



Sustainability Standard™

Sustainable Food Group Sustainability Standard™ General Regulations Version 1.6

Revised 05/24/2023

Sustainable Food Group
A branch of the
IPM Institute of North America, Inc.
211 S. Paterson St., Suite 380
Madison, WI 53703

Contents

Introduction	4
Standard Scope	4
Legislation	5
Guidance for the Management of Certification Bodies	5
Audit Duration and Frequency	6
Auditor Requirements	8
i. Education.....	8
ii. Experience.....	8
iii. Formal auditor training.....	8
iv. Auditor exam.....	9
v. Auditor evaluation (supervised audit).....	9
vi. Continued training.....	9
vii. Attributes and competencies.....	9
Confidentiality and Conflicts of Interest	10
Certification Process	10
i. Application.....	10
ii. Audit execution.....	10
Evaluation	12
i. Evaluation methods.....	12
ii. Conformance to individual questions.....	12
ii. Scoring.....	13
iii. Score calculation.....	13
iv. Special circumstances.....	13
v. Surveillance audits.....	15
Group Certification	16
iii. Group member oversight.....	16
iv. Group third-party audits.....	17
v. IMS evaluation.....	18
vi. Adding to a Group.....	18
vii. Surveillance audits.....	19
viii. Guidance for virtual audits.....	19
Requirements for Audit Reports	20
Non-conformances	20
Certification Decision	21
i. Evaluation of scores.....	21
ii. Issuing certification.....	23

iii. Complaints and appeals	23
Sanctioning Certification Bodies	23
Distribution of Audit Reports	23
Extension of Scope of Certification	24
Use of Logo and Registered Trademark	24
Acknowledgements	25
Glossary	26

Summary of Changes from v1.5

Location of change	Change
Auditor Requirements v.a. – Auditor evaluation (supervised audit)	Scheme manager may conduct supervised audits if no approved auditors are available
Auditor Requirements, viii.a. – Attributes and competencies	CBs are responsible for maintaining documentation of auditor qualifications on file, no longer required to enter into Azzule database
Confidentiality and Conflicts of Interest, ii.	Updated language around conflict of interest requirements for CB personnel
Certification Process iii. and iv.	Additional information added to define corrective actions and certification decision
Evaluation, i.a. – Evaluation methods	Additional information added regarding visual vs. verbal methods
Evaluation, i.b. – Evaluation methods	Additional guidance added about documentation requirements for new vs. existing auditees
Evaluation, ii. – Conformance to individual questions	Streamlined language around question scoring options for greater clarity
Evaluation, v.b.2.i. – Suspension/Revocation of Certification	If an organization fails to pay agreed-to fees, certification is suspended (previously revoked)
Evaluation vi.b.1. – Surveillance audits performed by the Scheme Owner	Clarified Scheme Owner abilities to conduct surveillance (shadow) audits for auditor assessment purposes
Group Certification	New section added outlining Group certification processes and expectations
Certification Decision, Table 1. Sustainability Standard Minimum Requirements	“Expectations” column removed from table; more detailed guidance can be found in the Audit Guidelines
Use of Logo and Registered Trademark	Clarified circumstances under which CBs and Certified Operations may use the logo, including how to obtain the logo. Added additional allowable logo uses by approved parties.
Throughout	“Technical Supervisor” changed to “Scheme Manager” (updated for consistent terminology throughout; role remains unchanged)
Throughout	Revised language to clarify requirements vs. guidelines/best practices (“shall” is used to convey mandatory/required practices, “should” is used to convey recommendations, and “may” is used where practices are optional)
Glossary	Added terms in relation to Group certification

Note on language: In this document, “shall” is used to convey mandatory (required) practices, “should” is used to convey recommended practices, and “may” is used to convey optional practices or actions that a certain party has the right to do if they so choose.

Introduction

- i. The Sustainable Food Group Sustainability Standard™ Certification is a private scheme that incorporates mandatory and optional requirements for the certification of food and non-food crop products (“crops”) at an international level.
- ii. These General Regulations detail the Sustainable Food Group Sustainability Standard Certification process and the duties and requirements of the Scheme Owner, its Certification Bodies (CBs) and applicants seeking certification for their agricultural products.
- iii. Sustainable Food Group, a branch of the IPM Institute of North America, is the Scheme Owner of the Sustainability Standard.

Standard Scope

- i. The scope of the certification is focused on sustainability of practices used to produce and process crops. Certification is available for farm (field or greenhouse) and facility operations (packers, processors and distributors). Group certification for facility operations or shippers certifies that the facility(ies) as well as the farms they source product from meet the Sustainability Standard criteria for certification.
- ii. As the Scheme Owner, Sustainable Food Group has established Minimum Requirements for certified operations for growing, storing, cooling and packing or processing agricultural products.
- iii. Applicants are certified by an approved third-party Certification Body (CB), recognizing performance in sustainability categories associated with each production stage.
- iv. Applicants can undergo the audit as a stand-alone sustainability inspection or in conjunction with a food safety audit.
- v. An explanation of the Sustainability Standard Scheme (“the Scheme”) requirements is provided in the normative documents. The most current version of all normative documents can be found on the Sustainability Standard website.
 - a) Sustainable Food Group Sustainability Standard – General Regulations
 - b) Sustainable Food Group Sustainability Standard – Checklist
 - c) Sustainable Food Group Sustainability Standard – Audit Guidelines
 - d) Sustainable Food Group Sustainability Standard – IMS Checklist
- vi. The Sustainable Food Group may issue revised and additional normative documents as needed.
- vii. The Sustainable Food Group shall internally review the normative documents annually and make changes as needed. Reissuing documentation shall take place as needed.
- viii. Triennial review of the Scheme shall be conducted by the Scheme Owner, with feedback from stakeholders taken into consideration. Proposed changes to the Scheme shall be made available to stakeholders for comment.
 - a) Triennial review of the Scheme will include any necessary action to ensure conformance with sustainability best practices.
- ix. English is the primary language for the audit documentation. Translations in different languages shall be made as needed. In the event of conflict between the two versions, the English version will prevail.
- x. All current versions of Scheme documentation are located on the Sustainability Standard website: <https://ipminstitute.org/services/sustainability-standard/>.

Legislation

The Sustainable Food Group Sustainability Standard is a voluntary standard that is intended to go beyond legal compliance, though there may be some localities where existing laws may be stricter. It is not intended to replace legal or regulatory requirements of any country or geographic area in which crops are produced, sold or handled. Applicants are always expected to follow all applicable laws and regulations.

Guidance for the Management of Certification Bodies

- i. Certification for the Sustainability Standard can only be performed by approved Certification Bodies (CBs). Certification activities shall be carried out by personnel who have the competence requirements to meet all management, administrative, technical and auditing functions.
- ii. The CB shall have a documented and implemented quality system that contains all the needed requirements for conformance with the Scheme. The information of the quality system required for conformance shall be made available to the Scheme Owner when requested.
- iii. A designated member of the CB staff shall be responsible for the quality system's development, implementation and maintenance. This person, the Scheme Manager, shall be the contact for the management of the Scheme.
- iv. The CB shall be managed according to ISO/IEC 17021 or ISO/IEC 17065.
- v. The list of approved and provisionally approved CBs shall be made publicly available by the Scheme Owner on the Sustainable Food Group website.
- vi. The Scheme Owner shall define a set of indicators of performance for CBs, which shall be monitored as part of the Sustainability Standard Integrity Program. Decisions to review CB performance and processes may be based on the number of certifications issued by the CB, products certified, the types of operations certified, complaints received and/or any other factors that the Scheme Owner considers relevant.
 - a) The Scheme Owner has the right to execute on-site inspections at the CB offices, evaluate the auditors regarding their technical skills (which can include shadowing auditors), review audit reports, review any materials conducted under the Sustainability Standard Scheme certification process or request information or documentation regarding CB's accreditation, audit reports and corrective actions and anything pertaining to the fulfillment of this agreement. All costs associated with these supervisions are to be covered by the CB.
- vii. CBs shall notify the Scheme Owner in a timely manner regarding any relevant changes to their ownership, management structure or constitution.
- viii. In the case of any possible conflict or problems that could bring the Sustainability Standard into disrepute, the Scheme Owner and the CB shall agree on the appropriate corrective action to take.
- ix. CBs are required to use the Azzule database to facilitate the Scheme Owner's ability to analyze performance and make improvements to program documents and procedures.
- x. Scheme Manager
 - a) The CB shall appoint at least one person to be a Scheme Manager who has the qualification/education and working experience of an auditor. The Scheme

Manager(s) is/are accountable to the Scheme Owner and has the following responsibilities:

- 1) Primary point of contact with the Scheme Owner.
- 2) Approval of new auditors for the CB.
- 3) Maintain the competence of CB personnel.
- 4) Provide technical support to CB personnel and audited organization

Audit Duration and Frequency

- i. An approved CB shall be responsible for evaluating whether an organization meets the requirements to achieve Sustainability Standard certification.
- ii. The CB shall also determine audit duration. The audit duration should be approximated by the CB when scheduling audits and adjusted as needed with the following considerations:
 - a) Type of operation(s) to be certified (e.g., farm or facility)
 - b) Number of operations to be inspected
 - c) Size of the operation(s)
 - d) Number of products and similarity of production process
 - e) Complexity of the production and/or handling processes
 - f) Company preparation level
- iii. The audit duration shall be recorded per organization and the operations included in the certification process. The audit duration comprises the entire audit process, from the opening meeting to the closing meeting with the organization where non-conformances are indicated. CBs should justify significant audit duration deviations. The following table provides guidelines for approximate audit durations:

Estimated Audit Duration	
Operation Type	Approximate Duration (hours)
Field	4 to 6
Greenhouse	4 to 5
Storage & Distribution Center	2 to 4
Cooler/Cold Storage	2 to 4
Packinghouse	2 to 4
Processing	4 to 6

- iv. The due date for the subsequent audit shall be 36 months from the date of the previous audit and not from the previous certificate issue date. In years one and two, the CB shall conduct a desk audit of the certified organization to confirm continued conformance with Minimum Requirements and other questions selected by the CB. The Scheme Owner may also suggest questions for document review to the CB based on the audit report and/or other communications. The desk audit shall consist of a document review and non-conformance follow up (if needed).

Audit Type	Deadline
Initial on-site audit	N/A
Desk audit	12 months from initial audit date
Desk audit	24 months from initial audit date
Recertification on-site audit	36 months from initial audit date

- a) The CB is responsible for providing the auditee with written and electronic reminders of desk audits and subsequent audits 30 to 60 days prior to the deadlines calculated from the initial audit date.
- b) The auditee is responsible for scheduling the first document review within one year (12 months) from their initial audit date, and the second document review within two years (24 months) from the initial audit date.
- c) The auditor shall request documentation confirming continued conformance with the Minimum Requirements and other questions selected by the CB.
 - 1) The auditee has two (2) weeks to respond to the request and provide the documentation. The CB shall provide a written reminder one (1) week prior to the deadline.
 - 2) An auditee may request one extension if an explanation is provided as to why they do not have the resources to respond within the given timeline. Criteria include the auditee does not have resources to respond due to extenuating circumstances such as short staffing and/or the auditee is exceptionally busy with planting/harvest or another audit. Extensions are to be granted at the discretion of the CB but should not exceed four (4) weeks.
 - 3) If an auditee fails to provide the requested information by the deadline, including any extension granted by the CB, their certification shall be suspended. Should an auditee wish to pursue certification after a suspension, they shall begin the certification process again with an initial on-site audit.
- d) The auditor shall review the documentation provided by the auditee within two (2) weeks and conduct any necessary follow up, including notifying auditee of any non-conformances and required additional information or corrective action. The auditee has two (2) weeks from the date of the notification to provide additional information or a plan for corrective action.
 - 1) An auditee may request one extension if an explanation is provided as to why they do not have the resources to respond within the given timeline. Criteria include the auditee does not have resources to respond due to extenuating circumstances such as short staffing and/or the auditee is exceptionally busy with planting/harvest or another audit. Extensions are to be granted at the discretion of the CB but should not exceed four (4) weeks.
 - 2) If an auditee fails to provide the requested information by the deadline, including any extension granted by the CB, their certification shall be suspended. Should an auditee wish to pursue certification after a suspension, they shall begin the certification process again with an initial on-site audit.
- e) After all documentation has been reviewed, including additional information and/or a plan for corrective action provided by the auditee, the auditor shall send a desk audit report to the auditee.
 - 1) If the auditee is no longer conformant to a minimum requirement, the certification shall be suspended. Should an auditee wish to pursue certification after a suspension, they shall begin the certification process again with an initial on-site audit.
- v. This frequency may be modified by factors such as:

- a) Modification of the scope and/or operation's location during the certificate validity.
- b) Seasonality of the products; up to a three-month extension of current certificate expiration date with justifiable circumstances.
- c) Quantity and type of non-conformities detected at the time of the audit (e.g., a re-audit or a re-visit may be required in order to receive certification).
- d) Insufficient evidence of corrective action requiring additional visits.
- vi. These or other situations shall be evaluated and documented by the CB defining the audit frequency required for each applicant as well as justification for any modification.
- vii. Flowchart diagrams of the initial certification audit timeline, desk audit timeline and three-year audit cycle are on the Sustainability Standard website:
<https://ipminstitute.org/services/sustainability-standard/>.

Auditor Requirements

CBs are responsible for ensuring that auditors performing the inspections are in conformance with the following minimum requirements and have evidence to demonstrate their conformance. In addition to education and professional experience qualifications, there are three steps to become an approved auditor: auditor training, auditor exam and auditor evaluation.

- i. Education
 - a) At a minimum, candidate auditors shall have a post-high school diploma, degree, certificate or equivalent (minimum course duration of two (2) years) in a discipline related to the scope of certification (food or agriculture/agronomy or environmental science, e.g., biology, ecology).
- ii. Experience
 - a) Professional work experience
 - 1) At a minimum, candidate auditors shall have at least two (2) years of related work experience in the agricultural industry, such as organic audits. It is preferred that an auditor have five years of work experience in sustainable agriculture and/or sustainability best practices in the food or agriculture industry.
 - b) Audit experience
 - 1) Candidate auditors shall have a minimum of ten (10) audit days or five (5) audits of practical experience performing audits of agricultural operations. This experience can be as a lead auditor of a third- or second-party audit or shadowing an approved auditor. The CB shall document information regarding auditors' audit experience, including details like dates, audited organization, type of operation being audited and role of the candidate auditor.
- iii. Formal auditor training
 - a) Candidate auditors shall successfully complete the following courses:
 - 1) Recognized training in audit techniques with a minimum of a one (1)-day practical inspection course setting out basic principles of auditing / inspection.
 - 2) IPM and nutrient management training, either as part of formal qualifications or through successful completion of a formal course.

- 3) Approved Sustainability Standard Auditor Training as defined by the Scheme Owner.
- iv. Auditor exam
 - a) All auditors shall pass the Sustainability Standard online exam (the “exam”) to be initially approved and subsequently reapproved when a new version of the Scheme is issued, or as required by the Scheme Owner. Auditors are given three attempts to pass the exam with a score of 85% or better. If an auditor fails three times, they shall participate in the next scheduled auditor training and re-take the exam. The exam assesses knowledge and understanding of the following topics:
 - (i) Sustainability Standard normative documents.
 - (ii) Relevant food/agriculture-related legislation.
 - (iii) Agricultural production of crops and sustainability best practices.
 - 2) The exam shall be taken by all approved auditors each time there is a new version of the Scheme and before conducting audits using the new version.
 - v. Auditor evaluation (supervised audit)
 - a) An already-approved auditor shall observe and evaluate a new auditor on an official Sustainability Standard audit. In cases where no already-approved auditors exist within the CB (for example, newly approved CBs), the Scheme Manager may perform the supervised audit. This supervised audit shall include an evaluation of the new auditor’s knowledge of the following items:
 - (i) Sustainability Standard normative documents.
 - (ii) Agricultural production of crops and sustainability best practices and knowledge of relevant laws and regulations and ability to apply them when appropriate.
 - (iii) Quality specifications and appropriate audit techniques.
 - b) The auditor evaluation shall be documented by the CB and include information about the auditor’s performance and describe the details and outcomes of the evaluation. Details shall include dates, audited organization and type of operation being audited.
 - vi. Continued training
 - a) To maintain approved auditor status, there should be evidence of conducting at least one Sustainability Standard audit per year, as well as multiple audits under other schemes.
 - b) The CB is responsible for ensuring that their auditors implement best practices and maintain the qualifications required to evaluate conformance with the Sustainability Standard. The CBs shall maintain records of all relevant training taken by the auditors.
 - vii. Attributes and competencies
 - a) CBs shall be able to demonstrate that the approved auditors meet the requirements to successfully conduct audits for the Sustainability Standard. CBs shall keep complete records of auditors’ qualifications, experience, training, exam results, supervised audits, sign-off, re-approval and others while they have a work relationship and during a minimum period of two (2) years.
 - b) The CB shall have a system in place that ensures auditors are conducting and behaving in a professional manner.
 - viii. Documentation of auditor requirements

- a) CBs shall be responsible for maintaining documentation of auditor qualifications, experience, training, exam results, auditing scopes, etc., and shall be able to provide this information to the Scheme Owner upon request. The CB shall also be responsible for keeping this information updated when changes occur.

Confidentiality and Conflicts of Interest

- i. The CB shall be free from any commercial interest in the companies or products applying for certification.
- ii. CB personnel involved in the certification process of an applicant shall not have had a financial, commercial or legal relationship with the organization applying for certification for a minimum of at least three (3) years prior to certification services being provided to the organization.
- iii. CB personnel shall declare any potential conflicts of interest to the CB management when assigned duties related to an applicant in the program.
- iv. The CB shall maintain the confidentiality of all client-specific information except as required by this standard or by law.

Certification Process

- i. Application
 - a) Applicants shall provide the CB with the information defining the scope of the certification they want to achieve for their operations. The information should at minimum include the following:
 - 1) Organization details
 - 2) Contact information
 - 3) Details about the operation(s) to be included in the scope of the certification. For farms, each site can either be called a “Field Operation” or a “Greenhouse”. In the case of a facility operation, each site could either be called a “Storage & Distribution Center”, “Cooling/Cold Storage”, “Packinghouse” or “Processing”.
 - 4) Whether Group certification is being pursued, and if so, the name of the group and which facilities and farms are to be included in the scope of certification.
 - 5) Commodities covered in the scope of the certification.
 - 6) Desired audit period based on the seasonality of the crop and validity of the current audit certificate.
 - 7) Language for the audit to be performed in and language to be used in the audit report.
- ii. Audit execution
 - a) The scope of certification shall be clearly defined prior to audit execution to determine how the audit will be structured for each applicant organization. Ownership of the different areas, locations, activities or crops of the applicant organization are elements to consider when deciding which operation(s) to include in the scope. The auditee defines the scope of the audit. The auditor shall perform the audit based on the defined scope.
 - b) Commodities in the scope of the audit should ideally be present in the field, greenhouse or facility at the time of the audit.

- 1) Where a commodity is not present at the time of the audit, but the operation wishes to include it the scope of their certification, it may be considered if it has similar growing and processing practices as the commodities audited and at least 12 months of records of production.
 - 2) The auditor shall indicate on the audit report which products were observed at the time of the audit, and which products are similar but not observed. The auditor shall include specific details in the scope of the audit and throughout the audit report as to which products were observed at the time of the audit and which records were reviewed.
 - 3) If the crop is not present at the time of the audit, the auditor shall review at least 12 months of production records.
- c) The facility shall be running, and the commodities should ideally be present in the operation during the audit.
- 1) Where a commodity is not present at the time of the audit, but the operation wishes to include it the scope of their certification, it may be considered if it has similar growing and processing practices as the commodities audited.
 - 2) The auditor shall indicate on the audit report which products were observed at the time of the audit and similar products not observed. The auditor shall include specific details in the scope of the audit and throughout the audit report related to which products were observed at the time of the audit and which records were reviewed.
 - 3) Process descriptions, e.g., a flow chart with step-by-step details of the post-harvest process and equipment, shall be provided by the auditee during the time of the audit. If the product is not present in the facility at the time of the audit, the auditor shall review at least 12 months of records.
- d) The audit shall be conducted with the most recent versions of the Sustainability Standard normative documents.
- e) The Sustainability Standard audit covers 15 categories. Each section contains questions detailing practices under that theme.
- 1) Environmental Certifications
 - 2) Policies
 - 3) Biodiversity and Environmental Protection
 - 4) Environmental Emergency Management
 - 5) Fertilizer and Pesticide Drift
 - 6) Air Quality
 - 7) Soil Health
 - 8) Water Conservation
 - 9) Energy Conservation
 - 10) Waste and Recycling
 - 11) Worker Safety and Welfare
 - 12) Sustainability and Stewardship
 - 13) IPM and Nutrient Management
 - 14) Internal Management System (Group certification only)
 - 15) Informational
- iii. Corrective actions
- a) Following the audit, a 30-day period shall be available for the auditee to make revisions to practices, policies or procedures to remedy any non-conformances

identified by the auditor. See details in the Non-conformances section below. The CB has the right to use all information the organization has provided as evidence of corrective action to inform their determination on other questions in addition to the particular question for which the corrective action is being evaluated.

iv. Certification decision

- a) Following the corrective actions phase, the CB shall make the final certification decision. See the Certification Decision section below for details. The CB has the right to take all information collected during the certification process into consideration when making a certification decision.

Evaluation

i. Evaluation methods

- a) Visual confirmation is the default method of auditing, which includes visual inspection of activities/operations or documents and records. 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, this should be rarely used. If a verbal confirmation is accepted, the auditor should note this in the comments section of the question.
- b) Documentation requirements are based on length of growing season and whether the audited organization has been previously certified.

	Operates <i>less than</i> three months per year (short-season operation)	Operates <i>more than</i> three months per year
New Auditee	Three months of records, which need not be consecutive (i.e., may include records from previous seasons to reach cumulative three-month total)	Three consecutive months of records
Existing Auditee	Three months of records, which need not be consecutive; <i>must include</i> records since previous on-site audit (or longer, if needed to meet minimum requirement of three months of records)	Records since previous on-site audit

ii. Conformance to individual questions

- a) To verify conformance to the Sustainability Standard requirements for certification, auditors shall use the Sustainable Food Group Sustainability Standard Checklist and Audit Guidelines. The Checklist consists of three checklists, which together comprise the full Sustainability Standard: Organization-Level Checklist, Farm-Level Checklist and Facility-Level Checklist.
- b) The auditor shall evaluate conformance with each individual question. The possible answers are Yes, No, and Not Applicable.
 - 1) A Yes response results in some or all of the points associated with a question being awarded. All questions marked Yes shall be scored by the auditor on a one (1) to five (5) scale based on the adequacy of completion, with one (1) being the lowest score and five (5) being the highest. Total conformance is scored as a five (5) and results in the maximum possible

points for the question. Lower levels of conformance are scored between 1 and 4. Detailed guidance on the scale and scoring for each question are contained in the Sustainability Standard Audit Guidelines. When awarding points less than total conformance, the auditor shall explain in the corresponding question comment the rationale for providing the assigned conformance level.

- 2) A No response to a question, also called non-conformance, results in a score of zero (0) for that question.
- 3) A Not Applicable (N/A) response shall be used for questions that do not apply to an operation. For questions scored as N/A, the maximum possible point value for that question is subtracted from the total possible points in the audit. Detailed guidance on N/A responses are contained in the Sustainability Standard Audit Guidelines.

(1) Not Applicable is an acceptable response only for questions with N/A options designed in the Checklist and N/A response options described in the Audit Guidelines.

(2) Questions in the Facility-Level Checklist are N/A for organizations that do not have a facility in the scope of certification, and questions in the Farm-Level Checklist are N/A for organizations that do not have a farm in the scope of certification.

- c) Most Minimum Requirements require complete conformance (5/5) for an auditee to pass the audit. Some Minimum Requirements require a score of 4/5 or higher to pass; these cases are defined in the Sustainability Standard Audit Guidelines. If Minimum Requirements do not achieve passing scores during the audit or corrective action phase, the auditee shall not pass the audit.

iii. Scoring

- a) Each question in the Sustainable Food Group Sustainability Standard Checklist has a maximum possible score.
- b) Points shall be awarded depending on the level of conformance that the auditee has met. For questions with a Yes response, the auditor shall determine and assign points on the 5-point scale based on their observations. The Azzule system calculates points achieved for each question by multiplying the 1 to 5 score assigned by the auditor by the maximum possible score for the question.

iv. Score calculation

- a) An overall total score is calculated for each audited operation by summing all points earned in the audit and dividing by the total possible points in the audit.
- b) The scores shall be displayed as percentages rounded down to the nearest whole number.
- c) This calculation is repeated for each audited operation included in the scope of the certification.

v. Special circumstances

a) Automatic failure

- 1) Under special circumstances and upon finding serious food safety or other risks, an audit can result in automatic failure and a “not certified” decision. The auditor should immediately inform the auditee of the automatic failure during the audit and the auditee has the option to continue or stop the audit at that point (all charges apply). Automatic failure can result from deliberate

illegal activities, violence or threats towards an auditor, attempted bribery, falsified records, etc., or finding serious safety issues during the audit.

- b) Suspension/revocation of certification
 - 1) The CB has the right to use all of the information gathered on the certified organizations and operations to suspend or revoke current certifications if illegal actions or serious safety issues are discovered.
 - 2) There are two types of possible sanctions to organizations:
 - (i) Suspensions - an organization's certification shall be suspended if:
 - (a) An organization does not pay the agreed-to fees.
 - (b) A non-conformance is found to be an immediate threat to the public.
 - (c) An inspection results in an automatic failure.
 - (d) A critical safety issue is detected during an audit. The CB should then consider suspending existing certificates related to this new observation(s).
 - (e) The organization improperly uses the Sustainability Standard logo or trademark.
 - (f) An organization is involved with an illegal activity or serious food safety issue.
 - (ii) Revocations - an organization's certification shall be revoked if:
 - (a) Evidence of fraud is discovered by auditors or the CB.
 - (b) A suspension-related issue is not adequately resolved.
 - (c) The organization declares bankruptcy.
 - (d) An organization that has had its certification revoked shall not be accepted for certification in the Sustainability Standard program for a period of six months after the date of revocation.
 - (iii) If the CB finds one of the above conditions during inspection of a certified organization, a sanction (suspension or revocation) shall be issued.
 - (iv) All sanctions shall be in writing and include the nature of the non-conformance, the time frame of resolution (if applicable) and provisions for escalation of sanctions if the non-conformance is not corrected within the specified period.
 - (v) Only the CB may lift a suspension sanction after sufficient corrective actions have been submitted with verification either through written or visual evidence and/or an on-site visit.
 - (vi) The CB may issue the sanction to an entire certified organization or narrow it to a specific certified product(s) or specific operation(s) within the scope of the current certification.
 - (vii) The CB shall always notify the Scheme Owner in a timely manner (ideally within five (5) business days) and in writing of any sanction applied to a certified organization as well as update the system to reflect those changes.
 - (viii) The CB shall compile and maintain a list of all suspended operations (those suspended after receiving certification), and those operations "not certified due to special circumstances" where the operation was "not certified" based on reasons other than score, and such list is available to the Scheme Owner.

- c) Significant safety events
 - 1) Certified organizations shall inform their CB about any safety-related prosecutions, citations for violation or any other issues related to safety that affect the overall Scheme within seven (7) days of the occurrence (or discovery of) the significant safety event.
 - d) Early re-evaluation of a certification organization
 - 1) The certified organization shall inform the CB of any changes that affect the sustainability of their product that affect the overall Scheme, and changes of ownership and/or management within 14 days of occurrence.
 - 2) If the CB has reason to believe there is a conformance issue regarding certification requirements, this is cause for re-evaluation. In this case, a second site visit may be conducted to verify conformance with the Sustainability Standard.
 - e) Significant events for certified organizations and their operations
 - 1) All certified organizations shall inform their corresponding CB and the Scheme Owner about any related prosecution, citations for regulatory violations, significant regulatory non-conformity, product recall related to food safety or any other issues that could bring the Scheme into disrepute. CBs shall ensure the integrity of certification after notification and consider the need to suspend or revoke certification. CBs should communicate these significant events to the Scheme Owner within seven (7) days of the occurrence.
- vi. Surveillance audits
- a) Surveillance audits performed by the CB
 - 1) Each CB may perform surveillance audits, also known as “unannounced” audits, to verify continued conformance to the Sustainability Standard Scheme. Surveillance audits shall be performed using the current Sustainable Food Group Sustainability Standard Checklist, and the selected organization with certified processes shall need to pass the audit as if it were a regular audit in order to maintain certification. For Group certification, surveillance audits may be of the Group leader (IMS holder) and/or any Group members.
 - 2) The CB shall notify the operation in writing of the surveillance audit no sooner than 48 hours prior to the day of the audit.
 - 3) An operation may only reject a surveillance audit once. A second surveillance audit rejection from the operation shall result in a suspension of certification.
 - 4) The Scheme owner may later mandate surveillance audits for a percentage of certified operations.
 - b) Surveillance audits performed by the Scheme Owner
 - 1) As part of the Sustainability Standard Integrity Program, the Scheme Owner may shadow third-party audits conducted by the CB. The purpose is to ensure that qualified auditors are performing the audits properly according to the Sustainability Standard Scheme.
 - (i) The audited operations shall be required to accept a second person on-site during the audit.

- (ii) The additional person on-site during the auditor assessments shall have no say during the audit nor shall they point out any deficiencies to the auditor at the time of the audit.

Group Certification

- i. Group Certification is an optional certification approach for organizations (e.g., packers, shippers, marketers, importers, exporters) that source product from multiple farm and facility entities and wish to demonstrate sustainability across their supply chain to their customers.
- ii. A Group is a self-designated set of farms and facilities with shared policies and practices. Every Group shall have an Internal Management System (IMS) that defines the Group's shared policies and practices and is managed and maintained by the Group leader, otherwise known as the IMS holder.
- iii. There is no limit on the size of the Group as long as all other requirements are met.
- iv. Organizations pursuing Group certification shall designate a responsible staff member within the Group leader organization to create, implement and manage the IMS. It is ideal that each Group member also designate a staff member that is knowledgeable on the IMS and Sustainably Standard requirements. The IMS shall meet all Minimum Requirements indicated in the most current version of the IMS Checklist.
- v. Group member oversight
 - a) The Group leader (IMS holder) is responsible for ensuring all members of the Group adhere to the policies and practices set out by the IMS. This includes assessing conformance with the Sustainability Standard.
 - b) The evaluation of the Group members is completed through an internal assessment process (e.g., second-party audits). The assessment process is completed by the Group leader visiting the farms and/or facilities on-site, conducting a visual inspection of the site(s) and reviewing the applicable documentation.
 - 1) An alternative method (i.e., virtual audit) to assess facility Group members is acceptable. See the "Guidance on Virtual Audits" section of this document for more information.
 - 2) Due to the conformance criteria required to be evaluated at a farming operation, virtual assessments are not acceptable for farm audits (except in extenuating circumstances that are documented).
 - c) The Group member assessments should occur before the Group leader undergoes the initial third-party audit conducted by an approved CB. This ensures the CB and auditor have sufficient evidence to evaluate conformance. If the Group does not complete all internal audits prior to the third-party audit by the CB, during the corrective action phase the Group may submit a plan for completing assessments within 12 months of the third-party audit. The CB shall review documentation for completion of these audits in the next desk audit of the Group.
 - d) When additional farms or facilities are added to an existing certified Group, the Group leader shall assess each entity joining the Group to ensure the organization and/or operation(s) are adhering to the Group IMS and Sustainability Standard criteria.
 - e) Records of internal audits shall be documented and maintained in a consistent and organized manner and be available for review during the third-party audit of

the IMS. The records shall meet Minimum Requirements outlined in the IMS Checklist. Internal audits do not replace third-party audits conducted by the CB.

- f) It is ideal that the Group member assessments be managed using the Azzule Auditing Software system. (<https://azzule.com/auditingsoftware>)
- g) After a Group achieves certification internal audits of all Group members (farms and facilities) shall occur at least once every three years to ensure continued conformance to the Group IMS and Sustainability Standard criteria.
- h) Qualifications for a Group leader's internal auditor are:
 - 1) Pass auditor exam with a score of 85% or higher. The exam evaluates knowledge and understanding of the following topics:
 - (i) Sustainability Standard normative documents
 - (ii) Agricultural production of crops and sustainability best practices
 - (iii) Group-specific guidelines and requirement
 - 2) Additional qualifications for internal auditors are ideal but not required:
 - (i) Attend Sustainability Standard Auditor Training as defined by the Scheme Owner.
 - (ii) At least two years of work experience in sustainable agriculture and/or sustainability best practices in the food or agriculture industry.
 - (iii) Recognized training in audit techniques with a minimum of a one-day practical inspection course setting out basic principles of auditing / inspection.
 - (iv) IPM and nutrient management training, either as part of formal qualifications or through successful completion of a formal course.
- i) An internal auditor may be a permanent employee, contractor, or consultant of the Group leader, so long as they meet the qualification requirements described in subpart d. .
- vi. Group third-party audits
 - j) Audits performed by an auditor of an approved CB, otherwise known as third-party audits, determine whether the Group achieves certification.
 - k) For a Group to achieve certification, the following requirements shall be met:
 - 1) All operations audited shall meet the Minimum Requirements of the Sustainability Standard Checklist
 - 2) The average audit score of the Group members receiving third-party audits shall be 70% or higher
 - 3) The Group IMS shall meet all Minimum Requirements of the IMS Checklist
 - l) The third-party audit process evaluates the Group's conformance to the Sustainability Standard criteria. Group conformance is evaluated by audits of the Group leader (IMS holder) and a subset of Group members.
 - 1) Third-party audits of the Group leader are conducted on-site by an approved auditor through visual inspection of the site(s) and review of applicable documentation. If the Group leader does not share a location with a farm or facility, then this audit may be conducted virtually.
 - 2) During the third-party audits of the Group leader, an auditor evaluates the Group's IMS against the IMS Checklist and evaluates the operation's practices against the Sustainability Standard Checklist.
 - m) Third-party audits of Group Members are managed and scheduled by the CB following a sampling approach to evaluate the implementation of the IMS and conformance to the Sustainability Standard. The sampling plan is defined by:
 - 1) The square root of the total number of facilities in the Group, and the square root of the total number of the farms in the Group shall be selected for audit.

The square root is calculated separately for farms and facilities in the Group and is rounded up to the nearest whole number. For example, if there are nine farms and two facilities in the Group, three farms and one facility would receive third-party audits.

- 2) For Group members (farms and facilities) selected for a third-party audit, the auditor evaluates and scores the operations' sustainability practices using the Sustainability Standard Checklist.
 - 3) An alternative method (i.e., virtual audit) to assess facility Group members is acceptable. Priority for the facility on-site audits should consider the more complex, resource-intensive sites.
 - 4) Due to the conformance criteria required to be evaluated at a farming operation, virtual assessments are not acceptable for farm audits (except in extenuating circumstances that are documented).
- n) Audits for all operations in the Group shall occur within a 12-month window. Group third-party audits may be conducted by multiple auditors to improve efficiency.
- o) A Bronze, Silver or Gold certification is awarded for the Group leader based on the average score of all audited operations and shall list all the members and locations in the Group. Any farm or facility in the certified Group may request a copy of the certificate from the Group leader.
- vii. IMS evaluation
- p) The Group's IMS is evaluated by the CB using the IMS Checklist, which includes Minimum Requirements and recommendations.
 - q) All Minimum Requirements are required to be met in order for the Group to achieve certification. The IMS Checklist is not scored on a point scale; it is audited only as pass/fail.
 - r) The auditor shall review the full IMS Checklist during initial certification audits and recertification audits. At the discretion of the CB, some elements of the IMS Checklist shall be reviewed in the desk audits which occur annually between certification audits.
 - s) If Minimum Requirements in the IMS Checklist are not met during the third-party audit, the Group may modify the IMS during the corrective actions phase. It is strongly recommended that the Group leader review the IMS Checklist during the creation of the Group IMS, so that it does not need to be substantially edited during the corrective actions phase.
- viii. Adding to a Group
- t) Adding farms or facilities into a certified Group.
 - 1) Farms or facilities may be added to a certified Group following an internal audit, provided that the additional entities do not exceed 20% of the initial total number of entities (farms and facilities) in the Group.
 - 2) New farms or facilities may be added in excess of the 20% threshold only if they receive an on-site audit from the CB (i.e., third-party audit) within 12 months of being added to the Group.
 - u) Adding certified farms or facilities into a newly formed Group.
 - 1) An individual farm or facility that is certified may be added into a new Group and may count as one of the required third-party audits so long as the audit of the individual operation occurred within the 12 months prior to the Group submitting the audit application to a CB.
 - (i) If the audit occurred more than 12 months prior to the Group audit application, the operation may still be added to the Group, however, the individual audit does not count towards the number of audits required for

- the Group, and the operation is eligible to be selected for a third-party audit as part of the Group.
- 2) When an individual operation joins a Group, the three-year certification cycle for the joining operation adjusts to adhere to the Group's audit cycle, meaning, the audit timeline of the individual operation starts over at year one since the Group is in year one.
 - 3) For certified operations that obtained an individual certification in the last 12 months, the requirement for an internal audit upon joining a Group is waived. For certified operations that obtained an individual certification more than 12 months prior to the Group application, an internal audit shall occur upon joining the Group.
- ix. Surveillance audits
- v) For Group certification, surveillance audits may be of the Group leader (IMS holder) and/or any Group members.
 - 1) The CB and Scheme Owner reserve the right to conduct surveillance audits as necessary to verify program integrity.
- x. Guidance for virtual audits
- w) Virtual ("remote") audits are acceptable in certain cases where on-site inspection is not crucial to the auditor understanding of sustainability at the operation. This approach is most beneficial for audits of facilities where the facility has a low level of complexity (for example, packing sheds or cooling facilities with no washing or processing). There is no limit to the number of audit cycles in which virtual audits may be used.
 - x) Execution of virtual audits shall include both a review of relevant documents and a virtual walkthrough of relevant spaces.
 - 1) Documentation to be reviewed should include, but is not limited to, documentation related to energy or water conservation, renewable energy use, waste diversion from landfill (recycling, reuse, food loss prevention), sustainable packaging use, sustainability goals and/or reporting, sustainability training attended, research supported by the organization, policies regarding emergency management and worker welfare (pay practices, worker safety, workers' rights), data and maps related to monitoring of environmentally sensitive areas.
 - 2) A virtual walkthrough should include, but is not limited to, location of emergency procedures and contact information, observation of processing equipment including any energy or water conservation measures, observation of on-site renewable energy generation, observation of environmentally sensitive areas near the facility and practices in place to protect them.
 - y) Virtual audits are acceptable for both third-party and internal audits of facilities.
 - z) When virtual audits are being employed for facilities in a Group, they should not be used exclusively. A combination of virtual and on-site audits is recommended, and on-site audits shall be prioritized for more complex facilities.
 - aa) Virtual audits do not replace desk audits (rather, they are an alternative to an on-site audit); desk audits should still occur in the two years following the initial audit in order for the organization to maintain certification.
 - bb) Due to the conformance criteria required to be evaluated at a farming operation, virtual assessments are not acceptable for farm audits (except in extenuating circumstances that are documented).

Requirements for Audit Reports

- i. The audit report shall be distributed through the Azzule database.
- ii. The auditor shall enter the information into the Azzule database to generate a preliminary audit report within 15 days of the on-site audit.
- iii. To the extent feasible, the audit report shall be written in the language that the applicant requests. Any language used by the CB to generate the audit reports is acceptable by the Scheme Owner, but the information entered into the Azzule database shall be available in English.
- iv. Every audit report shall include as a minimum the following information:
 - a) Name of the CB
 - b) Name of the applicant organization
 - c) Individual or Group certification
 - 1) For Group certification, the name of the Group, and all farms included in the scope of certification
 - d) Details about the operation under certification
 - e) Date and time of the audit
 - f) Name and version of the Sustainability Standard normative documents used for certification
 - g) Audit scope – details of the process under certification
 - h) Product(s) observed during audit and similar product(s) not observed
 - i) Names of all personnel involved in the audit from the applicant organization, including the organization contact
 - j) Auditor name
 - k) Audit scoring summary
 - l) Answers and comments for each question in the Sustainability Standard Checklist.
 - m) Shippers (customers of the auditee) designated during the application process (if applicable)
- v. Every audit shall generate a non-conformance report that summarizes all non-conformances found in the audit with the corresponding comments and details for each non-conformance.

Non-conformances

- i. Non-conformances are questions where the criteria for full points (total conformance) are not met in the audit.
- ii. If the audited organization does not pass the audit, they may submit corrective actions into the Azzule database for review by the CB to attempt to achieve a passing score.
 - a) The submission of comments and/or corrective actions does not guarantee that the score will change but should demonstrate the actions that were taken or are to be taken by the applicant organization.
 - b) The choice of non-conformances to address falls to the auditee.
- iii. Some non-conformances may not be able to be corrected, depending on their nature.
- iv. The corrective actions from the audited organization should address the determination of cause(s), any action plan(s) to address immediate issue(s)

- regarding the non-conformance, the corrective actions taken, and the development of preventive actions to help avoid future occurrences if necessary.
- v. Corrective action evidence may be in the form of documents, records and/or photographs and shall show that the auditee complies with the criteria needed to achieve improved or total conformance on a question.
 - vi. Evidence shall be verified and accepted by the CB. The CB has the right to determine if a re-visit to the audited organization is necessary to verify corrective actions for non-conformances.
 - vii. The time period from the initial onsite audit until the CB makes a certification decision shall be no longer than 45 days.
 - viii. Corrective action evidence for each non-conformance shall be submitted to the CB by the auditee within 30 calendar days from the original audit date.
 - ix. The CB has 15 calendar days to review the corrective action evidence, notify the auditee if it was accepted or rejected and close the non-conformance(s).
 - x. If time allows (i.e., within the 30-calendar day corrective action submission timeframe), when corrective action evidence is rejected by the CB, the auditee may re-submit additional evidence to close the non-conformance.
 - xi. Once the audited organization has responded to the CB regarding the non-conformances and the CB has reviewed all corrective actions submitted, the CB shall close the corrective action phase in the Azzule system, which allows for a certification decision to be made.
 - xii. Flowchart diagrams of the initial certification audit timeline, desk audit document review timeline and three-year audit cycle are available at <https://ipminstitute.org/services/sustainability-standard/>.

Certification Decision

- i. Evaluation of scores
 - a) Based on the outcome of the final audit report, the Azzule system will calculate the total score for each operation. The CB shall use this score to determine if the organization attained the minimum score needed for certification.
 - b) To achieve individual certification, audited operations shall meet all Minimum Requirements (Table 1) and attain a 70% audit score or higher.
 - c) The audit score that the auditee earns determines the certification level it receives.

Certification Level	Audit Score (%)
Bronze	70%
Silver	75%
Gold	80%

- d) To achieve Group certification, all third-party audited operations in the Group shall meet all Minimum Requirements of the Sustainability Standard and of the IMS Checklist and shall achieve an average audit score of 70% or higher across the Group.

Table 1. Sustainability Standard Minimum Requirements

Question Title	Question Number	Question	Total Points	Available Answers
Policies				
No biosolid use	1.02.01	Is there a written policy statement prohibiting the application of both untreated and treated biosolids to production sites for at least one year prior to production?	10	Y/N
GMO transparency	1.02.02	If the crops/ ingredients grown are modified using GMO technologies, is there a written policy that they will be disclosed to the buyer?	10	Y/N/NA
CRISPR transparency	1.02.03	If the crops/ ingredients grown are modified using CRISPR technologies, is there a written policy that they will be disclosed to the buyer?	10	Y/N/NA
Legal compliance	1.02.04	Is there a policy that the organization complies with all laws and regulations governing pesticide and nutrient use, labor, hiring and employment practices, and employee health and safety?	10	Y/N
Group certification	1.02.05	Does the Group maintain an Internal Management System (IMS) to ensure facility and producer group member compliance with the Sustainability Standard certification criteria? Does the IMS meet all minimum requirements identified in the IMS Checklist?	10	Y/N/NA
IPM and Nutrient Management				
Identification	2.07.02	Does organization identify key pests, weeds, and diseases (those which usually require action to prevent economic losses) and understand their biology?	100	Y/N
Prevention	2.07.03	Does organization implement effective non-chemical strategies to prevent losses by key pests?	100	Y/N
Monitoring	2.07.04	Does organization implement effective scouting, sampling and monitoring techniques for all key pests for which these techniques are available?	100	Y/N
Economic thresholds	2.07.05	Does organization use science-based economic thresholds to determine if and when to take action for each key pest for which thresholds are available?	100	Y/N
Non-chemical intervention	2.07.06	Are effective non-chemical intervention strategies - cultural, biological and/or mechanical - implemented to manage key pests?	100	Y/N
Pesticide use justification	2.07.07	Are pesticide applications tied to a documented need?	40	Y/N

Pesticide application records	2.07.08	Are there complete and legible pesticide application records for the current season that include location, date, time, material applied, rate, applicator name, application method, wind speed and direction, air temperature and target pest?	10	Y/N
Pesticide resistance mitigation	2.07.11	Does the organization implement effective strategies to mitigate the risk of resistance for pests and pesticides at the greatest risk?	50	Y/N/NA
Nutrient application records	2.07.16	Are there complete and legible nutrient application records for the current season that include date, time, material applied, rate, applicator name and application method?	10	Y/N

- ii. Issuing certification
 - a) For individual organizations seeking certification, certificates shall be issued individually to each operation that meets the requirements of certification. For Group certification, the certificate shall be issued to the Group leader. Audited Group members can request certificates from the Group leader.
 - b) Certification is valid for a maximum of 36 months from the certification date.
 - c) The certificate shall be generated by the Azzule software and provided to the certified operation within 30 days of the certification decision by the CB.
- iii. Complaints and appeals
 - a) The CB shall have a procedure in place to handle the complaints and appeals which shall be available publicly.

Sanctioning Certification Bodies

- i. A CB shall be suspended if:
 - a) The CB does not pay the agreed fees.
 - b) The CB improperly uses either the Azzule or the Sustainable Food Group logos.
 - c) An issue is discovered by the Sustainability Standard Integrity Program.
 - d) The CB does not abide by the requirements of the General Regulations, License Agreement or other Scheme requirements.
- ii. A CB shall have its approval revoked if:
 - a) Evidence of fraud is found.
 - b) The CB declares bankruptcy.
 - c) A suspension related issue is not adequately resolved.

Distribution of Audit Reports

- i. CBs shall provide information for each certification process, including but not limited to audit details, outcome and the certification status to the Scheme Owner by using the Azzule database or other means established by the Scheme Owner.
- ii. The documented audit reports generated by the certification process for each operation, including those submitted through the Azzule database, shall be made available to the audited organization, the CB and the Scheme Owner.
- iii. Ownership of the audit report, determination of details made available and authorization for access shall remain with the audited organization. The CB shall

ensure confidentiality except where required by law. The CB shall document all communication between the CB and audited organization. The CB shall not distribute any communication or certification activity information to an outside party without the audited organization's authorization.

Extension of Scope of Certification

- i. An organization's certified operation can apply for an extension of scope to their current certification for:
 - a) Increased growing area of products included in the scope of an already certified operation along with justifiable circumstances.
 - b) Adding similar products not in the scope of an already certified operation with justifiable circumstances. Similar products are those with similar growing and processing practices.
 - c) If products are approved and added to the current report, the product(s) shall be added to the "similar product(s) not observed" category.
- ii. Justifiable circumstances shall be reviewed by the CB regarding a request for extension of scope of increased growing area and/or adding new commodities. All relevant information, such as similarity (risks, processes, growing practices, location and personnel) between new products and already certified products and any additional information the CB considers as part of their risk assessment, shall be evaluated before a decision is made.
- iii. The CB shall determine the need for an on-site audit in order to increase the growing area, add commodities to already certified operations and/or add a new process to the certificate (e.g., a new packing line, automated chopper, etc.).
- iv. If a new facility or farm operation is added to an already certified organization more than 30 days after the original audit date, the organization shall be required to undergo another full audit of the new facility or farm.

Use of Logo and Registered Trademark

- i. The Sustainability Standard trademark and logo shall only be used with written permission from the Scheme Owner, signified by a signed and active License Agreement for CBs, and a signed and active Sublicense Agreement for clients/auditees.
- ii. The Sustainability Standard logo shall always be obtained by the CB from the Scheme Owner. This will ensure that it contains the exact corporate color and format. Certified operations shall obtain the logo from the CB.
- iii. The CB is responsible for controlling use of the Sustainability Standard trademark and logo on certified operations. The rules for the use of the logo and trademark are agreed to in the License Agreement signed between the Scheme Owner and the CB and in the Sub-License Agreement signed between the CB and each organization. Infringement of the rules by either CBs or organizations could lead to sanctions.
- iv. Approved CBs may use the trademark and/or logo for promotion of their Sustainability Standard certification activities in business-to-business communication and on Sustainability Standard certificates.
- v. Certified organizations shall only use the Sustainability Standard trademark and/or logo when the following conditions are met:

- a) There is a valid Sustainability Standard certificate linked to that organization
 - b) There is a clear reference to the operations and crops audited and certified
 - c) The logo is used for business-to-business communications or for marketing purposes (website, social media posts, etc.)
- vi. The logo shall not, in any circumstances, be used on product packaging.

Acknowledgements

We acknowledge and appreciate the influence of the Sysco Sustainable Agriculture/IPM Program, the Potato Sustainability Alliance (formerly Potato Sustainability Initiative) and Whole Foods Market's Responsibly Grown programs on the Sustainable Food Group Sustainability Standard.

Glossary

Aggregate stability

The ability of soil aggregates, or groups of soil particles, to resist disintegration when tillage, water, wind erosion or other disruptive forces act on the soil. Wet aggregate stability suggests how well a soil can resist raindrop impact and water erosion. Size distribution of dry aggregates can be used to predict resistance to abrasion and wind erosion.

Agricultural inputs

Materials used in the production of crops including seeds, transplants, rootstock, cuttings, fertilizers, crop protection products, adjuvants, growth promoters, predator additions, irrigation water and any other material inputs to the growing process.

Application equipment calibration

Process to ensure that input application equipment is operating properly by testing equipment measurements against a known value. Improperly calibrated equipment may cause either too little or too much of an input, e.g., pesticides, fertilizers, manure, compost, to be applied.

Available water capacity

The maximum amount of plant available water a soil can provide. It is an indicator of a soil's ability to retain water and make it sufficiently available for plant use.

Beneficial insect

Insects that provide a benefit, such as suppressing pests or providing pollination. The term “beneficials” in the context of a question addressing insects is used as a synonym to beneficial insects.

Beneficial species

Organisms that provide an agroecosystem benefit, such as suppressing pests. The term “beneficials” in a non-specific context refers to all beneficial species.

Biopesticide

Certain types of pesticides made up of living organisms or derived from the products of living organisms, such as microbes, bacteria, plant extracts, fatty acids or pheromones, and used to control pests.

Biosolid

Organic matter recycled from sewage for use in agriculture.

Buffer zone

An area of permanent vegetation that is maintained between agricultural fields and environmentally sensitive areas, including bodies of water. Buffers are intended to mitigate impacts of production on adjacent or nearby areas that can be impacted by agricultural activity by, for example, intercepting wastewater runoff or pesticide drift.

Commodity

An agricultural product that can be bought and sold. Also referred to as product.

Compaction

A compression of soil and decrease in pore space that results in poor water drainage, air movement and root growth.

Cover crop

A crop planted between or simultaneously with cash crops to help manage soil erosion, soil fertility, soil quality, water, weeds, pests, diseases, biodiversity and wildlife. Examples include legumes, cereals, grasses etc.

CRISPR

A tool of genetic modification adapted from natural defense mechanisms of bacteria. CRISPR technology can “cut and paste” strands of DNA, allowing scientists to precisely edit the genome of an organism. If foreign DNA is introduced in this process, the resulting organism is considered a GMO, however if DNA is deleted or cut and pasted within one organism, the resulting organism is not considered a GMO, according to the USDA.

Cultural practice

Agricultural practices that aim to disrupt the pest’s environment without the use of chemical substances to enhance crop health and prevent weed, pest or disease problems. Examples include turning under crop residues, sterilizing tools and equipment and harvesting early.

Drip irrigation

Irrigation method that reduces use of water and fertilizer by allowing water to drip slowly, either onto the soil surface or directly into the root zone, through a network of valves, pipes, tubing and emitters.

Evapotranspiration (ET)

The loss of water from the earth's surface through the combined processes of evaporation from soil and plant surfaces and plant transpiration. ET information is critical for irrigation system design and water management.

Facility operation

A handling operation carried out in one or several buildings where product is being handled.

The type of Facility operation can be classified as: “Storage & Distribution Center”, “Cooling Cold Storage”, “Packinghouse” or “Processing”.

Auditees should not apply for multiple Sustainability Standard audits of different operation types at the same address, unless there is a processing facility and growing operation with the same address, is of different ownership or the auditee is pursuing **Group** certification.

Farm

A collection of growing operations carried out in an open or covered area for the production of fresh produce for human consumption. Farms include field and greenhouse operations.

Field operation

A growing operation carried out in the open for the production of fresh produce for human consumption.

Filter strips

An area of permanent herbaceous vegetation used to reduce sediment, organics, nutrients, pesticides and other contaminant loadings in runoff.

Furrow irrigation

Irrigation of farmland by water run in open furrows created in soil between the crop rows.

Genetically modified organisms (GMOs)

Organisms (i.e., plants, animals or microorganisms) in which the genetic material (DNA) has been altered in a way that does not occur naturally by mating and/or natural recombination. This term includes organisms

modified using CRISPR technology if foreign DNA is introduced during the CRISPR gene-editing process, according to the USDA.

Green manure

Living plant material incorporated into the soil or killed and left on the surface for soil improvement, or when composed of legumes, to increase the soil N supply.

Greenhouse gases (GHGs)

Compounds that trap heat in the atmosphere. These gases include carbon dioxide, methane, nitrous oxide and fluorinated gases.

Greenhouse

A temporary or permanent enclosed structure where crops are grown in a controlled environment (also referred to as indoor agriculture or indoor production). Greenhouses do not include shade or hoop houses.

Ground nests

Similar in appearance to ant holes from above, about 70% of native bees nest in the ground and need access to the soil surface to dig their nest. Each female excavates her own nest tunnel and brood cells and stocks the cells with nectar and pollen.

Group

A self-designated assemblage of farms or facilities and its suppliers whose products and conduct adhere to a set of standards as designated through an Internal Management System.

Group leader

The designated organizer of the Group, often a packer or shipper, who maintains and implements the Group IMS and is responsible for internal audits of Group members. Also referred to as the IMS holder.

Group member

A farm or a facility within a Group that is not the Group leader.

Infiltration rate

The rate at which water on a soil surface enters the soil profile.

Integrated pest management (IPM)

A science-based decision-making process that identifies and reduces risks from pests and pest management related strategies. IPM coordinates the use of pest biology, environmental information and available technology to prevent unacceptable levels of pest damage by the most economical means while minimizing risk to people, property, resources and the environment.

Internal audit

An audit conducted by the Group leader (IMS holder) of Group members (may be performed by contractor). This may be a first- or second-party audit provided that all requirements outlined in the General Regulations are met.

Internal auditor

Staff position within the Group leader organization that conducts audits of Group members to ensure conformance to Sustainability Standard criteria and the Group IMS. The Group leader may contract out this role if sufficient internal capacity does not exist.

Internal Management System (IMS)

The collection of documents, SOPs, policies and protocols that dictate the standards to which members adhere in supplying their products to the Group.

IMS holder

The entity or organization that administers, implements, manages and/or maintains the IMS for the Group.

Invasive species

Designated by state or national agricultural or natural resource authorities as threatening to agricultural and/or horticultural crops and/or humans and livestock.

Key pest

An insect, disease, weed, mite, nematode or other organism that frequently causes crop damage exceeding a quality and economic threshold unless an action is taken to reduce the impact.

Large producer

Any producer that does not meet the criteria for small producer.

Micronutrient

A chemical element necessary in only extremely small amounts (less than 1 part per million in the plant) for the growth of plants. Micronutrients include boron, chloride, copper, iron, manganese, molybdenum and zinc.

Mitigation plan

Set of strategies that have been identified and implemented to reduce or eliminate the negative impact of pesticide applications on air, soil, water, plants, animals and humans.

Mode of action

Refers to how a particular chemical pesticide operates on the target pest. The Insecticide Resistance Action Committee (IRAC), Fungicide Resistance Action Committee (FRAC) and Herbicide Resistance Action Committee (HRAC) classify insecticides, fungicides and herbicides, respectively, by modes of action. Rotating chemical modes of action or combining multiple modes of action in a single application are primary strategies to delay the evolution of resistant pests.

Packinghouse

A type of facility where whole commodities are sorted and/or sized, may be minimally trimmed (not altered in form), washed or not washed, treated with post-harvest fungicide and/or wax applications and packed for commercial distribution and use by consumer or retail establishment. In this type of facility, no processing activities are performed, if so, a different type of facility operation shall be used. A Packinghouse facility covers the activities involved in the Storage & Distribution Center and Cooling/Cold Storage facilities.

Pest scouting

Systematic inspection of plantings to evaluate crop health, identify threats and inform and evaluate treatment decisions. Scouting can include counting pests or pest-damaged plants or plant parts, checking insect or disease spore traps, using drones to visually survey remote parts of fields, etc.

Pesticide

General term for a formulated chemical containing an active ingredient designed to kill, repel or otherwise suppress populations or activity of a particular pest or group of pests. This includes insecticides, fungicides, herbicides, miticides, fumigants, plant growth regulators, defoliants, desiccants, etc. Pesticide products approved for use in organic crops, such as those containing spinosad or Bt, are included in this definition.

Pesticide drift

Airborne movement of pesticides away from the intended target. Pesticide drift can affect everyone, both urban and rural communities, by having negative effects on human health and the environment.

Processing facility

A type of facility where whole commodities are 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 (e.g., pre-cut, packaged, ready-to-eat salad mixes). In this type of facility, processing activities are being performed, if not, a different type of facility operation shall be used. A Processing facility covers the activities involved in the Storage & Distribution Center, Cooling/Cold Storage and Packinghouse facilities.

Reduced tillage

Method of tillage in which the soil has been disturbed to a lesser extent relative to conventional tillage (plowed/harrow till). Reducing tillage can reduce soil erosion, loss of carbon from the soil into the atmosphere and energy consumption and costs.

Refuge

An area of a field not treated with pesticides to allow beneficial insects and susceptible pest organisms to survive. Also refers to a traditionally bred (non-GMO) crop area planted within GMO crop acreage to allow for the reproduction of pest species to mitigate the development of pest resistance to the pesticide incorporated into the GMO plant.

Resistance trait

A genetic trait or set of traits that provide a crop variety with the ability to withstand attack by a pest, disease or pesticide and remain virtually unaffected. May be bred traditionally, genetically engineered or arise inadvertently within a plant or pest population.

Resistant pest

Weeds, insects or other pests that have naturally evolved genetic resistance to specific chemical compounds or chemical modes of action after repeated exposure to the same chemical.

Riparian buffer

A vegetated region next to streams, rivers or wetlands designed to mitigate the flow of agricultural or wastewater runoff into the body of water.

Rotation

Alternating plantings of one type of plant with at least one other (e.g., corn followed by soybeans); alternating pesticides of one type (mode of action) with at least one other type (e.g., an organophosphate followed by a biopesticide).

Salinity management

The use of agronomic practices such as leaching, selection of salinity tolerant plants, soil/water amendments, etc. to mitigate the effects of dissolved salts that have been deposited onto cropland via irrigation water. Excessive salts (high salinity) in the root zone reduce water uptake and also may cause nutrient imbalance, affecting plant growth and yield. High concentration of specific ions can also become toxic to crops.

Sensitive site

Areas of the natural or built environment that may be negatively impacted by agricultural activities. Most growing operations have sensitive sites that can be protected from production activities, for example, wetlands, aquifers, well heads, forests, schools, office buildings, endangered species habitat, etc.

Small producer

A producer with a gross cash farm income (GCFI) of less than \$350,000 and less than or equal to five permanent workers, with no more than 25 total workers on-site at the management unit at any time.

Undeveloped reserve

A section of land that has been left untouched by farming, construction, etc. to preserve the natural habitat.

Wastewater

Any water that has been adversely affected in quality by man-made influence or pollutants. It comprises liquid waste discharged by domestic residences, commercial properties, industry and/or agriculture and can encompass a wide range of potential contaminants and concentrations.

Wood tunnel nest

Artificial nests consisting of wood blocks drilled with a large number of dead-end tunnels used to attract bees and promote their local population growth.