by a Certification Body by revoking a customer’s current certificate(s). This type of sanction should be issued based on the following circumstances or any other critical circumstance a Certification Body finds appropriate:

- Evidence of fraud is found
- A suspension-related issue is not adequately resolved
- The organization declares bankruptcy

**Risk:** A function of the probability of a hazard occurring, frequency and the severity of that hazard.

**Risk assessment (GAP):** An evaluation of the growing environment food safety hazards relevant to topography, hydrology, geographical features, climatic conditions, land history, adjacent land use, water source, domestic animal and wildlife presence or any other potential sources of contamination to the crop.

**Risk assessment (GMP):** An evaluation of the facility to identify and control and food safety hazards relevant to facility location and adjacent land use e.g. animal activity, industrial activity, water source, waste water treatment sites (settling ponds, land applications, etc.) or any other potential sources of contamination.

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

**Safener:** Chemicals used in combination with herbicides to reduce the effect (injury) of the herbicide on plants and to improve selectivity between the desired crop plant and the undesired weed species being targeted

**Salmonella:** A rod-shaped, non-spore-forming, Gram-negative bacterium that is a member of the family Enterobacteriaceae (as are *E. coli* and coliforms) and causes illness (salmonellosis) in humans. Sources include water, soil, insects, reptiles, birds, animal feces, eggs, meat, poultry unpasteurized milk, raw fruits and vegetables (e.g. sprouts, melons), nuts and spices.

**Sanitation Standard Operating Procedures (SSOPs):** A set of written instructions detailing all steps and activities required to perform a given cleaning and sanitation task before, during, and after production with the purpose of minimizing variation and facilitating consistency.

**Sanitize:** The process of reducing the number of microorganisms that are on a properly cleaned surface to a safe level. A safe level is defined as a 99.999% reduction of the number of disease microorganisms that are of public health importance. Sanitizing is accomplished by using either heat, radiation, or chemicals. Unless the item to be sanitized is effectively cleaned, it is impossible to obtain close contact between the sanitizer and the surface to be sanitized. Some chemical sanitizers, such as chlorine and iodine, react with organic matter and are less effective when the surface is not properly cleaned.

**Scheme:** A documented certification system related to specified products, which has specified requirements, specific rules and procedures.

**Senior Management:** person or group of people who directs and controls an organization at the highest level. Senior management has the power to delegate authority and provide resources within the organization, including the authority to authorize financial and human resource decisions.

**Sewage sludge:** Also called biosolids. Semi-solids left over from municipal wastewater treatment.

**Single-pass water:** Water that is not reused e.g. spray bars on a wash line. Water from spray bars in a single-pass system is not collected and re-used.

**Soil amendment:** Any material added to a soil to promote healthy plant growth by affecting the physical, chemical, or other characteristics of the soil and improve soil condition. For example, fertilizers, compost, sludge, manure, microbes.

**Standard:** A document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.

**Standard Operating Procedures (SOPs):** A set of written instructions detailing all steps and activities required to perform a given routine task with the purpose of minimizing variation and aiding consistency.

**Storage & Distribution Center:** A facility that is only receiving and storing finished goods for further shipment e.g. regional distribution warehouses. Goods may be stored at controlled or ambient temperatures.

**Subcontractor:** A person or organization contracted to provide labor or perform a service.

**Substrate:** Any growing medium used in place of soil for growing plants, that is introduced to the site and is removed after use.

**Supplier:** A person or organization that provides products or services to customers.

**Suspension:** A type of sanction issued by a Certification Body by suspending an organization's current certificate(s). This type of sanction should be issued based on the following circumstances or any other circumstance a Certification Body finds appropriate:

- A non-conformance is found to be a food safety issue and an immediate threat to the public.
- If the re-certification audit results in an automatic failure, while the organization still has a valid certificate.

- If a critical food safety issue is detected during an audit (e.g., automatic failure, special circumstance, etc.), then the CB should consider suspending existing certificates related to this new observation(s).
- An organization does not pay the agreed to fees.
- If an organization rejects a surveillance audit on the second CB notification.
- The organization improperly uses the PrimusGFS or GFSI logo or trademark.
- An organization is involved with an illegal activity or a serious food safety issue.

**Synergist:** Chemicals used in combination with insecticides to increase their effectiveness at killing pests e.g. piperonyl butoxide, N-Octyl bicycloheptene dicarboximide (MGK-264).

**Thermotolerant coliforms:** A subgroup of total coliforms. The predominant numbers of bacteria that test positive in assays for thermotolerant coliform may be *E. coli*, but from horticultural production and postharvest handling operations the greater numbers are often benign or non-pathogenic soil and leaf colonizers.

**Total coliforms:** A large group of bacteria common in the environment (soil and vegetation). Total coliform counts give a general indication of the sanitary condition of a water supply and are a useful indicator of the possible presence of other pathogens for drinking water. Their presence is an indication of issues with water treatment and/or the integrity of water distribution systems.

**Traceability:** System that permits the source of the product to be identified and maintained at any stage in the supply and distribution system.

**Turbidity:** A measure of the degree to which the water loses its transparency due to the presence of suspended particulates.

**Validated process:** A process that has been demonstrated to be effective through a statistically based, scientific study that considers and determines limits for all process variables that may impact the process' objectives

**Validation:** An activity to obtain evidence that a requirement is controlled effectively.

**Verification:** Confirmation through the review of objective evidence, that a product, process or service fulfills specified requirements.

**Visitor:** Any person who enters an operation (GAP or GMP) with the permission of the operation's management.

#### **Water:-**

**Agricultural water:** Water used for irrigation, the application of agricultural chemicals and commercial fertilizers and on-farm tasks such as dust suppression.

**Flume water:** Water used for transporting product or for the initial step of the soil removal process.

**Ground water:** Water beneath the earth's surface, often between saturated soil and rock, which supplies wells and springs.

**Municipal water:** Water supplied by the local government that is potable.

**Potable water:** Water that meets the standards for drinking purposes of the State or local authority having jurisdiction, or water that meets the standards prescribed by the U.S. Environmental Protection Agency's National Primary Water Regulations (40 CFR 141). (Biological parameters are zero total coliforms and zero *E. coli*).

**Re-circulated/reused water:** Water that is being used more than once e.g. flume system, dump tank, hydrocooler.

**Surface water:** Water at or above the land surface exposed to the environment (ponds, rivers, lakes, canals, etc.), as opposed to ground water.

**Tailwater:** Surface run-off water from irrigation. Water may be captured in ponds or tanks and pumped back to the growing area for use in next cycle of irrigation.

**Tertiary water:** Wastewater (e.g. municipal, industrial) that has received the third, or final, stage of water treatment. Primary treatment screens particulates and settles sludge in ponds. Secondary treatment removes harmful microorganisms and tertiary treatment passes the water through filters to remove organic pollutants that bacteria cannot break down. Tertiary treatment also uses chemicals to remove chemical pollutants such as phosphorous and nitrogen.

**Wash water:** Water used during the cleaning process to remove organic material/soil from product (e.g., dump tanks, sprays, hydro-coolers).

**Water distribution system:** All pipes, pumps, valves, storage tanks, reservoirs, meters, fittings, and other components used to carry water from its primary source to other areas of the property, building, etc.

**Work in progress (WIP):** An ingredient/product that is no longer in the state in which it was received but is not yet a finished product (it still has one or more processes to go through).

**Worker:** Any person who has been assigned to carry out a task. This includes owners, family members, managers, and labor both directly contracted and contracted through an agency.