Preface

This document provides general guidance for SQF sites, consultants and auditors when implementing and auditing module 7 of the SQF Food Safety Code for Primary Production, edition 8 and can be used where no specific industry sector guidance is available.

The purpose of SQF Code implementation is not only to achieve certification, but to assure constant and continual validate and review of a site’s SQF System for currency and completeness.

Effective implementation of the SQF Code requires the commitment of the site management and the constant involvement and participation of site staff to maintain the safety of SQF certified products. The results of effective SQF implementation are not only the protection of public health and company brands, but real improvement in margins by reduction of waste, recalls and withdrawals, and improved productivity through “doing it right the first time.”

The SQF Institute is grateful to the SQF Institute Technical Advisory Council and SQF stakeholders for their assistance in reviewing and contributing to this document.
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Section 1. Introduction

1.1 Purpose of the Guidance Documents

This document provides general guidance for SQF sites, consultants and auditors when implementing and auditing module 7 of the SQF Food Safety Code for Primary Production, edition 8 and can be used where no specific industry sector guidance is available.

The relevant Code version number is identified in the document header. Terms used in these documents are defined in Appendix 2: Glossary of the SQF Code edition 8.

Guidance is intended to support the SQF Code, but does not replace it. It is not an auditable document, nor is it definitive and applicable in every situation. Sites, consultants, and auditors are required to understand the food safety risks in a given industry sector and are able to apply the SQF Code to effectively control those risks.

1.2 Layout of the SQF Code

The SQF Code, 8th edition consists of two parts and three appendices. Part A contains the criteria for implementing and maintaining the SQF Code. Part B, the heart of the SQF Code, is made up of modules. Within each module are clauses or elements, which the site must implement as their SQF System. In module 2, the clauses encompass the system elements. Each element outlines where procedures need to be documented, where record keeping is required or where actions must be taken. Modules 5-8 are the Good Agriculture/ Aquaculture Practices (GAP) requirements applicable to various primary production industry sectors. Producers and sites must meet the requirements of the module or modules applicable to their primary production industry sector.

The four appendices in the SQF Code provide additional information needed to implement an SQF System:

- Appendix 1: SQF Food Sector Categories
- Appendix 2: Glossary of Terms
- Appendix 3: SQF Logo Rules of Use
- Appendix 4: Requirements for SQF Multi-site Certification
Section 2. The SQF Certification Process

The steps for the process of preparing for SQF certification are shown below. Optional steps or other options are indicated in parenthesis. This process is outlined in section 1 of Part A of the SQF Code.

- **Step 1**: Learn about the SQF Code
  - (SQF Implementation Training)
- **Step 2**: Select the relevant SQF modules
- **Step 3**: Register in the SQF assessment database
- **Step 4**: Designate an SQF practitioner
- **Step 5**: Select certification level - 1, 2, 3
- **Step 6**: Document and implement the SQF Code
- **Step 7**: Select a certification body
- **Step 8**: (Conduct a pre-assessment audit)

The first step is for the site to learn about the SQF Code. The SQF Code suggests several options for doing this, including completing an “Implementing SQF Systems” training course either online or through a licensed SQF training center. Be sure to download the SQF Code available free of charge from the SQFI website (sqfi.com).

In step two, select the relevant modules to be implemented by the site. To aid in doing this, Table 1 SQF Food Sector Categories and Applicable Modules and Appendix 1: Food Sector Categories are available in the SQF Code for reference. Note that certification to the SQF Code is site and product specific.

Please note that module 2 is applicable to all industry sectors and will need to be implemented by all sites.

The third step is to register the site’s company or site in the SQF assessment database. For new users, the registration link is housed on the SQFI website (sqfi.com). Choose the "Suppliers” tab from the home page, and then select "New Users.” Suppliers must register with SQFI prior to achieving certification and must remain registered at all times to retain their certification.

In step four, the supplier will need to designate an SQF practitioner to oversee the development, implementation, review and maintenance of the SQF System. The requirements for an SQF practitioner are described in elements 2.1.2.4 and 2.1.2.5 of module 2 of the SQF Code.

The fifth step is for the site to select a certification level – 1, 2 or 3 based on the needs of customers and the stage of development of the food safety and quality management system.

At the sixth step, the site must document and implement the relevant modules of the SQF Code in their SQF System. This step will be explained further in the next section.

In step seven, the site will choose a certification body. Certification bodies are licensed by SQFI to conduct SQF audits and issue the SQF certificate of registration. A current list of licensed certification bodies is available on the SQF website (sqfi.com) and includes their countries of operation. Certification bodies are also listed on the SQF assessment database and sites can request a quote or...
select a certification body online once they have registered.

In the final step, the site may wish to conduct a pre-assessment of their systems, procedures and protocols already in place to determine existing gaps requiring action in order to reach the level of SQF certification desired. This assessment, while voluntary is essential to the development of the SQF System and may be conducted by a consultant, a certification body or by the site’s staff under direction of an SQF practitioner.

**Section 3. The SQF Implementation Process**

To achieve SQF certification, the site must document and implement the relevant modules of the SQF Code, at the level required. It’s also important to provide evidence of the System in the form of documents and records. The implementation process is shown below.

Document the SQF System – prepare policies, procedures, work instructions and specifications that address the relevant modules of the SQF Code. In other words “say what you do.”

Implement the SQF System – put into place the prepared policies, procedures, work instructions and specifications. In other words, “do what you say.”

Provide records the SQF System – keep records to demonstrate compliance to the relevant modules of the SQF Code. These records provide evidence of the function and control of the System. In other words, “prove it.”
Section 4. Introduction to This Guide

1. Purpose and Scope of This Guide

The purpose of this SQF Guidance Documents is to assist sites with designing, developing, documenting, implementing and maintaining an SQF System using the SQF Code, edition 8, and to assist SQF registered auditors in auditing the SQF Code, edition 8.

The relevant Code version number is identified in the document header. Terms used in this document are defined in Appendix 2: Glossary of the SQF Code, edition 8.

This particular guide covers the requirements of Module 7: Food Safety Fundamentals, good Agricultural Practices for Farming of Plant Products. It covers the Good Distribution Practices for the storage and distribution of retail food products.

Sites implementing this module must also meet the requirements of Module 2: SQF System Elements. Module 2 guidance is a separate document and sites are advised to understand the System Elements, e.g. the requirements of Module 2 before addressing Module 7.

Applicable food sector categories (FSCs) for Module 7 are:

- FSC3: Growing and Production of Fresh Produce and Nuts

Guidance is intended to support the SQF Code, but does not replace it. It is not an auditable document, nor is it definitive and applicable in every situation. Sites, consultants, and auditors are required to understand the food safety (and quality, where applicable) risks in a given industry sector and are able to apply the SQF Code to effectively control those risks.

2. The Structure of the SQF Code, Edition 8

The SQF Code is a process and product certification standard that uses Hazard Analysis Critical Control Points (HACCP) as its foundation. HACCP is a food safety management system based on the principles defined in either:

- The CODEX Alimentarius Commission HACCP principles and guidelines, or
- The National Advisory Committee on Microbiological Criteria for Food (NACMCF)

The main feature of the SQF Code is its emphasis on the systematic application of HACCP to identify, monitor and control food safety hazards as well as food quality hazards in the process flow to manage identified food safety risks and/or quality threats.

This guide references the HACCP (Hazard Analysis and Critical Control Point) technique but does not explain the HACCP method in any detail. It requires that those implementing and auditing an SQF System to have completed HACCP training as defined in Appendix 2: Glossary of the SQF Code, edition 8 and have extensive knowledge of the HACCP guidelines of either of the above documents, the application of the HACCP principles and experience in implementing HACCP systems. It is not meant to deliver prescribed, absolute rules for implementation, but to be utilized by sites, SQF consultants and SQF auditors as recommendations on practical applications for implementation and certification of the SQF Code.

The SQF Code also recognizes that food safety practices differ depending on the food safety risk to the product or process, and has designed the Code to meet the individual requirements of each industry sector. Module 7 prescribes the Good Agricultural Practices that applies to particular industry sectors.

The particular modules that apply to each industry sector are as follows:
<table>
<thead>
<tr>
<th>SQF Food Sector Category (FSC)</th>
<th>Category (Site Scope of Certification)</th>
<th>Applicable SQF Code Modules</th>
</tr>
</thead>
</table>
| 1                             | **Production, Capture and Harvesting of Livestock and Game Animals** | Module 2: System elements  
Module 5: GAP for farming of animal products |
| 2                             | **Growing and Harvesting of Animal Feeds** | Module 2: System elements  
Module 3: GMP for animal feed production |
| 3                             | **Growing and Production of Fresh Produce** | Module 2: System elements  
Module 5: GAP for farming of plant products (fruit and vegetables)  
Or Module 7H: GAP for farming of plant products |
| 4                             | **Fresh Produce Packhouse Operations** | Module 2: System elements  
Module 10: GMP for pre-processing of plant products |
| 5                             | **Extensive Broad Acre Agriculture Operations** | Module 2: System elements  
Module 8: GMP for farming of grains and pulses |
| 6                             | **Harvest and Intensive Farming of Fish** | Module 2: System elements  
Module 6: GAP for farming of fish |
| 7                             | **Slaughterhouse, Boning and Butchery Operations** | Module 2: System elements  
Module 9: GMP for pre-processing of animal products |
| 8                             | **Processing of Manufactured Meats and Poultry** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 9                             | **Seafood Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 10                            | **Dairy Food Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 11                            | **Honey Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 12                            | **Egg Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 13                            | **Bakery and Snack Food Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 14                            | **Fruit and Vegetable Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 15                            | **Canning, Pasteurizing, UHT and Aseptic Operations** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 16                            | **Ice, Drink and Beverage Processing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 17                            | **Confectionary Manufacturing** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 18                            | **Preserved Foods Manufacture** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 19                            | **Food Ingredient Manufacture** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 20                            | **Recipe Meals Manufacture** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 21                            | **Oils, Fats, and the Manufacture of Oil or Fat-based Spreads** | Module 2: System elements  
Module 11: GMP for processing of food products |
| 22                            | **Processing of Cereal Grains and Nuts** | Module 2: System elements  
Module 11: GMP for processing of food products |
This guidance document describes the requirements of Module 7, which applies to GAP requirements for most Primary Production Sites.

3. The Structure of Module 7

An SQF System is a risk management system documented and implemented by a supplier of food (or related) products to control food safety risks using the SQF Code, edition 8. It can be audited and certified by an SQF licensed certification body.

The process of how to document and implement the SQF Code, edition 8 and achieve SQF certification can be found in the most current version of Part A of the SQF Code, edition 8.

Module 2 defines the core elements of the SQF Code that provide protection and assurance and are required to be implemented by all sites seeking SQF certification. It forms the foundation of the site’s SQF System. It includes the commitment of site management to maintain a safe, quality food supply and the management processes that must be in place to do so; the HACCP plan(s) that identify and control hazards; the HACCP food quality plan (s) that identifies quality threats and defines their control; product traceability and recall; control of foods containing allergens and other foods requiring identity preservation; and staff training requirements.

Module 7 expands on element 2.4.2.1 of the system elements (Module 2) and details the specific GAP requirements for the growing and harvesting of fruits, vegetables and nuts.
2.4.2.1 The site shall ensure that Good Agricultural Practices described in Module 7, or other relevant applicable module of this Code, are applied, or exempted according to a written risk analysis outlining the justification for exemption or evidence of the effectiveness of alternative control measures to ensure that food safety is not compromised.

It is recognized that not all elements of module 7 are applicable to all farms and operations handling plant products. Some elements can be exempted if they are not relevant, and as long as the site has submitted a written request to the certification body prior to the audit, to exclude that element. For example, if the operation has no controlled temperature or atmospheric storage facilities then elements under 7.2.3 would not apply.

There are no mandatory elements in module 7.
4. The Format of the Module 7 Guidance

The following section explains the elements and sub-elements of module 7 and provides guidance on what a site needs to do to develop, document and implement module 7 requirements, and provides information on what the auditor may be looking for to confirm compliance.

The following format is used throughout:

<table>
<thead>
<tr>
<th>Sub-element Number and Name</th>
</tr>
</thead>
</table>

This section will describe what the SQF Code, edition 8 requires for module 7. This is the text from the SQF Code, and is the auditable standard. Where there is disagreement between the text of the SQF Code and the guidance, the SQF Code in English prevails.

### Implementation Guidance

**What does it mean?**

This will include the interpretative comments of what the sub-element requires or definitions of the terms used.

**What do I have to do?**

This will include suggestions of what is required to be done by the site to document and implement this sub-element. The information provided is not considered exhaustive and may not apply in every situation. It is meant to provide guidance and interpretation.

### Auditing Guidance

This will include suggestions of what the auditor may seek as evidence of compliance for this sub-element. The information provided is not exhaustive and may not apply in every situation.
Section 5. Guidance for Module 7: Good Agricultural Practices for Farming of Plant Products (GFSI BI)

This module covers the Good Agricultural Practices requirements for the growing and harvesting of fruits, vegetables and nuts.

Sites implementing this module must also meet the requirements of the SQF System Elements for Primary Production (Module 2).

Implementation Guidance

Food intended for human or pet consumption must be produced, processed and handled in a hygienic, safe and efficient manner. In order to accomplish this, food storage and distribution premises shall be designed to facilitate proper handling and storage of product. Module 7 outlines the general requirements for the construction of premises and equipment in which food is handled, stored and/or transported with guidance on each aspect provided to assist in understanding various requirements. It also details some of the fundamental practices that must be in place to protect the safety and quality of food.

While the SQF requirements for Module 7 are "shall do...,” meaning the element MUST be accomplished, where applicable to the site’s specific food storage and distribution operation, element 2.4.2.1 provides a method to seek exemption, provided the exemption is supported by a risk analysis. It is the site's responsibility to develop and present this risk analysis outlining justification for exemption or evidence of the effectiveness of alternate control measures to the certification body and/or SQF auditor for review when questioned.

7.1 Site Requirements

7.1.1 Property Location

What the SQF Code says

7.1.1.1 The farm and facilities shall be such that adjacent and adjoining buildings, operations and land use do not interfere with the safe and hygienic operations on the property.

7.1.1.2 Production and growing sites shall have a risk assessment conducted to evaluate and document the risk to crops due to prior land use, adjacent land use, and other environmental factors including structures and equipment. Consideration shall be given to the following:

i. History of land use;
ii. Topography;
iii. Adjacent land use; and
iv. Other factors that may impact on the ability to supply safe product.

7.1.1.3 The analysis shall be re-evaluated in the event of any circumstance or change that may impact on the production of safe product.

7.1.1.4 Where risks are identified, control measures shall be implemented to reduce the identified hazards to an acceptable level.

What does it mean?

The location and previous use of land and the construction and location of buildings are such that neighboring buildings, farms, current land or factories do not introduce factors that could adversely affect the safety and quality of food (e.g., spray drift from neighboring farms, soil contaminate, air-borne pollutants from adjacent factories, etc.). Direct and indirect possible contamination should be considered.

What do I have to do?

The owner, senior site manager or person responsible for food safety must consider the direct and indirect food safety risks to the products from the growing, handling and storage environment. All risks
should be recorded and if determined that controls or corrections must be applied these should be documented and included in GAP's. The following environmental or location aspects should be considered:  

Previous land use – When land is used for the first time, the activities from the last 5 years (at a minimum) should be assessed for hazards such as heavy metals and lead from previous applications of fertilizer, agricultural chemicals and liming materials. Contaminates from previous non-agricultural uses such as landfills, manufacturing or buildings should also be considered.  

Adjacent land use – Crop production inputs and the risk to cross contamination from seepage or chemical drift should be considered. If livestock production is adjacent to any crops, make sure to assess whether it could be a current or potential source of contamination. Poor drainage and areas prone to flooding will also need to be considered as risks to crops. The risks above should be considered for both production fields as well as buildings used on site to handle or store products.

### 7.1.1 Auditing Guidance

Any applicable documented protection measures shall be reviewed initially at the desk audit. However, compliance to this requirement shall be reviewed by observation of adjacent buildings and land use and interviews with the owner or SQF Practitioner at each site audit. Evidence may include:

- Investigation of external environment and surrounding land-use to determine risk;
- A site’s understanding of the risks from the external environment;
- Physical measures in place to manage exterior environmental risks;
- Procedural measures in place to manage exterior environmental risks;
- Measures are effective in managing the exterior environmental risk; and/or
- Initial risk assessment and on-going evaluations when land use or adjacent factors change.

### 7.2 Product Handling, Storage and Equipment

#### 7.2.1 Field and Storage Buildings

**What the SQF Code says**

7.2.1.1 All buildings used to store equipment, field chemicals, field packaging materials or field product shall be designed and constructed so as to permit compliance to good hygiene practices and avoid product contamination.

7.2.1.2 Buildings designated to store field product or field product packaging materials shall be of durable construction. Internal surfaces shall be smooth and impervious with a light-colored finish and shall be kept clean.

**7.2.1 Implementation Guidance**

**What does it mean?**

The construction of building and storage areas and the materials and surfaces of internal walls shall be constructed in a way that would be easily cleanable and prevent contamination to the products being grown, stored and transported.

**What do I have to do?**

The design and construction of any buildings used to handle or store products grown in the field must minimally meet local building code regulations. The building(s) exterior, including the roof, and the interior must be maintained in a manner that minimizes the risk to contamination. Regular inspections during harvest and produce handling periods must be conducts. Periodic inspections during inactive periods are also recommended.

Storage or produce handling rooms and any product contact surface must be impervious, non-corrodible, smooth, easy to clean, light colored, nontoxic and impact resistant. Stainless steel, aluminum, hot-dipped galvanized steel, fiberglass, polyvinyl chloride and nylon are examples of approved product contact surfaces.
All other surfaces must be capable of being kept clean and must be preferably light-colored.

Documentation of buildings and product contact surfaces being in good condition can be accomplished by making this item a part of a monthly facilities checklist or other types of check lists. Also see 7.2.11 for requirements of a cleaning and sanitation program.

### 7.2.1 Auditing Guidance

Compliance to this requirement shall be reviewed at each site audit by interviews, observations and reviews of records. Evidence may include:

- Product contact areas are clean and free of rust and corrosion;
- Product contact surfaces are constructed of materials that do not pose a food safety risk;
- Non-food contact surfaces are constructed of materials that do not pose a food safety risk;
- Inspection records are available that show these surfaces are routinely monitored; and/or
- If wood surfaces (crates, skids) are used, they are free of splinters and frequently inspected.

### 7.2.2 Greenhouses, Hydroponics and Mushrooms

#### What the SQF Code says

7.2.2.1 Sites that grow produce indoors shall be designed so that there is no food safety risk to the product.

7.2.2.2 A procedure for handling of glass or hard plastic breakages in greenhouses shall be documented and implemented (refer to 7.4.2).

#### 7.2.2 Implementation Guidance

**What does it mean?**

Greenhouse construction and maintenance must be maintained in a manner that minimizes the risk of contamination to the products being grown.

**What do I have to do?**

Greenhouses constructed of glass or poly must be initially constructed to meet local regulatory building permits. They must be maintained through regular inspections during all growing and harvesting periods to ensure that glass and/or poly are not cracked, broken or ripped. The integrity of all glass/poly must be maintained to prevent water or weather leakage or pest infestation.

Greenhouses constructed of glass must ensure that any glass breakage that may occur is fully documented and cleaned up as per glass breakage handling procedures. See also 5.4.2.

#### 7.2.2 Auditing Guidance

Compliance to this requirement shall be reviewed at each site audit primarily through observations. Evidence may include:

- Greenhouse coverage material is maintained and shows no signs of abuse, breakage rips or mold;
- A written glass breakage procedure is available an up to date and any incidents are properly recorded; and
- Designated employees are trained in glass breakage procedures.
7.2.3 Controlled Temperature and Atmosphere Storage

What the SQF Code says

7.2.3.1 The producer shall ensure any chilling, cold storage and controlled atmosphere facility is of suitable size, construction and design and is capable of effective operational performance.

7.2.3.2 Floors shall be constructed of smooth, dense impact resistant material that is impervious to liquid and easily cleaned. Floors shall be effectively graded, to allow the effective removal of all overflow or waste water under normal conditions.

7.2.3.3 Wall, ceilings, doors, frames and hatches shall be of a solid construction. Internal surfaces shall be smooth and impervious with a light-colored finish.

7.2.3.4 Lighting shall be shatter-proof or provided with protective covers.

7.2.3.5 Sufficient refrigeration and controlled atmosphere capacity shall be available to chill or store the maximum anticipated throughput of product with allowance for periodic cleaning of storage rooms.

7.2.3.6 Discharge from defrost and condensate lines shall be controlled and discharged to the drainage system.

7.2.3.7 Chilling, cold storage and controlled atmosphere facilities shall be fitted with temperature monitoring equipment or suitable temperature monitoring device that is located so as to monitor the warmest part of the room and is fitted with a temperature gauge that is easily readable and accessible.

7.2.3.8 Chill, cold storage and controlled atmosphere loading dock areas shall be appropriately sealed, drained and graded.

7.2.3 Implementation Guidance

What does it mean?

Sites that are required to control the temperature and/or atmosphere of stored produce for product safety and quality purposes must have storage rooms that capable of maintaining the temperature and/or atmosphere to designed limits and at maximum loads. Storage rooms are designed and maintained to minimize contamination of products stored and monitored on a regular basis to ensure operational effectiveness.

What do I have to do?

Controlled temperature or atmospheric room need to be designed in a manner that ensure it can adequately keep product at appropriate temperatures given initial entry temperatures and volume of product. Refrigeration and atmospheric control equipment should be sized to meed maximum requirements and on-going operations efficiency. All equipment will need to have monitoring capabilities and devices that ensure accurate and timely recordings are maintained during any product storage periods. Discharge from defrost cycles must have lines direct to drains and/or where traffic or other activities do not pose a risk to the products stored.

Floors shall be provided with proper drainage and constructed of materials that are smooth, impervious to liquid and easy to clean. Drains need to be positioned and constructed to allow the effective removal of overflow or waste water under normal working conditions. Where drainage and gradients are not ideal, a written SOP shall address the timely and effective removal of waste water to a drain.

Ceiling design and construction must not pose a threat of product contamination. Where drop ceilings are not used, cleaning regimes and inspections must check for dust on ledges, loose fittings, glass windows, light fittings, or other areas where dust can accumulate and fall onto product.

Wall-to-ceiling, wall-to-wall and wall-to-floor junctions must be sealed and easy to clean. Where floor junctions in facilities are not rounded to enable easy cleaning and prevent the build-up of waste, a written SOP shall address the cleaning protocol to meet acceptable hygienic standards for these areas. Walls, partitions, doors and ceilings must be kept clean.

Today’s food storage design generally excludes windows in food storage areas. However, older facilities may have glass windows. The site must, as part of their foreign matter control program, identify any windows that could pose a hazard to unpackaged product and primary packaging if shattered. Windows away from the immediate storage areas are generally not recognized as posing a hazard to packaged food. Windows close to...
storage areas and skylights that are located immediately above product storage or packaging areas can pose a hazard. Such windows must be constructed of shatterproof material or otherwise covered to prevent glass or plastic fragments from entering product or packaging. Window ledges need to be sloped downwards for ease of cleaning and to prevent their use for unwanted storage of utensils or other materials.

Doors routinely subjected to water must be of solid construction, impact-resistant, non-corrosive materials preferably with a smooth, light colored surface. Doors between storage rooms used to transport food storage need to be protected against damage by crates, trolleys, folk lifts or similar traffic.

For efficiency and ease of cleaning, walls with cement render and smooth-finish glazed tiles, fabricated insulated panels or similar materials are examples of acceptable surfaces. Where light colored finishes do not exist, a written Standard Operating Procedure (SOP) shall address the timely and effective inspection of the adequacy of cleaning and resultant corrective actions when discrepancies are noted.

Lighting provided in the storage areas must be fully protected by a plastic cover of screen and/or bulbs provided are shatterproof.

7.2.3 Auditing Guidance

Compliance to this requirement shall be reviewed at each site audit primarily though observation. Evidence may include:

- Walls and partitions are of sound construction and made of suitable materials;
- Doors are of sound construction for the volume and type of traffic;
- Ceilings are of sound construction and made of suitable materials;
- Walls, partitions, ceilings, and doors are kept clean;
- Lighting is properly protected and does not pose a food safety risk;
- The condition of walls, partitions, doors, ceilings, does not pose a food safety risk; and/or
- Refrigeration or atmospheric control equipment is properly drained, sufficient for operational efficiency and accurately monitored to ensure appropriate control.

7.2.4 Storage of Dry Ingredient, Packaging and Utensils

What the SQF Code says

7.2.4.1 Storage rooms shall be designed and constructed to allow for the separate, hygienic storage of harvesting and packing utensils away from farm machinery and hazardous chemicals and toxic substances.

7.2.4 Implementation Guidance

What does it mean? The location and design/construction of storage rooms used for harvesting and packaging materials ensures that risks to product contamination are minimized.

What do I have to do?

Storage rooms for harvesting utensils and packaging materials must be separated from those areas used for farm machinery or hazardous/toxic chemicals. See 7.2.5 & 7.6.1 for those storage requirements. The separation should be sufficient to ensure contamination potential is minimized. This can be accomplished by physically separated room or buildings. Temporary partitions with shared floors and ceiling are not considered appropriate.

Interior design and maintenance of these storage areas should be adequate not prevent a risk of contamination to stored materials and utensils. Walls and floors should be smooth and easy to clean and maintain. Since this is considered a dry storage area requirement, wet wash or water handling is not necessary.

7.2.4 Auditing Guidance
Compliance to this requirement shall be reviewed at each site audit primarily through observation. Evidence may include:

- Location of dry storage rooms is adequately separated from farm equipment and hazardous/toxic chemicals;
- Storage rooms are maintained and cleaned in a manner that does not pose a risk to product safety; and/or
- Inspections of storage areas are recorded on a regular basis during growing and harvesting periods.

### 7.2.5 Farm Machinery, Conveyors, Harvesting Rigs Construction and Storage

#### What the SQF Code says

7.2.5.1 Product contact surfaces on conveyors and harvesting rigs shall be designed and constructed to allow for the efficient handling of product and those surfaces in direct contact with product shall be constructed of materials that will not contribute a food or feed safety risk.

7.2.5.2 Food handling equipment including knives, totes, trays, conveyors, containers and other equipment shall be constructed of materials that are non-toxic, smooth, impervious and easily cleaned.

7.2.5.3 Provision shall be made for the washing and storage of harvesting rigs, equipment, conveyors, totes, trays, containers and utensils.

7.2.5.4 Provision shall be made to store farm machinery separate from food conveyors, harvesting and processing rigs.

#### 7.2.5 Implementation Guidance

**What does it mean?**

Product handling equipment and harvesting rigs must be designed, constructed and maintained so they minimize the risk of contamination to products being grown, harvested and stored. Specific devices and tools used to handle the product must be made of materials that are easy to clean and have surfaces that are smooth and impervious to water and food decay. Storage of farm machinery shall be kept separate from product handling equipment.

**What do I have to do?**

Sites should complete an initial inspection of all containers, conveyors, knives, totes or any other device or tool that is used in the harvesting and handling of crops being produced. The inspection should ensure that the contact surfaces are made of materials that can be cleaned, kept in good repair and do not pose a risk of contamination of the product. Periodic inspections or prior to use inspections should be conducted to ensure these items are kept in good repair and suitable for use (see also 7.2.6.3). As part of the inspection or on a set schedule, all product handling tools and equipment need to be cleaned as per the Cleaning and Sanitation program (see 7.2.11).

When not in use, tools and equipment must be stored in storage rooms suitable for their purpose (see 7.2.4) and separate from farm machinery such as planters and tractors.

#### 7.2.5 Auditing Guidance

Compliance to this requirement shall be reviewed at each site audit primarily through observation and records of inspections and cleaning. Evidence may include:

- Observation of tools and devices in use during harvesting to ensure they are free from defects and suitable for their purpose;
- Review of inspection and cleaning records associated with the tools and devices; and/or
- Observation of storage conditions and locations for tools and device and their proximity to farm
7.2.6 Vehicles, Equipment and Utensils

What the SQF Code says

7.2.6.1 Equipment, vehicles, tools, utensils and other items or materials used in farming operations that may contact produce are identified and are in good repair, kept clean and sanitized, and stored in such a way as to avoid contamination.

7.2.6.2 Water tanks shall be cleaned at a sufficient frequency so as not be a source of contamination.

7.2.6.3 Food contact harvest containers and pallets shall be inspected prior to and during harvesting. A documented and implemented procedure shall include the type and construction of harvest and packing containers.

7.2.6.4 The use of harvest containers for non-harvest purposes will be clearly identified and not returned to use for harvest.

7.2.6.5 Vehicles used for the transport of produce shall be adequate for its purpose and shall not be used to carry waste materials, manure, chemicals or other hazardous substances that could cause produce contamination without thorough cleaning and inspection.

7.2.6.6 Tractors, harvesters, field packing equipment and machinery driven over ground crops shall be fitted with drip trays to prevent contamination of the crop by lubricants and oils.
7.2.6 Implementation Guidance

What does it mean?
The equipment, vehicles, tools and other items used on the farm to support the growing and harvesting must be kept in good repair and cleaned so they do not become a source of contamination to the product.

What do I have to do?
The site should clearly designate any equipment, vehicles or input storage/handling devices that are not normally associated with direct contact with the crops being harvested. They should be kept in good repair (see also 7.2.7) and cleaned (see also 7.2.11) so as not to pose a risk of contamination to the grown and harvested products. Where equipment such as tractors, harvesters and field packing equipment is driven over ground crops, drip trips should be used so that inadvertent drips of oil or lubricants over crops are prevented.

Harvest containers and pallets can be a source of contamination (biological, chemical or physical) to the crops being harvested and this risk can increase due to long storage times in these containers. As such, they should be inspected prior to use and during use to ensure they are fit for their purpose and suitable to use. These inspections must be documented and recorded to ensure they are completed on a regular basis.

Vehicles used to transport product from the field to storage and storage to customers must not be used for other farming activities such as removal of waste materials, manure, chemicals or other hazardous substances. These vehicles should be clearly designated for this purpose and employees should be trained to ensure they are not inadvertently used for other purposes.

7.2.6 Auditing Guidance

Compliance to this requirement shall be reviewed at each site audit primarily through observation and interview. Evidence may include:

- Observation of all auxiliary equipment not in direct contact with products to ensure they are maintained and in good condition;
- Observation of vehicles used to transport products to ensure it is not used for other non-product handling activities;
- Observation of tractors, harvesters or packing equipment in use in the field to ensure drip pans are in place and functional; and
- Maintained harvest container inspection records.

7.2.7 Maintenance

What the SQF Code says

7.2.7.1 The maintenance of equipment and buildings shall be planned, scheduled and carried out in a manner that prevents any risk of contamination of product or equipment.

7.2.7 Implementation Guidance

What does it mean?
The regular maintenance of buildings and equipment, including: harvest containers, utensils, benches, tables and bins, are planned and scheduled events so that they do not lead to or pose a threat to product safety or quality.

What do I have to do?
The site must compile a list of equipment and building amenities that have direct contact with food and products or could be adjacent to and possible lead to the contamination of products if not properly maintained. This would include food contact conveyors, benches, containers, harvesting equipment, trailers, truck etc. Each item should be properly identified either through description, asset tags or other forms.
each item, a preventive maintenance program should be developed that would include the following:

- List of activities that need to be completed to keep it operational and minimize food safety risks such as fraying, rust, leakage, broken welds, metal wearing etc.;
- A frequency of when activities need to be completed. This can be based on time or hours of use and should align with manufacturer recommendations. If equipment is customized or fabricated on site, then reference to industry acceptable frequencies and items for inspections should be considered;
- Reference to calibration methods, if required (see also 7.2.8); and
- References to how and where such planned maintenance activities are being recorded.

Where maintenance activity on any of the listed items is not planned, such as mechanical breakdowns, it should be recorded and kept separate from planned activities, unless opportunity provides for planned activities to occur at the same time. Equipment, if required, shall be cleaned after any maintenance activities and prior to food handling activities.

### 7.2.7 Auditing Guidance

This element shall be reviewed at each site audit through observation and interview with operational staff. Evidence may include:

- There is a planned maintenance schedule that is being followed and adhered to;
- Preventative maintenance activities are documented;
- Building and equipment failures are documented;
- All tools, parts and debris are removed from repair areas;
- Sanitation activity occurs after maintenance repair in food handling areas;
- Notification occurs when potential risk to product is evident through maintenance activities or breakdowns;
- Food grade lubricant is used in food contact zones, conveyors, and on all motors over food contact surfaces;
- Food grade lubricant is used sparingly and does not come into contact with food product, materials, or food contact surfaces;
- Paint is not used on product contact surfaces; and
- Maintenance records are available and complete.

### 7.2.8 Calibration of Equipment

**What the SQF Code says**

7.2.8.1 The calibration and re-calibration of chemical application, measuring, test and inspection equipment used in the growing and harvesting process shall be documented and implemented.

7.2.8.2 Equipment shall be calibrated against manufacturer, national or international reference standards, methods and schedules. In cases where such standards are not available the producer shall indicate and provide evidence to support the calibration reference method applied.

7.2.8.3 Calibration records shall be maintained.

### 7.2.8 Implementation Guidance

**What does it mean?**

The accuracy of chemical application, measuring, and inspection equipment that is used in growing and harvesting activities is essential in ensuring that product meets regulatory, customer and industry food safety requirements. The equipment itself must be tested to ensure correct information is provided to...
make operational decisions.

**What do I have to do?**

Test equipment used to confirm regulatory requirements (e.g. chemical sprayers, weight scales) must be calibrated against a national or international standard.

In cases where a national or international standard does not exist or is not arranged, a reference standard can be purchased or created and/or a standard method (often supplied by the equipment supplier) used.

To ensure that equipment use provides reliable results, the site must:

- Identify all the equipment that requires calibration (e.g., sprayers, scales, product testing devices etc.);
- Ensure the equipment, once calibrated, is protected so that measurements remain accurate;
- Ensure the equipment is only operated by authorized personnel and using approved methods;
- Determine how accurate the measurements need to be. Does the site need to comply with industry or national standards? If the calibration is designed to check measurements implemented to improve a process, the site may determine the level of measurement required and apply calibration parameters to ensure consistent measurement;
- Calibrate equipment regularly. The calibration frequency will vary depending upon the type of equipment and its usage. Calibration frequency must be adjusted in light of experience or manufacturer’s instructions; and
- Develop a procedure to address products produced between the time equipment “out-of-calibration” is discovered and the last calibration check with normal tolerances recorded.

Clearly identify who is responsible for undertaking calibration, recording the results of all calibrations and when recalibration is due.

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### 7.2.8 Auditing Guidance

Calibration procedures and records shall be reviewed at the initial desk audit. Subsequently, compliance to this requirement and the site calibration procedures shall be reviewed at each site audit through observation, review of records and interviews with operational staff responsible for calibration. Evidence may include:

- All measuring, test and inspection equipment is identified;
- Calibration standards are known and followed;
- Calibration methods and frequency are documented for all available measuring, test, and inspection equipment;
- Calibration methods and frequency meet national or international standards where appropriate;
- Calibration methods and frequency meet customer requirements where appropriate;
- Calibration and/or validation methods and frequency meet manufacturer’s instructions where appropriate;
- Methods for calibration of equipment include responsibility for conducting calibration;
- Authorized personnel understand the methods for conducting calibration;
- There are procedures in place to address disposition of potentially affected product;
- Potentially affected product is adequately disposed of;
- Calibrated equipment is protected from damage;
- Calibrated equipment is not subject to unauthorized adjustment; and
- Calibration records are available and complete.
7.2.9 Pest Prevention

What the SQF Code says

7.2.9.1 The property adjacent to buildings, storage facilities, machinery and equipment shall be kept free of waste or accumulated debris so as not to attract pests and vermin. Harvested products and food contact packaging materials shall be free of evidence of pest and vermin infestation.

7.2.9.2 The pest prevention program shall:
   i. Describe the methods and responsibility for the development, implementation and maintenance of the pest prevention program;
   ii. Record pest sightings and trend the frequency of pest activity to target pesticide applications;
   iii. Outline the methods used to prevent pest problems;
   iv. Outline the methods used to eliminate pests when found;
   v. Outline the frequency with which pest status is to be checked;
   vi. Include on a site map the identification, location, number and type of bait stations set;
   vii. List the chemicals used (they are required to be approved by the relevant authority and their Safety Data Sheets (SDS) made available);
   viii. Outline the methods used to make employees aware of the bait control program and the measures to take when they come into contact with a bait station; and
   ix. Outline the requirements for employee awareness and training in the use of pest and vermin control chemicals and baits.

7.2.9.3 Records of pest inspections and pest applications shall be maintained.

7.2.9 Implementation Guidance

What does it mean?

Integrated pest prevention program is a holistic approach that integrates a range of practices to minimize the incidence of pest activity.

The Food and Agriculture Organization (FAO) of the United Nations defines IPM as “the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment.”

In other words, a range of integrated measures are required to minimize pest populations, including mechanical preventions (e.g., sealed doors and windows, etc.), mechanical controls (e.g., baits, traps, etc.), waste minimization, appropriate use of pesticides, etc.

This element covers primarily traditional pest management activities for buildings and storage areas, including pesticide application. It is not applicable to pesticide application in the fields and growing areas as this is covered in 7.7.4.

What do I have to do?

Pest prevention starts with proper maintenance of property adjacent or in close to building and storage areas that are involved in food handling or storage of inputs, packaging or products. The properties must be kept clear of high grass, equipment, waste and other items that can attract or be a harborage for pests (see also 2.5.5.3 and 7.8 for inspection and waste handling requirements).

A pest prevention program is essential to the safe function of any general product handling operation. The program must:

- Identify the target pest (s) for each pesticide application;
- Outline the frequency with which pest status is to be checked;
- Identify the location of bait stations, traps and chemical sites for ease of checking;
- Outline the methods used to prevent pest problems (the recommendation is to be proactive);
• Outline the methods used when pests are found;
• Maintain licenses and credentials of the pest control operator(s);
• List the chemicals used;
• Assure chemicals used are approved by the relevant authority and that SDS are accessible; and
• Outline the requirements for staff awareness and training in the use of chemicals.

The location of internal and external pest control devices must be completed based on the risk to the site and the product. Factors that can affect this include location of site, surrounding environment, types of facilities, external storage of equipment (such as farm implements), and neighboring facilities and land use. The site and surrounding areas must be kept free of waste, redundant equipment and associated debris to minimize harborage for pests.

Pest control devices should be located at all product handling, storage, material and packaging storage locations. Inspections for pest activity must take place on a regular basis as well as the results recorded and the actions taken if pests are present. This can be incorporated into the operation’s internal audit program.

Examples of records of pest control applications should include service reports, pesticide usage logs, pest sighting logs, and corrective action reports.

In addition to the pests most commonly seen in food handling facilities (i.e., flies, mice, rats, roaches, etc.), pest management procedures need to also consider and control domestic and feral animals as well as birds where applicable (see also 7.2.10).

Personnel handling pest control chemicals must be trained and authorized to do so. Where external pest management contractors are used, they must be licensed by the relevant local authority and use only approved pest control chemicals. Chemicals must be stored appropriately and separate from any food materials or products (see also 7.6.1), and used chemical containers disposed of correctly.

### 7.2.9 Auditing Guidance

Pest prevention programs shall be reviewed for compliance to this requirement at each site audit through observation, review of records and interviews with operational staff and possibly the pest contractor (if applicable). Evidence may include:

• The potential pests are known;
• A documented pest prevention program that integrates a number of preventative as well as control measures, targets all known pests and includes frequencies for checking pest status;
• External areas are kept clear and free from waste and debris;
• There are no observed pest harborage areas observed within the building or in the immediate surrounds;
• There is a site map of pest control devices;
• Pest control devices meet regulatory requirements;
• There is a list of approved pest control chemicals along with appropriate safety data sheets;
• Pesticides are correctly labeled;
• Empty or redundant pest control chemical containers are correctly disposed of;
• Pest control contractors or designated staff are trained, licensed and approved; and
• Records are current and maintained.
7.2.10 Animal Control

What the SQF Code says

7.2.10.1 The operation shall have a written risk assessment on animal activity in and around the production of produce that has been implemented and monitored.

7.2.10.2 Measures shall be in place that control domestic and wild animals in the growing fields and does not allow the presence of domestic or wild animals in greenhouses and all storage and product handling areas.

7.2.10 Implementation Guidance

Wild and/or domestic animals can be a cause of product contamination when their access is not controlled or minimized to a level where contamination is minimized. Each site, and its risk to animal activity must be assessed for these risks and appropriate control measures applied.

The site must complete a risk assessment of their growing fields, adjacent areas and water sources to determine if access from wild animals could be a potential source of contamination. The assessment should consider some of the following factors:

- Concentrated cattle populations either on site owned land or land adjacent to growing areas or water sources;
- Access to routes through growing areas or water sources by migrating or feeding herds of wild game (e.g. Caribou, antelope, bison, deer); and/or
- Access to water sources by migrating flocks of birds.

The risk assessment should include descriptions of the types of wild animals considered, a risk factor for each such as high/medium/low and justification for each risk factor assigned.

Where the risk assessment indicates that product contamination is likely to occur, control measure must be applied and monitored. These control factors might include fencing, bird control devices, netting etc.

Domestic animal control (e.g. dogs, cats) must be applied to all product handling and material/input storage areas. Greenhouses are included as product handling areas. Domestic animals are allowed if they are designated as guide dogs and in some instances used in pest prevention techniques. In both instances, they must be under control of site staff or contractors.

7.2.10 Auditing Guidance

Wild and domestic animal control programs will be evaluated during a site audit through observation and interview with site personnel. Evidence may include:

- Risk assessment documentation and resulting control measure if applicable;
- Site maps (see also 7.1.1) indicated adjacent land use; and/or
- Observations of domestic animal control in buildings.

7.2.11 Cleaning and Sanitation

What the SQF Code says

7.2.11.1 The cleaning of product contact surfaces, field harvesting equipment and sanitary facilities shall be documented and implemented. Consideration shall be given to:

i. What is to be cleaned;
ii. How it is to be cleaned;
iii. When it is to be cleaned;
iv. Who is responsible for the cleaning, and
v. Who is responsible for the evaluation of cleaning activities.
7.2.11.2 A schedule shall be prepared indicating the frequency of verifying the effectiveness of the cleaning of product contact surfaces, field harvesting equipment and sanitary facilities and indicating who is responsible for completing verification activities.

7.2.11.3 A record of cleaning and sanitation activities shall be maintained.

### 7.2.11 Implementation Guidance

**What does it mean?**

Cleaning and sanitation methods will vary depending on the nature of the farm/site, and the microbiological and possibly allergen risk. Some storage & distribution facilities require a dry clean, whereas other facilities will utilize more stringent cleaning and sanitation regimes. This element covers cleaning and sanitation protocols generically, but specifies the correct use and type of cleaning detergents, sanitizers (also referred to as disinfectants) and the requirement for post-clean inspections.

It is important to stress that, irrespective of the type of products, product handling activities and risk, all food handling building and equipment require an appropriate documented and implemented cleaning program. The program must be verified to ensure its effectiveness.

**What do I have to do?**

A written cleaning program shall be in place and fully implemented that includes provisions for effective cleaning of harvesting equipment, containers, transportation units, buildings, utensils, amenities (e.g. washrooms) and external areas. The cleaning program shall identify the what, how, when and who for every item of equipment and part of the building. Responsibilities shall be identified, including responsibility for the visual or test inspection, and the methods for verification of cleaning.

If small items of equipment are used (such as tools, trays, harvest container, etc.), a wash area shall be provided with sufficient hot and cold running water, a suitable detergent and sanitizer for cleaning and when necessary, suitable racks for draining/drying. These areas shall be identified and constructed so they do not present a hazard to handling and storage of products. Protective clothing racks provide temporary storage for gloves, aprons and other items when staff needs to leave the clean-up area for meals or other short breaks. Used disposable protective clothing must be immediately disposed of in an appropriate manner. Non-disposable protective clothing shall be cleaned according to the written procedures.

The cleaning and sanitation protocol shall include the following detail:

- List all the areas and equipment to be cleaned;
- The frequency for cleaning and sanitizing different areas of the buildings and all associated equipment;
- A full description of the cleaning and sanitation procedures for each piece of equipment or area of any recoup or exposed-food operation. This should include:
  - Physically remove solid particles by sweeping or wiping;
  - Apply a suitable detergent in the correct concentration to remove grease and other food residues;
  - Rinse off residual food residue and detergent;
  - Apply a suitable sanitizer in the correct concentration to reduce or eliminate microbiological contaminants, if required;
  - Rinse to remove residual sanitizer, if indicated on product label; and
  - Dry, as indicated, in a manner that will prevent recontamination.
- Ensure staff involved in cleaning, including contract cleaners, are fully trained in cleaning and sanitation procedures;
- Chemicals must be approved for use by the appropriate authority; maintain on file Safety Data Sheets (SDS) for each chemical used (see also 7.6.1). Describe the chemicals used, their dilution rate and method of application;
- Chemical cleaners and sanitizers must be used and stored in an approved manner (see also 7.6.1);
- Evaluation of cleaning. Monitor the effectiveness of cleaning (e.g. physical inspection and/or swabbing) and keep records of all inspections implemented to verify the effectiveness of the cleaning program;
and

• Outline requirements for the disposal of unused compounds and empty containers in accordance with regulatory requirements (see also 7.6.1).

To verify the effectiveness of sanitation, a visual inspection of equipment and buildings should be conducted prior to the start of operations, after a cleaning/sanitation activity. This must be documented both in a schedule, if reasonable known, and through actual records indicating completion of verification (i.e. supervisory signatures or initials on cleaning records.)

Any corrective actions taken when inspection reveals a problem must be recorded.

### 7.2.11 Auditing Guidance

Cleaning and sanitation procedures and schedule and compliance to them shall be reviewed at each facility audit through observation, review of records, and interviews with staff and cleaning contractors if applicable. Evidence may include:

- The site has an effective and appropriate cleaning program in place;
- All critical equipment and areas of the buildings are covered in the cleaning program;
- Cleaning methods include what is to be cleaned, how it is to be cleaned, frequency of cleaning and responsibility for cleaning;
- The cleaning program includes measures for verification of the effectiveness of sanitation;
- The cleaning of equipment is effective;
- The cleaning of utensils and protective clothing is effective;
- The cleaning of buildings, surrounds, and amenities is effective;
- Cleaning of utensils is carried out in an area separate from food handling areas and storage;
- Racks and areas for storing cleaned utensils are provided and appropriate;
- Inspections are completed to ensure cleanliness following cleaning activities;
- A sanitation verification schedule is available;
- Methods are established for verification of sanitation;
- Detergents and sanitizers meet local regulatory requirements;
- SDS sheets are available for all cleaning chemicals purchased;
- Personnel handling cleaning chemicals are properly trained;
- Cleaning chemicals are disposed of as per regulatory requirements;
- Empty cleaning chemical containers are labeled and securely stored;
- Records of cleaning and sanitation activities are maintained and complete; and
- Records of hygiene inspections are maintained and complete.

### 7.3 Personal Hygiene

#### 7.3.1 Personnel Practices

**What the SQF Code says**

7.3.1.1 Personnel engaged in the handling of product shall observe appropriate personal practices. Corrective actions shall be implemented for personnel who violate food safety practices.

7.3.1.2 Personnel suffering from, or are carriers of, an infectious disease, which can be carried with food as a vehicle, shall not engage in growing, product handling or field harvesting operations.
7.3.1.3 A medical screening procedure shall be in place for all employees who handle product or food contact materials, and will also be applicable to all visitors and contractors.

7.3.1.4 Personnel with exposed cuts, sores or lesions shall not be engaged in handling product or food contact materials. Minor cuts or abrasions on exposed parts of the body shall be covered with a suitable waterproof dressing.

7.3.1.5 A written policy shall be in place that specifies the procedures for handling product or product contact surfaces that have been in contact with blood or other bodily fluids.

7.3.1.6 Smoking, chewing, eating, drinking (except for water) or spitting is not permitted in any growing areas including on field harvesting rigs and during harvesting and packing operations.

### 7.3.1 Implementation Guidance

**What does it mean?**

In many jurisdictions, personnel requirements for food handling and storage activities are covered by food safety legislation. Where this applies, the legislative requirements must underpin the requirements of 7.3.1. This element covers the basic personal hygiene requirement for working at growing operations or food handling sites.

**What do I have to do?**

Proof that staff has been trained on infectious disease must be documented. Staff identified as carriers of infectious diseases are not to be permitted to handle food products or direct packaging materials.

Employees must be aware of risks to the food products from the potential transmission of pathogens from ill employees and of their responsibility to report such instances. An example of a control program could be moving an employee to non-food contact activities when the employee reports potential illness. Ideally, an employee will not be penalized for reporting illness to their supervisor. This will be supported by introductory training with all employees on reporting illnesses and a questionnaire on illnesses for visitors.

Staff in food storage facilities with exposed cuts is not permitted to handle products unless suitable protective coverings are applied. These coverings must be monitored regularly by responsible personnel to ensure they remain effective.

Dressings on hands and fingers are required to be covered with a suitable glove.

Smoking, eating, chewing and drinking is not permitted in any growing areas, food handling or storage areas.

### 7.3.1 Auditing Guidance

Medical screening and personal hygiene policies and procedures shall be reviewed for compliance at each site audit through observation, review of records and interviews with staff. SQF auditors will question employees on hygiene practices to ensure they are understood and applied. Evidence may include:

- Medical screening and personal hygiene policies and procedures are in place;
- Medical screening and personal hygiene policies and procedures are effectively implemented;
- Employees notify the business of illness;
- Personnel who are engaged in product handling and exhibit signs of illness are redeployed to low risk areas;
- Personnel who are known to have been ill with an infectious illness are not involved in food storage or recouping activities;
- Personnel sores or cuts on hands are redeployed to low risk areas or have cuts suitably bandaged and gloved;
- There is no smoking, chewing, eating or drinking on harvesting rigs, or in food handling or product storage areas.
7.3.2 Sanitary Facilities and Hand Washing

What the SQF Code says

7.3.2.1 Toilet facilities shall be provided and designed, constructed and located in a manner that minimizes the potential risk for product contamination.

i. Toilets shall cater for the maximum number of employees and be constructed so that they can be easily cleaned and maintained;

ii. Hand wash basins with clean, potable water, hand soap, disposable towels or effective hand drying device, waste bins and a tank that captures used hand wash water for disposal (if not connect to drains) shall be provided inside or adjacent to toilet facilities;

iii. Signage in appropriate languages shall be provided adjacent to hand wash basins instructing people to wash their hands after each toilet visit;

iv. Racks for protective clothing used by farm employees shall be provided;

v. Toilets shall be located so as to provide easy access for farm workers;

vi. Toilet and wash stations shall be maintained in a clean and sanitary condition.

7.3.2.2 Personnel shall have clean hands and hands shall be washed by all personnel:

i. Before handling product;

ii. Before putting on gloves;

iii. After each visit to a toilet;

iv. After using a handkerchief, handling dirty or contaminated material; and

v. After smoking, eating or drinking.

7.3.2 Implementation Guidance

What does it mean?

At all sites employees, contractors and visitors must have clean hands upon entering food handling or storage areas. Hands must be washed after each visit to a toilet, after smoking, eating or drinking and after handling wash down hoses, or contaminated material. Hand wash stations and toilets must therefore be correctly equipped and available at convenient locations for use.

What do I have to do?

The site must ensure that is has sufficient toilets for the maximum number of employees and that they are conveniently located. The number and location may be provided by local health and safety regulations which must be followed. Generally, 1 toilet per 35-50 employees is recommend and its location must not lead to or become a source of contamination to water sources or products. The toilets should be easily assessible (i.e. maximum 3-5 minute walk) or assessible through transportation provided (e.g. employee or site vehicle). Racks or hooks outside or adjacent to toilets should be available for protective clothing. Toilets facilities, whether permanent or temporary, must be cleaned and maintained at regular intervals or based on usage. This must be recorded and could be included in the cleaning program (see 7.2.11).

Hand wash basins must be conveniently located so that handwashing and must be available in harvesting areas, food handling areas, breakrooms/lunch areas and near bathrooms/toilets. There must be instructions for all staff, contractors and visitors on how to wash hands. Additional hand basins are required where hands could become contaminated prior to working with product.

Potable water (see also 7.5.5) at a suitable temperature, liquid soap, single-use paper towels and a means of disposing of used paper towels need to be provided at each hand wash station.

7.3.2 Auditing Guidance

The location and construction of toilets and hand-wash stations and their use by employees, contractors and visitors shall be reviewed and observed at each site audit. Evidence may include:
• Hand wash basins and toilets are available for employees, contractors, and visitors and easily accessible;
• Hand wash basins have potable water supplied at appropriate temperatures;
• There is liquid soap available at hand wash stations;
• There are paper towels available at hand wash stations;
• There are containers for used paper towels at hand wash stations;
• There is signage near hand wash stations instructing people to wash their hands;
• Personnel in food handling areas shall have clean hands;
• Personnel wash their hands on leaving toilet areas;
• Personnel wash their hands on leaving the lunch room;
• Personnel wash their hands after handing food products, hoses or waste;
• Personnel wash their hands after eating, drinking or smoking; and
• Personnel who use gloves also follow hand washing requirements.

7.3.3 Protective Clothing

What the SQF Code says
7.3.3.1 Protective clothing shall be effectively maintained, stored, laundered and worn so as to protect product from risk of contamination.
7.3.3.2 Where applicable, clothing, including footwear, shall be effectively maintained, cleaned and sanitized, and worn so as to protect product from risk of contamination.
7.3.3.3 If rubber or disposable gloves are used, the operation shall have a glove use policy and personnel shall adhere to the hand washing practices outlined above.

7.3.3 Implementation Guidance

What does it mean?
Protective clothing that is provided to employees are primarily for the protection of food and food-contact surfaces. Clothing must therefore be designed to prevent contamination and maintained in a clean and serviceable condition.

What do I have to do?
Employees and visitors must wear clean clothing and footwear while in or engaging in food handling areas. Employees and visitors with excessively soiled clothing are not to handle products or packaging materials. Employees can wear their own clothing, if allowed by sites, provided they are properly cleaned prior to the beginning of their work activities.

For food handling areas, clothing includes outer garments such as work clothes, overalls, boots, shoe coverings, head coverings, hair nets, smocks, frocks, beard snoods and coats. When required, gloves and aprons shall be kept in an intact and sanitary condition when used. When not in use, gloves and aprons shall be stored in a designated area (e.g. such as a rack or locker), not on products or equipment (see also 7.4.3). Disposable gloves shall be removed before each break, changed upon re-entry into food handling areas and when damaged. Employees must comply with hand washing practices even when gloves are used.

Any disposable clothing must be changed between breaks, upon entry into food handling areas and when damaged. This includes aprons, frocks, smocks, boots, gloves, etc. When clothing is to be reused, it must be properly cleaned and stored on racks or hangers. It cannot be stored on boxes or product or packaging materials (see also 7.4.3). Where hair restraints, such as hairnets or hats are required by customers, regulation or site policy, they are to be properly used and available at convenient locations for use by employees, contractors and visitors.
7.3.3 Auditing Guidance

Clothing worn by employees, contractors and visitors (where appropriate) shall be reviewed for compliance at each site audit through observation and interview. Evidence may include:

- Procedures on clothing including uniforms, gloves, and footwear are in place and are appropriate for the type of operation;
- Clothing policies are implemented by all employees;
- Clothing provided to staff is appropriate and properly maintained;
- Clothing worn by staff is clean;
- If required, items such as hair nets, snoods and disposable gloves are at accessible locations;
- Clothing requirements for contractors and visitors are followed;
- Employee clothing is clean at the start of each day or working period;
- Disposable gloves and hairnets are correctly disposed of; and
- Non-disposable gloves and/or aprons are properly cleaned between uses.

7.3.4 Jewelry and Personal Effects

What the SQF Code says

7.3.4.1 Jewelry and other loose objects that pose a threat to the safety of the product shall not be worn or taken onto any growing, product handling or storage operations.

7.3.4 Implementation Guidance

What does it mean?

Loose pieces of jewelry can fall into exposed food products and cause a choking hazard. Also, pathogenic bacteria can multiply in the warm, humid areas under watchbands, rings and bracelets.

The application of the jewelry policy in growing and food handling areas is therefore dependent on the risk to the product and exposure to the product. Where product is exposed, site policies shall require the removal of all jewelry and loose objects prior to entering the food handling areas where food is exposed.

What do I have to do?

Jewelry and other loose objects, including watches, worn or carried, must comply with local regulatory authority and proper employee hygiene practices. Where product is exposed, if such hand jewelry cannot be removed, it may be covered with material which can be maintained intact, in a clean and sanitary condition and which effectively protects against the contamination by these objects to the food, food-contact surfaces or food-packaging materials. Sites should adjust their good employee hygiene practices based on customer requirements, risk to their product, product exposure and storage conditions.

7.3.4 Auditing Guidance

Jewelry shall be reviewed for compliance at each site audit through observation and interview. Evidence may include:

- The jewelry policy is appropriate to the risk, handling of exposed product, product exposure and storage conditions; and
- The jewelry policy is effectively implemented for all employees (including management).
7.3.5 Visitors

What the SQF Code says

7.3.5.1 All visitors (including management and maintenance employees not normally working at the site) shall be required to remove jewelry and other loose objects and wear suitable protective clothing around product growing, harvesting, or storage areas.

7.3.5.2 Visitors exhibiting visible signs of illness shall be prevented from entering any growing or product handling or field harvesting operation.

7.3.5.3 Visitors must follow all personnel practices as designated by the site for employees within various areas of fields, sheds, packing facilities or storage locations.

7.3.5.4 Unsupervised children shall not be permitted to enter any harvesting, packing, or food storage areas.

7.3.5 Implementation Guidance

What does it mean?

A visitor is considered a non-employee of the company or facility. Examples of visitors would be vendors, service providers, contractors, truck drivers, tours and guests. Some facilities may define visitors to include anyone who does not work at the site, thus, corporate/office personnel could be considered visitors.

Visitors pose the same risk to product safety as employees and in some cases a greater risk because they may not understand the risks to products or food hygiene requirements.

What do I have to do?

The requirements for visitors are dependent on the risk to the product, exposure to the product and the proximity of visitors to the food handling activities.

The site shall have specific good hygiene practices for visitors, contractors and tours; have a means to communicate those expectations to visitors, contractors and tours; and monitor visitors, contractors and tours to ensure all visitors are in compliance with the company’s good hygiene practices. All visitors are required to wear clean clothing and foot wear, and must remove jewelry and other loose objects, including watches that may fall into equipment or into or onto food.

Visitors shall enter and exit food handling, packing and storage areas through designated employee entrance points and must comply with all hand washing and personal requirements. Visitors must not be permitted to handle any product or equipment unless they are service providers whose contract states this is part of their function.

Visitors should sign in the visitor log and should be fully trained or should be accompanied at all times by a site employee. For their personal safety, as well as the security of the product and process, they must be monitored.

Children are not allowed in food handling or storage areas unless accompanied by a site employee.

7.3.5 Auditing Guidance

Visitor practices and policies/procedures shall be reviewed at each site audit through observation and interviews. As someone external to the company, the auditor will be able to partly ascertain compliance by their personal experience on entering and moving around the site. Evidence may include:

- The visitor policy is appropriate to the risk, product exposure and storage conditions and the type and number of visitors visiting the site; and
- The visitor policy is effectively implemented for contractors, and visitors.
7.3.6 Amenities

What the SQF Code says

7.3.6.1 Provision shall be made to store employee personal belongings away from crops, harvesting, field and packing operations, and harvesting equipment.

7.3.6.2 Areas for meal breaks shall be designated and located away from a food contact/handling zones and harvesting equipment.

7.3.6.3 Drinking water shall be available to all field employees.

7.3.6 Implementation Guidance

What does it mean?

Product contamination can be controlled by providing storage areas for employee personal belongings and a place to break or eat that is away for product handling areas.

What do I have to do?

Provide adequate lunchroom and restroom facilities, as appropriate for the number of employees in the operation based on applicable legislation relevant to the commodity being processed.

Provided amenities must have adequate lighting and ventilation.

Studies have shown that clean, well-supplied amenities lead to a higher hygienic practice by employees when they are on the floor.

Employees in the field conducting growing or harvesting activities will require regular access to water. Sites should provide this access as well as the forms of deliver in order to avoid employees providing their own containers that could lead to product contamination.

7.3.6 Auditing Guidance

This element will be audited as part of each site audit through observation and interviews with employees. Evidence may include:

- Amenities are provided depending on the type of operation and the number of employees;
- Amenities are available for all employees who handle product;
- Staff amenities have adequate lighting;
- Staff amenities have adequate ventilation and are free of odors; and
- Water is available to staff in appropriate form and containers.

7.4 Harvesting, Field Packaging and Product Handling Practices

7.4.1 Pre-Harvest Assessment

What the SQF Code says

7.4.1.1 A pre-harvest risk assessment procedure shall be documented and implemented and describes when the assessment is performed and identifies those conditions that may be reasonably likely to result in physical, chemical, or biological contamination.

7.4.1.2 Knives and cutting instruments used in harvesting operations shall be controlled, and kept clean and well maintained.

7.4.1.3 A written procedure shall be documented and implemented that describes the use and storage of harvesting containers.

7.4.1 Implementation Guidance
What does it mean?
Prior to the harvesting of crops, risks and hazards shall be evaluated to determine if any control measures can be applied to reduce any biological, chemical or physical hazards that may pose a risk. The assessment shall be documented to ensure they are complete and accurate.

What do I have to do?
A risk assessment procedure must be prepared to describe how they will be completed and must contain the normal procedural details such as who, when, what and where. The “what” must describe how risk is determined and what hazards are considered. It is recommended that biological, chemical and physical risks be considered for all harvesting and product handling activities and that risks of probability vs likelihood be applied. If a HACCP-based Food Safety Plan is being referenced as per 2.4.3.1, this can be considered as a replacement for this risk assessment, so long as it has been reviewed and applied to the specific site on a minimal annual basis.

All tools, implements and containers used in harvesting should also be examined pre-harvest to ensure they are appropriate for use in the harvesting and handling of foods. Storage conditions for use during and after harvest should be as per 7.2.4.

7.4.1 Auditing Guidance
Pre-harvest assessments shall be part of each site audit and will be evaluated through review of documentation and observations. Evidence may include:

- Risk assessment procedure and resulting documentation;
- Storage procedures and practices for harvest containers; and
- Proper identification, use and maintenance of knives and other cutting instruments.

7.4.3 Field Packing Personal Practices
What the SQF Code says

7.4.3.1 Appropriate personnel practices shall be employed by field packing employees which include:

i. Fingernail polish, artificial nails, and long nails, shall not be permitted where product is handled with bare hands;
ii. False eyelashes and eyelash extensions shall not be permitted;
iii. Aprons and gloves shall be kept clean;
iv. Aprons and gloves shall not be left on product, work surfaces, equipment or packaging material but hung on apron and glove racks provided;
v. All product and packaging material shall be kept off the ground and the floor of the transport vehicle;
vi. Waste shall be contained in the bins identified for this purpose. Waste shall not come in contact with produce and be removed on a regular basis and not left to accumulate.

7.4.3.2 A written policy regarding the handling and field packaging of produce, specific to the commodity, shall be implemented and maintained. The policy shall assure that:

i. Damaged or decayed produce is not harvested or culled;
ii. Product that contacts the ground shall not be harvested (unless that product typically contacts the ground);
iii. Measures to inspect for physical hazards and procedures to remove physical hazards are in place; and
iv. Cloths, towels, or other cleaning materials that pose a risk of cross-contamination shall not be used to wipe produce.
7.4.3.3 Packaging materials shall be appropriate for their intended use and stored in a manner that prevents contamination. A written policy shall be in place that identifies how packing materials are permitted in direct contact with soil.

7.4.3.4 Materials that come in contact with the produce shall be clean and in good repair.

### 7.4.3 Implementation Guidance

| What does it mean? | The activities and actions of employees/personnel while harvesting products in the field can be sources of product contamination. Procedures, training, proper tools, clothing, packaging materials and general awareness or risk and hazards to products during harvesting will minimize incidences of product contamination. |
| What do I have to do? | Employees, management and contractors must all be aware of appropriate practices, hazards and how to handle products so that any risks and hazards to products being harvested are minimized or eliminated. Part of good agricultural practices includes inspections for any physical hazards that may present themselves either before or during harvesting. If harvesting is automatic or involves harvesting rigs, field inspection is expected as is on-going inspection of the rigs. |

A list of what is permitted or not permitted to wear must be supplied to each employee and on-going employee supervision and observation will ensure they are compliant to these policies. Specifically nail polish, artificial nails or long nails are not allowed unless they are continually covered with a glove during product handling. They have the potential to break off or chip and end up in products being harvested and possibly field packaged. Additionally, false eyelashes and/or eyelash extensions are also not allowed as they may fall off and into product packages.

Aprons and gloves that may be in use must be kept clean. Frequency and how to clean will be dependent on products and conditions they are used. Employees and management must either use their discretion of frequency or set minimum (e.g. daily) cleaning requirements. In order to avoid further soiling or contamination with what they contact. Aprons and gloves must not be placed or left on the ground or on non-food contact surfaces. Employee procedures should state where they can be stored and employees must be trained on proper use. Employees must also be aware of how or when to use any clothes, towels or other cleaning materials. The materials must be specific for their use with products and not confused with other clothes or cleaning materials used elsewhere on the farm (e.g. on equipment). Color coding of such materials is recommended.

Waste that may accumulate during harvesting activities must be removed on a regular basis (e.g. daily) to avoid accumulations that may pose a risk to products. Any waste that is disposed of in bins, must have the bins properly identified for such a purpose. Bins that are repurposed for other uses must be thoroughly cleaned and any labelling from the previous usage must be removed, marked out or covered. Bins must clearly state they are for waste or be color coded to distinguish them from other bins or containers.

Harvesting practices must be specific for various commodities or products being harvested so that employees can accommodate for different requirements. These may include quality of the produce (rotting or decaying products must not be harvested), packaging details and other factors. Products that are culled out due to quality or safety concerns must be kept separate from harvest products being put forward for sale. Products that touch the ground, such as falls from trees or bushes, shall NOT be harvested. If product normally comes in contact with the ground, this does not apply. If fallen product is being collected and sold for further processing, this must be kept separate from normal product, and the site must have documentation with the buyer of such product that states they are aware they are harvested off the ground and assume control of any risks.

Packaging materials are sometimes used directly in the field and how they are used and stored during that use must be specifically communicated to employees. Written procedure must be in place and employees must be trained to them. The packaging materials must be approved for use in the field and meet the specification documents in 2.3.2 of the code. If packaging materials is appropriate for being temporarily placed on the ground, the circumstances for such activity must be clearly stated and adhered too. Supervision activities can be used for on-going monitoring of such practices.

### 7.4.3 Auditing Guidance
Employee harvesting practices will be reviewed for compliance during the on-site audit. This will be completed through employee interviews, procedure and record review and observations. Evidence may include:

- Employee practices observations during product harvesting and field packaging;
- Employee adherence to items not permitted during harvesting and field packaging;
- Use and identification of cleaning materials (if in use) and waste bins;
- Complete and accurate procedures;
- Employee training records on harvesting and packaging procedures; and
- Packaging material uses and conformance to specifications.

### 7.5 Water Management

#### 7.5.1 Water Systems

**What the SQF Code says**

7.5.1.1 A water description plan shall be prepared that describes the water sources and the production blocks they serve, and shall include one or more of the following: maps, photographs, drawings, or other means to communicate the location of the water sources, permanent fixtures and the flow of the water system. The plan shall be kept current and revised when changes occur.

7.5.1.2 Agricultural water shall be sourced from a location and in a manner that is compliant with prevailing regulations.

7.5.1.3 Water system intended to convey untreated human or animal waste shall be separated from conveyances utilized to deliver agricultural water.

**7.5.1 Implementation Guidance**

**What does it mean?**

The water system used by the site for agricultural and/or potable water must be documented to show the various sources, if it applies and whether they are compliant with regulatory authorities having jurisdiction. The documentation provides a complete picture of where water is sourced and if there are any risks to the products being grown and harvested.

**What do I have to do?**

A complete review and assessment of the water system is required in order to properly document all sources, pumping systems, piping and transport, storage and other elements that may apply. The document can be in any form that allows for ease of annual review and review by auditors, customers and regulators. It could be a map, list, pictures or a combination of them. Where necessary a description of each part of the water system is required to convey its purpose and use. If there are parts of the system that are intended to move or transport untreated human waste or animal waste, then maps, blue prints or other forms/diagrams must be presented to show they are separate from agricultural water systems.

Agricultural water, defined as water used for irrigation, spraying and other crop purposes, must be sourced from locations that meet any regulatory, legal or other authority. Documentation must be present to illustrate this compliance and sites should ensure the documents align with all sources listed. The documents can include any issuance from public health authorities, water rights holders, analytical result etc.

### 7.5.1 Auditing Guidance
This element will be audited as part of each site audit through observation, review of records and interviews with operational staff. Evidence may include:

- Review of maps, lists, pictures and other documents that describe the water system;
- Observations of water sources and system in use or being used before or during the harvest;
- Interviews of operations employees with responsibility for water use; and
- Blue prints or other documents use to illustrate separation of sanitary lines from agricultural water line.

### 7.5.2 Irrigation Water

**What the SQF Code says**

7.5.2.1 Agricultural water shall be drawn from a known clean source or treated to make it suitable for use. The producer shall conduct an analysis of the hazards to the irrigation water supply from source through to application, establish acceptance criteria for the monitoring of water and validate and verify the integrity of the water used to ensure it is fit for the purpose.

**What does it mean?**

Agricultural water may be a source of biological or chemical hazards due to the source or conveyance system. The hazard analysis and establishment of monitoring will ensure that any agricultural water used will not contaminate product being grown and harvested.

**What do I have to do?**

The water system described in 7.5.1.1 should be used to conduct a risk/hazard assessment. The assessment should consider any possible biological or chemical hazards that may occur in the water system and what might be the cause. The assessment should consider contamination of sources via neighbouring or on-site extensive cattle housing, roadside or agricultural chemical run offs, high levels of wild animal or bird activity, neighbouring industrial waste. Other hazards may also be considered and should be documented.

Where the risk assessment and sources of water dictate that water quality should be monitored, the site must establish the criteria for monitoring such as type of testing, frequency and what to do when testing does not meet industry or regulatory requirements.

**7.5.2 Auditing Guidance**

This element will be audited as part of each site audit through observation, review of records and interviews with operational staff. Evidence may include:

- A completed risk/hazard assessment covering all elements of the water system;
- Methods to determine if water quality monitoring is required;
- Criteria established for water quality monitoring; and
- Records to support water quality monitoring and compliance with established criteria.

### 7.5.3 Treatment of Irrigation Water

**What the SQF Code says**

7.5.3.1 In circumstances where irrigation water is treated to render it acceptable, the water, after treatment shall conform to the microbiological standards as outlined in element 7.5.5.
7.5.3 Implementation Guidance

What does it mean?
Agricultural water used for irrigation can sometimes be subject to a treatment process to render it acceptable for use as per criteria established in 7.5.2. Post treatment analysis of any such water must meet the criteria or standards listed in 7.5.5.

What do I have to do?
Following the evaluation of water systems and the access to irrigation water and determination that such water needs to be treated, the site must monitor conformance of the treated water by analysing it in post treatment. The analysis, standards used and reporting should indicate that it is appropriate for use. The details of where to sample, how much, frequency, etc. should follow the Water Management Plan documented as part of 7.5.5.

7.5.3 Auditing Guidance
This element will be audited as part of each site audit through observation, review of records and interviews with operational staff. Evidence may include:

- Observation of the irrigation water treatment system;
- Records to support conformance to standards; and
- Interviews with staff to support knowledge of the treatment system and how to correct it if results do not illustrate conformance.

7.5.4 Water System Risk Assessment

What the SQF Code says
7.5.4.1 An initial risk assessment shall be performed and documented that takes into consideration the historical testing results of the water source, water system control and protection, the characteristics of the crop, the stage of the crop, and the method of application.

7.5.4 Implementation Guidance

What does it mean?
The water system mapped out as part of 7.5.1.1 has risks and hazards that need to be assessment periodically or at least annually. The assessment ensures that any new or different risks present, changes to crops and changes to irrigation methods are known to the site and actioned accordingly to protect products.

What do I have to do?
The site must complete a risk assessment prior to the start of each crop year to ensure the complete water systems are capable of delivering water as required and take into consideration any changes in operations that may affect risk. These changes can include new sources, neighbors, irrigation methods, crop types etc. The assessment should follow similar documentation completed in 7.5.2.1 or other risk assessments to support Good Agricultural Practices. The following may assist in determining risk based on water source type:

- Municipal Water – Lowest Risk
- Well Water and Tertiary Water – Low Risk
- Ponds, reservoirs fed by groundwater or rain water – Moderate Risk
- Lake – Medium Risk
- Ponds, reservoirs fed by streams or run-off – High Risk
- Rivers, streams, canal, flooding – Highest Risk
### 7.5.4 Auditing Guidance

This element will be audited as part of each site audit through observation, review of records and interviews with operational staff. Evidence may include:

- A completed risk/hazard assessment covering all elements of the water system;
- Employee interviews to ensure knowledge and understanding of how to use the completed risk assessment.

### 7.5.5 Water Management Plan

**What the SQF Code says**

7.5.5.1 Water used for washing and treating product, cleaning food contact surfaces, mixing sanitizer solutions and washing hands shall comply with potable water microbiological and chemical standards in the country of production and destination. Separate criteria will be established for irrigation water, frost control, humidifying, pesticide application, etc. as applicable, based on the hazard analysis, best practices within country of production and any applicable legislation.

The water management plan shall include the following:

i. Preventive controls;
ii. Monitoring and verification procedures;
iii. Corrective actions; and
iv. Documentation.

Water testing shall be part of the water management plan, as directed by the water risk assessment and current industry standards or regulations for the commodity being grown.

7.5.5.2 Water quality shall be monitored to verify it complies with the established water microbiological and chemical standard or criteria established. A verification schedule shall be prepared indicating the location and frequency of monitoring, which shall be decided by the risk assessment, best practices within country of production, or applicable legislation. Water analysis shall be undertaken by an approved laboratory accredited to ISO 17025 or equivalent.

7.5.5.3 Water used for hydroponics culture shall be frequently changed and procedures shall be implemented that minimizes microbial or chemical contamination. Delivery systems shall be designed so they can be maintained and cleaned.

### 7.5.5 Implementation Guidance

**What does it mean?**

Water used for direct contact with equipment, products and personnel must be managed to ensure it remains potable at all times during use. The potability standard and its testing requirements is set by the sites regulatory authority having jurisdiction.

**What do I have to do?**

The water management plan is specific to water used treating products, cleaning food contact equipment, and washing hands. The plan must distinguish the difference between how potable water is sourced, stored, treated and analysed vs agricultural water (see 7.5.2 and 7.5.3 for agricultural water management).

The water management plan includes detail of what controls are in place at various points in the water system to ensure water potability is maintained. The definition of potability must be stated through reference to the microbiological standards issues by the sites country of product origin. It may also need to make reference to any commodity specific water standards especially for hydro-cooling, drenching, fluming or washing products (see also 7.5.8). Municipal water is assumed to be potable; therefore, it does not need to be tested UNLESS it is stored, treated, and recycled/recirculated or a test is required from the equipment.

The plan must also address the frequency, microbiological testing limits, and testing methods used to monitor potable water compliance to regulations. Records must be maintained to show compliance to the plan and
Water analysis used to ensure potability must be conducted by an ISO17025 approved lab. This is an accreditation given to the lab that ensures it has the capability of analysing water correctly and provided lab results that are credible.

For crops grown or using hydroponic cultures, the plan must describe how frequently water is changed such that microbiological and chemical risks are controlled and how systems are cleaned and maintained.

### 7.5.5 Auditing Guidance

This element will be audited as part of each site audit through observation, review of records and interviews with operational staff. Evidence may include:

- A documented water management plan in current and implemented;
- Potable water availability is adequate for product handling needs, if applicable (such as sanitizing produce before sorting/packing);
- Potable water availability is adequate to meet cleaning requirements; and
- Monitoring and verification records are available and accurate.

### 7.5.6 Corrective Actions

**What the SQF Code says**

7.5.6.1 A corrective action plan shall be developed when monitoring shows that water does not meet established criteria or standards. The plan can include additional treatment for water, additional sources for water, product identification and disposition or other alternative actions to adequately control the identified hazards.

**What does it mean?**

Test results from water quality monitoring activities may indicate that the water does not meet established criteria. When this occurs, specific corrective actions are required to bring the water back into compliance and determine whether any product is at risk of contamination from non-potable water.

**What do I have to do?**

A pre-determined corrective action must be written so that should analytical results indicate issues with waste potability, then the site can act accordingly. The resulting corrective action plan must specifically address how water potability will be corrected and how possible product contamination may be assessed. The site may choose to include such corrective plans within the corrective action program that is part of the system elements (see 2.5.3). The plan must reference application records/forms that would be used to document any corrective actions taken.

### 7.5.7 Implementation Guidance

**What does it mean?**

Test results from water quality monitoring activities may indicate that the water does not meet established criteria. When this occurs, specific corrective actions are required to bring the water back into compliance and determine whether any product is at risk of contamination from non-potable water.

**What do I have to do?**

A pre-determined corrective action must be written so that should analytical results indicate issues with waste potability, then the site can act accordingly. The resulting corrective action plan must specifically address how water potability will be corrected and how possible product contamination may be assessed. The site may choose to include such corrective plans within the corrective action program that is part of the system elements (see 2.5.3). The plan must reference application records/forms that would be used to document any corrective actions taken.

### 7.5.7 Auditing Guidance
This element will be audited as part of each site audit through review of records, a documented plan and interviews with operational staff. Evidence may include:

- A written corrective action plan specifically for water quality monitoring;
- Employee interviews illustrating knowledge on water quality monitoring methodology; and
- Records from any corrective action occurrence.

### 7.5.7 Ice

**What the SQF Code says**

7.5.7.1 The producer shall verify that any ice used is made from water that meets the microbiological and quality standards as specified in element 7.5.5.

**7.5.7 Implementation Guidance**

**What does it mean?**

Ice is sometimes used to cool down harvest crops and may be used during shipment. Due to its contact with product, ice must comply with the same requirements as potable water.

**What do I have to do?**

The source of the ice must be established by the site and if made internally, it must be included in the water management plan. Compliance to microbiological standards established in 7.5.5.1 & 2 is required. If the ice is purchased, it must be considered an input and managed per 2.3.2 and 2.4.4.

**7.5.7 Auditing Guidance**

This element will be audited as part of each site audit through a review of records and interviews with operational staff. Evidence may include:

- Ice included in water management plan if made on site; and
- Ice vendor records of analysis and approvals.

### 7.5.8 Harvest Assessment Water/ Ice

**What the SQF Code says**

7.5.8.1 Written procedures shall be developed for all uses of water during harvesting of food or feed products. The procedures shall address:

i. The microbial quality of water or ice that directly contacts the harvested crop, is used on food contact surfaces or used to deliver agricultural chemicals;

ii. The treatment of re-circulated water, if used;

iii. The condition and maintenance of water-delivery system; and

iv. The control of wash water temperature.

7.5.8.2 A written procedure that includes water-change schedules shall be developed for all uses of water during harvesting.
7.6 Storage and Transport

7.6.1 Storage of Hazardous Chemicals and Toxic Substances

What the SQF Code says

7.6.1.1 Hazardous chemicals, toxic substances, and petroleum products shall be stored so as not to present a hazard to employees, product, product handling equipment or areas in which product is handled, stored or transported.

7.6.1.2 Product contact chemicals such as pesticides and herbicides; rodenticides, fumigants and insecticides; sanitizers and detergents shall be stored separately and in their original containers.

7.6.1.3 Chemical storage sheds shall:
   i. Be compliant with national and local legislation and designed such that there is no cross-contamination between chemicals;
   ii. Be ventilated to the exterior;
   iii. Be provided with appropriate signage indicating the area is a hazardous storage area;
   iv. Be secure and lockable to restrict access only to those personnel with formal training in the handling and use of chemicals;
   v. Have instructions on the safe handling of hazardous chemicals readily accessible to employees;
   vi. Be equipped with a detailed and up-to-date inventory of all chemicals contained in the storage facility;
   vii. Have suitable first aid equipment and protective clothing available in the storage area;
   viii. Have emergency shower and/or wash facilities available in the event of an accidental spill;
   ix. Be designed such that spillage and drainage from the area is contained in the event of a hazardous spill; and
   x. Be equipped with spillage kits and cleaning equipment.

7.6.1.4 Petroleum fuels, oils, grease and other lubricants shall be stored separate from other storage areas.
7.6.1.5 The storage of hazardous chemicals, toxic substances and petroleum products in areas (separate
lockable or otherwise contained) shall not occur inside food handling areas, product and packaging storage
rooms.

### 7.6.1 Implementation Guidance

**What does it mean?**

Cleaning chemicals, pesticides, agricultural chemicals, lubricants, oil, grease, boiler chemicals, etc. plus any other toxic substances must be stored in designated and separately secure storage areas.

**What do I have to do?**

There must be clearly visible means of separation of these groups of chemicals or toxic substances. Pest management chemicals shall be stored separate from cleaning chemicals and separate from agricultural chemicals. Bulk containers of hazardous chemicals or toxic substances must have sufficient spill-proof procedures that ensure that no cross contamination can occur. There must be signage indicating this area is a hazardous chemical storage area.

Chemical storage areas must comply with local or national regulations, be designed to contain spillages, and be ventilated, secure and lockable. Only approved and authorized chemicals are to be stored. An inventory of stored chemicals must be available at all times.

Chemicals must be stores in their original containers or transferred to specifically designed bulk storage units that are correctly labeled.

Utensils, tools or equipment used for product handling and harvesting must not be stored in the same room as hazardous chemicals.

The site must ensure that Safety Data Sheets (SDS) are readily available and accessible to personnel handling or coming into contact with hazardous chemicals. The site must also ensure that personnel have been trained in the safe handling and use of all hazardous chemicals in use on site as required by legislation.

### 7.6.1 Auditing Guidance

This element will be audited as part of each site audit through observation and interviews with employees. Evidence may include:

- There is one or more designated storage rooms for storing of chemicals;
- Chemical storage rooms are correctly designed and constructed, and meet regulatory standards;
- Chemical storage rooms are ventilated, secure and lockable;
- There is a detailed inventory of stored chemicals;
- The inventory agrees with the actual stock in store;
- Only authorized chemicals are stored;
- There is appropriate signage indicating the area as a hazardous storage area;
- The chemical storage areas are separate from food storage areas;
- There is spill control and spill kits available in the chemical storage rooms;
- There are no harvesting tools, utensils or farm equipment stored with hazardous chemicals;
- Packaging material is not stored in an area used to store hazardous chemicals;
- Sanitizers and/or cleaning products are not stored with pesticides or other toxic chemicals;
- Chemicals are stored in original containers; and
- There are instructions on safe handling of chemicals available.
7.6.2 Transport

What the SQF Code says

7.6.2.1 The loading, transport and unloading of crops shall ensure that product integrity is maintained.

Documented and implemented practices include:

i. Verification of cleanliness and functionality of shipping units;
ii. Appropriate storage conditions during transportation to final destination;
iii. Prevention of cross contamination with other hazards and spoilage; and
iv. Appropriate stock rotation practices.

7.6.2.2 Employees involved in loading, transport and unloading events shall be appropriately trained.

7.6.2 Implementation Guidance

What does it mean?

The movement of harvested crops from the field or storage buildings to the final destination can be completed in various stages and using various forms of transport. Maintaining the integrity of the product and avoiding point of contamination or product degradation is required to ensure customers receive a safe, quality product.

What do I have to do?

The site will be required to have a written loading, unloading and transportation procedure that the employees are trained on and are following on a routine basis. The procedure should outline specifically what they need to do prior to loading, during loading, during transportation both within the site and to the customer and final unloading at the customers site. The steps, tools, inspections, and product protection should all take into consideration any potential risks to the product and what to do to avoid any cross contamination from occurring. Some specific points that should be included are:

- Inspection of vehicles, trailers, bins, or other transfer or transport equipment to ensure it is clean and suitable for use;
- Proper handling to avoid damage to either the product or any packaging material used;
- Use of good inventory control practices such as First In, First Out;
- Traceability and/or lot number control and records should be part of these loading/unloading activities;
- Methods to ensure good storage practices during final transport to the customer; and
- Records used to make note of movement, inspection and delivery.

Employee training records will need to indicate that they understand and have completed the procedures adequately. These can be included with other training records and methods of training as per 2.9 in the system element.

7.6.2 Auditing Guidance

This element will be audited as part of each site audit by observations, review of records and interview with employees. Evidence may include:

- Observations of loading and unloading of harvested products both in the field and from storage;
- Employee interviews to determine knowledge or written procedures and risks being managed;
7.7 Soil Management

7.7.1 Fertilizer Management

What the SQF Code says

7.7.1.1 Inorganic (chemical) and organic (manure) soil amendments shall be isolated and stored separately so as not to pose a food safety risk.

7.7.1.2 Provision shall be made for the storage of concentrated and diluted liquid soil amendments in tanks designed to retain at least 110% of total volume or as per local regulations.

7.7.1.3 Soil amendments shall be stored separate from crop, field or irrigation water sources such that contamination from run off is avoided either by locating of the soil amendment a suitable distance from the crop or by the utilization of other physical barriers.

7.7.1.4 A current inventory of all organic and inorganic soil amendment storage and use shall be maintained

What does it mean?

Soil amendments, such are chemicals and manures, must be managed on the site so that in their bulk or concentrated form, they do not pose a risk to the crops should incidences of contamination through leakage or accidents occur.

What do I have to do?

The site must have planned and prepared locations to adequately store soil amendments prior to their ultimate use on crops being grown. Storage areas should be separate from the fields, crops harvested or water source. The separation can be by distance of through physical barriers such as berms, walls or other containment forms. These containment forms may be regulated so sites should be aware of any local ordinances or regulations. If by distance, the site should have completed a risk assessment or be able to reference a local or industry good agricultural practices to support that decision.

If the amendments are stored in tanks, then the containment forms must be able to hold 110% of the total volume. This ensures that should leakage occur the entire tanks contents is contained.

As part of good storage practices, a current inventory of all stored soil amendments must be maintained. This would include current, received and used amounts that align with the physical observations.

7.7.1 Auditing Guidance

This element will be audited as part of each site audit by observations, review of records and interview with employees. Evidence may include:

- Observations of currently stored soil amendments;
- Employee interview; and
- Inventory records.
7.7.2 Soil Amendments

What the SQF Code says

7.7.2.1 A soil amendment policy shall be documented, implemented and designed to prevent contamination of product. The policy shall outline the methods used to treat manure and other untreated organic fertilizers ensuring:

i. The treatment methods applied inactivate pathogens in organic soil amendments;
ii. No raw untreated manure is used;
iii. A hazard analysis of organic soil amendments treatment methods is conducted before use;
iv. Treatments and application methods are validated and treatment of organic soil amendments are verified as being in compliance with the approved or recommended methods applied;
v. Records of the validation and approvals and verification of organic soil amendment treatments are maintained.

7.7.2.2 Soil amendment protocols shall outline the methods to ensure organic soil amendment applications are timed to pose minimum risk to product safety and human health including:

i. All applications of soil amendments are in accordance with national or local guidelines best practices and codes of Good Agricultural Practice;
ii. Equipment used for soil application is maintained in good condition and calibrated to ensure accurate application;
iii. Records of all equipment maintenance and calibration are maintained;
iv. Signage complies with national and local codes of practice; and
v. Sufficient data is recorded to provide a detailed record of soil amendment applications.

7.7.2 Implementation Guidance

What does it mean?

The application of organic soil amendments (e.g. manure) can be a source of biological hazards to crops it is being applied to. The content, type, timing of application and equipment used can all have an impact on the risk to crops being grown and harvested. Control and knowledge of these factors will be required by the site.

What do I have to do?

The site must compile actionable policy statements (i.e. procedures) that describe the various types and application of organic soil amendments it uses. Unless an organic soil amendment has gone through a heat treatment that can validate that any active pathogens have been eliminated, we have to assume that all amendments would contain active pathogens such as listeria & e-coli. The descriptions must include which treatment methods are used. Typically, the applications to crops are timed so that there is sufficient time between the applications and harvested for pathogens to die out. Industry standards sometimes reference a 120 day period. No untreated organic soil amendments can be used if less than a 120 interval is between the application and harvest dates. The site must have documentation such as validation studies to support less than 120 days and will need an exemption from the certification body for 7.7.2.1 ii. If other treatments are used or amendments are purchases with such treatment, they must be documented and validated through analytical records to support a pathogen kill step.

The site’s documents to support organic soil amendment use must include a risk assessment (hazard analysis) prior to its use. If the amendment is similar in nature to previous applications, then the assessment can reference a previous completed assessment. New types (e.g. species change, purchased vendor changes etc.) must have a new assessment completed. The assessment should include risk rating (e.g. high, medium, low), what the risk is, and how it will be mitigated (eliminated or controlled) by the site.

Where possible any application methods should reference any national or local guidelines, best practices or regulations. If the method vary from these know sources, the site will need to validate its effectiveness for ensuring inactivation of pathogens prior to application or harvest dates.

Equipment used during applications must be included in maintenance schedules to ensure it is capable of delivering the quantity and rate of amendments stated either in references codes of practice or the sites own procedures.

Where required by local regulations, signage may need to be present during application and for a set period of
All applications must be supported by detailed records. They must minimally include the date of application, rate, type and location. Other records or documents to support organic soil amendment use could include best practice/codes, validation studies, purchasing invoices and supplier approvals.

### 7.7.2 Auditing Guidance

This element will be audited as part of each site audit by observations, review of records and interview with employees. Evidence may include:

- Review of written policies, procedures;
- Maintenance and calibration records;
- Interviews with employees on knowledge of organic soil amendment application;
- Harvest date records can comparison to application records,
- Application records;
- Foreign matter control procedures are communicated to staff;
- Inspections are conducted to prevent foreign material contamination of product;
- Temporary repairs are not used within the storage areas or where food is handled;
- A glass register has been developed;
- The glass register is complete, and covers all glass located at the site;
- The glass register includes brittle plastic and other materials;
- Glass inspections are conducted regularly including instrument dial covers and thermometers;
- Wood used in storage / handling area well maintained and clean; and
- There are no loose materials on processing equipment.

### 7.7.3 Purchasing Chemicals

#### What the SQF Code says

- Only chemicals approved for use in the country of production and the country of destination shall be purchased. Purchased chemicals shall be labeled with the active ingredient(s), applicable dosage rates, and application instructions. Where no regulations or partial regulations govern the use of chemicals, the site shall have a documented risk assessment on the justification for use of non-regulated chemicals.
- Chemicals that are specifically banned for use in the country of production or the country of destination shall not be purchased or stored.
- A current inventory of all chemicals purchased and used shall be maintained.

#### What does it mean?

Chemicals used on the site for application on crops being grown or harvested must be approved for the specific crops. The approvals come from both country of production (site’s locations) and country of destination (if exported). The approvals ensure proper chemicals, rates of application and residual levels are appropriate for fruits and vegetables being harvested. Banned chemicals and any of their derivatives are also a concern since they can sometimes be approved in one country but banned in another.

#### What do I have to do?

All chemicals for use on crops should be contained in a registry or list for ease of reference. It should be maintained and kept current and include information such as intended use, approval information, and vendor. If some chemicals are banned from certain countries but are in inventory due to approved use in other
countries, this must be clearly indicated and stored accordingly so that inadvertent use does not occur. See 7.6.1 for storage requirements.

A current inventory of all chemicals is also required to be kept current. An inventory form similar to those used for other chemicals is sufficient.

### 7.7.3 Auditing Guidance

This element will be audited as part of each site audit by observations, review of records and interview with employees. Evidence may include:

- Chemical listings;
- Chemical labels and storage conditions;
- Chemical inventory records; and
- Chemical approval documentation.

### 7.7.4 Agricultural Chemicals

#### What the SQF Code says

7.7.4.1 A spray or crop protection program indicating the applications used for a target pest or disease and the threshold levels that initiate application shall be prepared and implemented.

7.7.4.2 The person making decisions on chemical application shall:

i. Demonstrate knowledge of, and access to, information regarding chemical applications and the maximum residue limits allowable in destination markets;

ii. Use only chemicals approved for cultivation of the specified products, and approved for use in the intended market;

iii. Demonstrate competence and knowledge of chemical application and crop withholding periods;

7.7.4.3 Records of all chemical applications shall be maintained and include:

i. A current chemical register of all chemical use;

ii. The chemical used;

iii. The crop sprayed;

iv. The concentration;

v. The date, method and frequency of application; and

vi. Evidence that the timing between chemical application and harvest complies with the approved harvest interval for the chemical application.

7.7.4.4 Biological controls that are approved for the cultivation of the specified products shall be used, and in accordance with instructions or as per expert recommendations.

7.7.4.5 The site shall dispose of chemical waste and empty containers in accordance with regulatory requirements and ensure that:

i. Empty chemical containers are not re-used;

ii. Empty containers are labeled or rendered unusable, isolated and securely stored while awaiting collection;

iii. Unused and obsolete chemicals are stored under secure conditions while waiting authorized disposal by an approved vendor.

### 7.7.4 Implementation Guidance

#### What does it mean?

Agricultural chemical applications and the handling of chemicals need to be controlled in a manner that does not pose a risk to crops grown and harvested. The applicator must have knowledge of chemicals in use and their applications to specific crops.

#### What do I have to do?
### 7.8 Waste Disposal

#### 7.8.1 Dry and Liquid Waste Disposal

**What the SQF Code says**

7.8.1.1 Waste shall be regularly removed from the farm, field, packing facility and the surrounds so as not to pose a food safety risk to finished product or growing, harvesting and packing operations.

7.8.1.2 A written procedure shall be documented and implemented that describes the effective and efficient disposal of all solid waste, including inedible material, unusable packaging, including trademarked material, and liquid and unsanitary waste.

7.8.1.3 Inedible waste designated for animal feed shall be stored and handled so as to not cause a risk to the animal or further processing for human consumption.

**What does it mean?**

The procedures for storage and disposal of all types of waste (dry, liquid and inedible farm waste) must be documented and implemented. The procedure will include how waste is contained in appropriate, covered and labeled containers; the frequency of disposal; how it is disposed of; and who is responsible for it. Local regulations and community expectations concerning recycling, waste disposal and transport must also be.
considered.

**What do I have to do?**

Solid and inedible waste from the field or product handling areas is essential to the maintenance of a clean and safe farm environment. Procedures must adequately describe how the farm disposes of waste on a regular basis to avoid build up which can be a harborage for pests and also pose a risk to products.

If inedible waste is being designed for animal feed, either at the site or sold/transferred to other farms or animal feed production facilities, they will need to be stored and handled in a manner that does lead to further decay or degradation that could put the animals at risk.

Lunch room/area food waste shall be stored separately from packaging waste in covered pest-proofed containers and emptied on a basis that prevents the attraction of pests.

Empty chemical drums shall be collected and transported to secured storage (refer 7.7.4).

Exterior waste containers need coverage or lids to prevent attracting flies or vermin.

### 7.8.1 Auditing Guidance

This element will be audited as part of each site audit by observations, review of records and interview with employees. Evidence may include:

- Waste handling, storage and disposal procedures are documented;
- Waste handling, storage and disposal procedures include how waste is contained in appropriate, covered and labeled containers, frequency of disposal, how it is disposed of, and who is responsible for waste handling and disposal;
- Waste handling, storage and disposal procedures are fully implemented;
- Waste handling, storage and disposal procedures adequately dispose of waste without risk of product contamination;
- Waste is regularly removed from the field or product handling and storage areas;
- Waste collection and storage areas are maintained and cleaned;
- Inedible waste used in animal feed is properly stored and handled;
- Containers for waste are properly maintained and cleaned;
- Trolleys, vehicles and equipment used for waste are properly cleaned; and
- Records are maintained of waste disposal.