General Guidance for Developing, Documenting, Implementing, Maintaining, and Auditing an SQF System

Module 11: Good Manufacturing Practices for Processing of Food Products

SQF Code, Edition 7.2

JULY 2014

SQF Institute is a division of the Food Marketing Institute (FMI).

Preface

This document provides general guidance for SQF suppliers, consultants and auditors when implementing and auditing module 11 of the SQF Code, edition 7 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 supplier'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 and quality 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

The purpose of this series of SQF Guidance Documents is to assist suppliers with designing, developing, documenting, implementing and maintaining an SQF System using the SQF Code, edition 7, and to assist SQF registered auditors in auditing the SQF Code, edition 7.

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 7.

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. Suppliers, 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.

1.2   Layout of the SQF Code

The SQF Code, 7th 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 supplier 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 3-15 are the Good Agriculture, Aquaculture, Manufacturing and Distribution Practices (GAP/GMP/GDP) requirements applicable to various food industry sectors. Producers and suppliers must meet the requirements of the module or modules applicable to their food industry sector. Module 16 describes the requirements of the SQF multi-site programs managed by a central site.
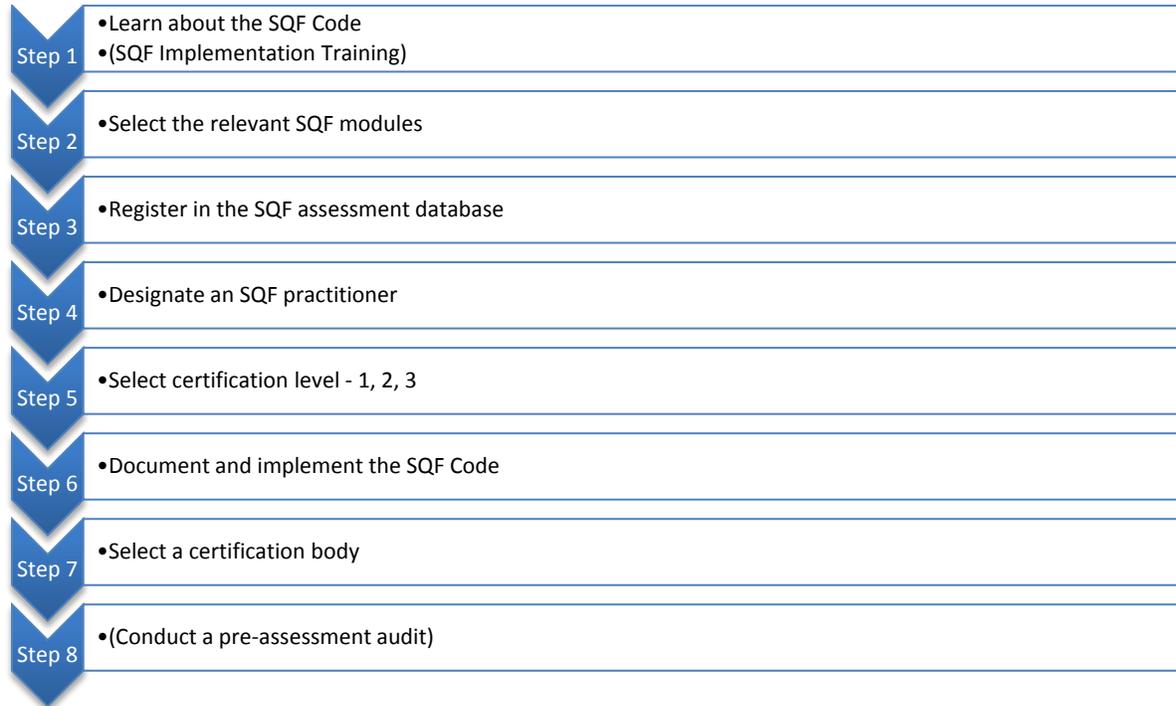
The three appendices in the SQF Code provide additional information needed to implement an SQF System:

o   Appendix 1: SQF Food Sector Categories

o   Appendix 2: Glossary of Terms

o   Appendix 3: SQF Quality Shield and Logo Rules of Use

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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, 7th edition.

Step	
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 supplier 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 supplier. 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 suppliers.

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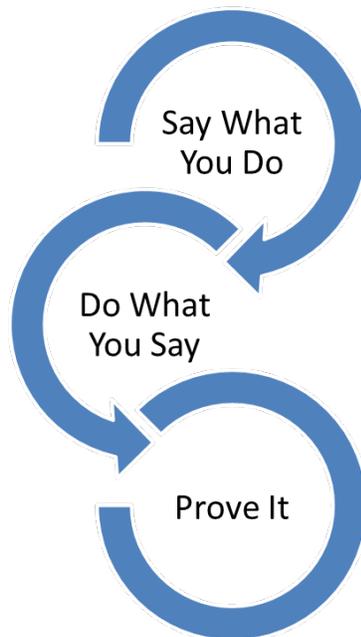
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In step seven, the supplier will choose a certification body. Certification bodies are licensed by SQFI to conduct SQF audits and issue the SQF certificate of registration. A current list of licensed certification bodies is available on the SQF website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

In the final step, the supplier 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 supplier's staff under direction of an SQF practitioner.

Section 3. The SQF Implementation Process

To achieve SQF certification, the supplier 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.

Say What
You Do

Do What
You Say

Prove It

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."

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Section 4. Introduction to This Guide

1. Purpose and Scope of This Guide

The purpose of this series of SQF Guidance Documents is to assist suppliers with designing, developing, documenting, implementing and maintaining an SQF System using the SQF Code, edition 7, and to assist SQF registered auditors in auditing the SQF Code, edition 7.

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 7.

This particular guide covers the requirements of *Module 11: Food Safety Fundamentals – Good Manufacturing Practices for Processing of Food Products.* It covers the Good Manufacturing Practices requirements for the processing of perishable animal products, and production of bio-chemicals.

Suppliers implementing this module must also meet the requirements of *Module 2: SQF System Elements.* Module 2 guidance is a separate document and suppliers are advised to understand the System Elements, e.g. the requirements of Module 2 before addressing Module 11.

Applicable food sector categories (FSCs) for Module 11 are:

FSC8: Processing of manufactured meats and poultry
FSC9: Seafood processing (include 9A, 9B, 9C)
FSC10: Dairy processing
FSC11: Honey processing
FSC12: Egg processing
FSC13: Bakery and snack food processing
FSC14: Fruit and vegetable processing
FSC15: Canning, pasteurization, UHT and aseptic operations (includes 15A, 15B)
FSC16: Ice drink and beverage processing
FSC17: Confectionery manufacturing
FSC18: Preserved foods manufacture
FSC19: Food ingredient manufacture
FSC20: Recipe meals manufacture
FSC21: Oils, fats and the manufacture of fat-based spreads
FSC22: Processing of cereals, grains, 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. Suppliers, 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 7

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 7 and have extensive knowledge of the HACCP guidelines of either of the above documents, the

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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 suppliers, 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. Modules 3 through 15 prescribe the Good Agricultural Practices, Good Aquaculture Practices, Good Manufacturing Practices, or Good Distribution Practices that may apply to particular industry sectors. The particular modules that apply to each industry sector are as follows:

SQF Food Sector Category (FSC)	Category (Supplier Scope of Certification)	Applicable SQF Code Modules
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 7: 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: GAP 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

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SQF Food Sector Category (FSC)	Category (Supplier Scope of Certification)	Applicable SQF Code Modules
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
23	Food Catering and Food Service Operations	Not available[1]
24	Food Retailing	Not available[1]
25	Fresh Produce Wholesaling and Distribution	Module 2: System elements Module 12: GMP for transport and distribution of food products
26	Food Wholesaling and Distribution	Module 2: System elements Module 12: GMP for transport and distribution of food products
27	Manufacture of Food Sector Packaging Materials	Module 2: System elements Module 13: GMP for production of food packaging
28	Provision of Crop Spray Services	Not available[1]
29	Provision of Field Harvest Services	Not available[1]
30	Provision of Sanitation and Hygiene Services	Not available[1]
31	Manufacture of Dietary Supplements	Module 2: System elements Module 11: GMP for processing of food products
32	Manufacture of Pet Food	Module 2: System elements Module 4: GMP for processing of pet food products
33	Manufacture of Agricultural Chemicals and Food Processing Aides	Module 2: System elements Module 11: GMP for processing of food products
34	Manufacture of Animal Feeds	Module 2: System elements Module 4: GMP for animal feed production
35	Broker or Agent	Module 2: System elements Module 14: GMP for brokers or agents

[1] These modules will be completed when the GFSI guidance becomes available.

This guidance document describes the requirements of Module 11, which applies to GMP requirements for most food processing facilities.

3.   The Structure of Module 11

An SQF System is a risk management system documented and implemented by a supplier of food (or related) products to control food safety risks (and food quality risks at Level 3) using the SQF Code, edition 7. It can be audited and certified by an SQF licensed certification body.

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The process of how to document and implement the SQF Code, edition 7 and achieve SQF certification can be found in the most current version of Part A of the SQF Code, edition 7.

Module 2 defines the core elements of the SQF Code that provide protection and assurance and are required to be implemented by all suppliers seeking SQF certification. It forms the foundation of the supplier'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 11 expands on element 2.4.2.2 of the system elements (module 2) and details the specific GMP requirements for food manufacturing.

Module 2	**Module 11**
	11.1 Site requirements and approval
	11.2 Construction and control of product handling and storage areas
2.4.2.2 The supplier shall ensure the food safety fundamentals described in the relevant subsequent modules of this Code (i.e. modules 3 – 15) are applied, or exempted according to a risk analysis outlining the justification for exclusion or evidence of the effectiveness of alternative control measures to ensure that food safety is not compromised.	11.3 Personnel hygiene and welfare
	11.4 Personnel processing practices
	11.5 Water, ice, and air supply
	11.6 Storage and transport
	11.7 Separation of functions
	11.8 On-site laboratories
	11.9 Waste disposal
	11.10 Exterior

It is recognized that not all elements of module 11 are applicable to all food production facilities. Some elements can be exempted if they are not relevant, and as long as the supplier has submitted a written request to the certification body prior to the audit, to exclude that element. For example, if the operation has no cold storage facilities then elements under 11.6.1 would not apply.

There are no mandatory elements in module 11.

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4.   The Format of the Module 11 Guidance

The following section explains the elements and sub-elements of module 11 and provides guidance on what a supplier needs to do to develop, document and implement module 11 requirements, and provides information on what the auditor may be looking for to confirm compliance.

The following format is used throughout:

Element Number and Name

Sub-element Number and Name.

This section will describe what the SQF Code, edition 7 requires for module 11. 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 supplier 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.

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Section 5. Guidance for Module 11: Food Safety Fundamentals – Good Manufacturing Practices for Processing of Food Products

This module covers the Good Manufacturing Practices requirements for the processing of perishable animal products, perishable plant products, processing of animal and plant perishable products, processing of ambient stable products, and production of bio-chemicals.

Suppliers implementing this module must also meet the requirements of Module 2: SQF System Elements.

Implementation Guidance

Food intended for human consumption must be produced, processed and handled in a safe and efficient manner. In order to accomplish this, food processing premises shall be designed to facilitate proper processing, handling and storage of product. Module 11 outlines the general requirements for the construction of premises and equipment in which food is processed, 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 11 are "shall do…," meaning the element MUST be accomplished, where applicable to the supplier's specific food processing operation, element 2.4.2.2 provides a method to seek exemption, provided the exemption is supported by a risk analysis. It is the supplier'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.

11.1   Site Requirements and Approval

11.1.1 Premises Location

What the SQF Code says

11.1.1.1 The location of the premises shall be such that adjacent and adjoining buildings, operations and land use do not interfere with safe and hygienic operations.

11.1.1.2 Measures shall be established to maintain a suitable external environment, and the effectiveness of the established measures shall be monitored and periodically reviewed.

11.1.1 Implementation Guidance

What does it mean?

The location and construction of food premises are to be such that neighboring buildings, farms, or factories do not introduce factors that could adversely affect the safety and quality of food (e.g., spray drift from neighboring farms, air-borne pollutants from adjacent factories, etc.).

What do I have to do?

The supplier must ensure the premises and its surroundings are kept free of contaminants to the products from the external environment. The supplier shall maintain structures, instructions, procedures, etc. that verifies the control of external environmental conditions and for the safety or quality of the process and/or product produced if applicable.

For farms, this may include protection of water courses, prevention of run-off from animal farms onto crops, or measures to avoid spray drift from adjacent properties. Note that identity-preserved farm products (e.g., non-GMO) may require particular protective measures.

For food factories and storage facilities, measures may include protection of exposed products or materials from air-borne contaminants from neighboring facilities. Measures may include physical barriers, sealed factories, positive air pressure, etc.

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11.1.1 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 facilities and land use and interviews with operational staff at each facility audit. Evidence may include:

- Investigation of external environment and surrounding land-use to determine risk;

- Understanding of the supplier to the risk from the external environment;

- Physical measures in place to manage exterior environmental risks;

- Procedural measures in place to manage exterior environmental risks;

- The measures are effective in managing the exterior environmental risk.

11.1.2 Construction and Operational Approval

11.1.2.1 The construction and ongoing operation of the premises on the site shall be approved by the relevant authority.

11.1.2 Implementation Guidance

What does it mean?

In most jurisdictions, the building and operation of the food premises is governed by local, state, and/or federal regulations. The supplier must be familiar with the applicable regulations and ensure that relevant permits, approvals and notifications are in place.

What do I have to do?

Suppliers must check with local authorities to establish the requirements. However plans and specifications submitted to a local authority for approval may include:

- Locality map showing the site in relation to the area;

- Site plan showing all salient features of the site and a description of adjoining sites including the location of the premises north compass points, roads, storm water, waste water;

- Floor plans showing the layout of the premises, processing areas, permanent fixtures, and layout of equipment;

- Details of major items of equipment used in the processing area;

- A diagram of product/process flow;

- Specifications generally include details of construction materials, surface finishes (walls, floors, ceilings, etc.), product contact surfaces, essential services and the number of personnel;

- Refrigeration equipment and operating temperatures of cold storage rooms, storage capacity and means of loading into and out of cold stores need also be included.

All applicable certificates or inspection documents from local, state, federal or international governing agency shall be current and kept on file.

11.1.2 Auditing Guidance

The auditor shall be familiar with the regulatory requirements applicable to the site and check the certificates and inspection documents from the government agency.

To determine compliance, the auditor must walk around the site, inside and out to determine if there are any outside factors that would impact the certified product. This would include potential threats from neighboring facilities or other environmental conditions.

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11.2   Construction and Control of Product Handling and Storage Areas

11.2.1 Materials and Surfaces

11.2.1.1 Product contact surfaces and those surfaces not in direct contact with food in food handling areas, raw material storage, packaging material storage, and cold storage areas shall be constructed of materials that will not contribute a food safety risk.

11.2.1   Implementation Guidance

What does it mean?

The construction of the material and surfaces used at the site shall be constructed in a way that would be easily cleanable and prevent contamination to the finished product or the process.

What do I have to do?

The main feature of an acceptable product contact surface is that it is 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 preferably light colored.

Documentation of product contact surfaces being in good condition can be accomplished by making this item a part of a monthly facilities checklist or other type of check list.

11.2.1   Auditing Guidance

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

- Knowledge of local, state, and federal regulations on the construction and operation of food premises;

- The site has been approved by relevant authorities for construction;

- The site is approved by relevant authorities for production/processing/storage of the applicable products;

- Approval has been sought and given for changes to facilities or equipment.

11.2.2 Floors, Drains and Water Traps

11.2.2.1 Floors shall be constructed of smooth, dense impact resistant material that can be effectively graded, drained, impervious to liquid and easily cleaned.

11.2.2.2 Floors shall be sloped to floor drains at gradients suitable to allow the effective removal of all overflow or wastewater under normal working conditions.

11.2.2.3 Drains shall be constructed and located so they can be easily cleaned and not present a hazard.

11.2.2.4 Waste trap system shall be located away from any food handling area or entrance to the premises.

11.2.2   Implementation Guidance

What does it mean?

Floors, drains and waste traps shall be designed and constructed in such a way as to minimize the risk to product or process safety.

What do I have to do?

Drains shall be easily accessible for cleaning. Grates need to be removable for access and cleaning. Practices must be demonstrated by the supplier to assess the risks to products and to control those identified food safety risks.

Documentation of floor materials shall be included in the site plan or description of the plant/processing area. Floors shall be provided with proper drainage. Drains need to be positioned and constructed to allow the

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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.

11.2.2 Auditing Guidance

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

- Food 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;

- Floors are smooth and easy to clean;

- Floors are correctly graded to allow for water run-off;

- Floors are made of appropriate, smooth, dense, impact-resistant material;

- There are no areas of water pooling or build-up;

- Procedures are in place to deal with floor areas that are not correctly designed or constructed;

- Drain locations do not pose a safety risk;

- Drain construction does not pose a safety risk;

- Waste traps are located away from food handling areas or entrances to the site.

11.2.3 Walls, Partitions, Doors, and Ceilings

11.2.3.1 Walls, partitions, ceilings and doors shall be of durable construction. Internal surfaces shall be smooth and impervious with a light colored finish, and shall be kept clean (refer 11.2.13.1).

11.2.3.2 Wall-to-wall and wall-to-floor junctions shall be designed to be easily cleaned and sealed to prevent the accumulation of food debris.

11.2.3.3 Ducting, conduit and pipes that convey services such as steam or water shall be designed and constructed so as to allow ease of cleaning.

11.2.3.4 Doors, hatches and windows and their frames shall be of a material and construction, which meets the same functional requirements for internal walls and partitions.

   i. Doors and hatches shall be of solid construction; and

   ii. Windows shall be made of shatterproof glass or similar material.

11.2.3.5 Food shall be processed and handled in areas that are fitted with a ceiling or other acceptable structure that is constructed and maintained to prevent the contamination of products.

11.2.3.6 Drop ceilings shall be additionally constructed to enable monitoring for pest activity, facilitate cleaning and provide access to utilities.

11.2.3 Implementation Guidance

What does it mean?

This clause is concerned with the design, construction and condition of the buildings that house food processing operations – the floors, partitions, doors and ceilings. They must be designed and constructed in such a way as to minimize the risk to product safety and in some instances to offer protection to the product. The extent to which these elements are relevant will depend on the type of processes housed and whether the product is enclosed or exposed.

What do I have to do?

Walls, partitions, doors and ceilings need to be described in the site plan. Ceiling design and construction must not pose a threat of product contamination. Wall-to-ceiling, wall-to-wall and wall-to-floor junctions must be sealed and easy to clean.

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Walls, partitions, doors and ceilings must be kept clean.

Today's food premises design generally excludes windows in food processing areas. However, older plants may have glass windows. The supplier 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 processing areas are generally not recognized as posing a hazard to packaged food. Windows close to processing areas and skylights that are located immediately above product processing 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 processing rooms used to transport food for processing 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.

It is recommended that if light colored finishes do not exist, an inspection shall be included in the internal audit and/or cleaning sanitation schedule. 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.

Service ducting, conduit and pipes ideally need to be recessed into walls or ceilings, suspended from ceilings, housed inside drop ceilings with vertical drops to their point of use, or mounted a sufficient distance from walls or ceilings. In other words, they should be constructed to avoid build-up of debris, prevent rodent runs and allow ease of cleaning.

Drop ceilings offer some advantages and disadvantages. They can provide a clean, smooth, impervious ceiling surface in the processing area and an area for service runs. However, they can also allow for an "out of sight, out of mind" mentality and can accumulate dust and provide harborage for pests. Drop ceilings, if used, must be checked and cleaned regularly (refer 11.2.7).

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.

11.2.3 Auditing Guidance

Compliance to this requirement shall be reviewed at each facility 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;

- Where a drop ceiling is used, the area is kept clean and tidy;

- Service lines are designed and constructed for ease of cleaning;

- The condition of walls, partitions, doors, ceilings, does not pose a food safety risk.

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11.2.4 Stairs, Catwalks, and Platforms

11.2.4.1 Stairs, catwalks and platforms in food processing and handling areas shall be designed and constructed so as not to present a product contamination risk, and shall be kept clean (refer to element 11.2.13.1).

11.2.4 Implementation Guidance

What does it mean?

Stairs, platforms and catwalks shall be designed and constructed so as not to pose a contamination risk.

What do I have to do?

All stairs, catwalks and platforms that are positioned over any portion of the processing area where product is exposed, shall be constructed so as to not present a product contamination risk. The materials used need to be rust proof and easily cleaned. Solid side (kick) plates shall be installed and the stairs shall have slip resistant tread.

Stairs, platforms and catwalks shall be kept clean and not used to store tools and equipment.

11.2.4 Auditing Guidance

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

- Stair design and construction does not pose a food safety hazard to the product;

- Catwalk design and construction does not pose a food safety hazard to the product;

- Platform design and construction does not pose a food safety hazard to the product;

- Stairs, catwalks, or platforms in close proximity to open product have kick boards installed;

- Stairs, catwalks, or platforms over open product are not constructed of open mesh;

- Stairs, catwalks, or platforms are kept clean and tidy, with no accumulated trash, tools or equipment.

11.2.5 Lighting and Light Fittings

11.2.5.1 Lighting in food processing and handling areas and at inspection stations shall be of appropriate intensity to enable the staff to carry out their tasks efficiently and effectively.

11.2.5.2 Light fittings in processing areas, inspection stations, ingredient and packaging storage areas, and all areas where the product is exposed shall be shatterproof, manufactured with a shatterproof covering or fitted with protective covers and recessed into or fitted flush with the ceiling. Where fittings cannot be recessed, structures must be protected from accidental breakage, manufactured from cleanable materials and addressed in the cleaning and sanitation program.

11.2.5.3 Light fittings in warehouses and other areas where the product is protected shall be designed such as to prevent breakage and product contamination.

11.2.5 Implementation Guidance

What does it mean?

Adequate light intensity is required for processing operations, cleaning and inspection tasks. However, the design and construction of lighting can pose a risk to product due to breakage or dust accumulation.

What do I have to do?

Lighting shall provide minimum lux (foot candle) intensity as prescribed by applicable legislation or in their absence, meet good manufacturing best practices appropriate to the commodity being processed. In general, processing and food handling areas are illuminated to a minimum intensity of 200 lux (18.58 ft.c.). Inspection areas require higher illumination; 500 lux (46.45 ft.c.) is generally recommended.

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Light fittings in food processing and handling areas are required to be fitted with protective covers or have shatterproof lights installed. Documentation needs to be kept on file and is to include specifications from the manufacturer with a description of the product. An acceptable practice is to recess the light into the ceiling, where possible or have it fitted flush to the ceiling. Where light fittings are not able to be recessed, they must be protected from accidental damage. In circumstances where light fittings are suspended from cables, the top of the fitting needs to be sloped at an angle that permits easy cleaning. Exposed light fittings must be included in a cleaning and sanitation schedule (refer 11.2.13).

11.2.5 Auditing Guidance

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

- Lighting intensity is sufficient in food processing areas;

- Lighting intensity is sufficient at inspection stations;

- Lighting intensity is sufficient in warehousing and storage areas;

- Light fixtures are shatterproof or protected, and pose no threat to product safety;

- Light fittings are intact – there is no sign of breakage;

- Light fittings are clean and part of a regular cleaning regime.

11.2.6 Inspection Area

11.2.6.1 A suitable area within the processing area shall be provided for the inspection of the product if required.

11.2.6.2 The inspection area shall be provided with facilities that are suitable for examination of the style of product being processed. The inspection area shall have:

   i. Easy access to hand washing facilities; and

   ii. Sufficient lighting intensity to enable as thorough inspection of the product as required.

11.2.6 Implementation Guidance

What does it mean?

Where on-line inspection is required, a suitably equipped inspection station is required close to the process line, but sufficient distance to prevent contamination of the product.

What do I have to do?

Inspection areas shall be provided when online inspection is required for the commodity being processed to preclude potential contamination of the processing line and other products.

Lighting intensity at a minimum of 500 lux (46.45 ft.c.), is generally recommended or use what is prescribed by applicable legislation for product inspection areas.

Equipment used at the inspection station shall not pose a threat to the product. Inspected product shall not be returned to the processing line, or considered as rework. It shall be disposed of in a manner that prevents contamination of products in production and ingredients.

Hand-wash facilities shall be provided at the inspection station.

11.2.6 Auditing Guidance

Compliance to this requirement shall be reviewed at each facility audit primarily though observation and interviews with inspection staff.   Evidence may include:

- Online inspection is required;

- There is a suitable designated inspection area;

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- The inspection area is equipped with appropriate lighting;

- The inspection area is equipped with hand-wash facilities;

- The equipment used in the inspection station does not pose a product safety threat;

- Inspected material is suitably disposed of;

- Inspected material is not returned to production;

- The inspection station is kept clean.

11.2.7 Dust, Fly, and Vermin Proofing

11.2.7.1 All external windows, ventilation openings, doors and other openings shall be effectively sealed when closed and proofed against dust, vermin and flies.

11.2.7.2 Personnel access doors shall be provided. They shall be effectively fly-proofed and fitted with a self-closing device.

11.2.7.3 External doors, including overhead dock doors in food handling areas, used for product, pedestrian or truck access shall be fly-proofed by at least one or a combination of the following methods:

  i.   A self-closing device;

  ii. An effective air curtain;

  iii. A fly-proof screen;

  iv. A fly-proof annex.

  v.   Adequate sealing around trucks in docking areas

11.2.7.4 Electric insect control devices, pheromone or other traps and baits shall be located so as not to present a contamination risk to the product, packaging, containers or processing equipment. Poison bait shall not be used inside ingredient or food storage areas or processing areas.

11.2.7 Implementation Guidance

What does it mean?

This element is closely related to *11.2.11 Management of Pest and Vermin.* This element provides the requirements for physical barriers to pest and dust ingress into food production areas – via external doors, windows or other means. It also covers the location and use of control measures to trap pests within the premises.

What do I have to do?

Doors opening directly into processing areas must be effectively sealed to prevent dust and/or entry of pests.

Doors used for personnel access shall be self-closing unless used exclusively as a fire exit.

All pest devices used must be approved and used per applicable legislation so as not to present a contamination risk to the product, packaging containers or equipment.

In 11.2.7.4, "bait" refers to poison baits or glue boards. Indicator baits that conform to local regulations may be used inside processing areas.

11.2.7 Auditing Guidance

Compliance to this requirement shall be reviewed at each facility audit primarily through observation, and records of pest activity (refer 11.2.11). Evidence may include:

- Windows are closed or protected and sealed against dust or pests;

- Doors are closed or adequately protected against dust or pests;

- Personnel doors have self-closing devices or other method to ensure effective protection;

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- External doors are adequately fly-proofed;

- Sealing around trucks in docking areas is adequate;

- Insect devices are located so as not to pose a threat to product, tools or equipment;

- Poison baits or glue boards are not used in processing areas.

11.2.8 Ventilation

11.2.8.1 Adequate ventilation shall be provided in enclosed processing and food handling areas.

11.2.8.2 Extractor fans and canopies shall be provided in areas where cooking operations are carried out or a large amount of steam is generated and shall have the following features:

    i. Capture velocities shall be sufficient to prevent condensation build up and to evacuate all heat, fumes and other aerosols to the exterior via an exhaust hood positioned over cooker;

    ii. Fans and exhaust vents shall be fly proofed and located so as not to pose a contamination risk; and

    iii. Where appropriate, positive air-pressure system shall be installed to prevent airborne contamination.

11.2.8 Implementation Guidance

What does it mean?

Poor ventilation can result in condensate build-up in cooking areas or other areas where heat or steam are applied, and can result in contamination due to condensate dripping onto product or food-contact surfaces. Also, in high-risk processing areas, positive air pressure must be maintained to prevent airborne contaminants being drawn into the area.

What do I have to do?

Cooker/washer steam shall be adequately ventilated to the outside. Ventilation in enclosed food processing areas must meet applicable design and construction legislation and prevent condensation over food and surfaces of food contact equipment. Vents and exhausts must be screened to prevent ingress of flying insects.

Positive air pressure must be maintained in high risk processing areas to prevent airborne contaminants being drawn into the area.

11.2.8 Auditing Guidance

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

- Food processing areas have adequate ventilation;

- Cooking areas are adequately exhausted;

- There is no condensation present over product or food contact surfaces in cooker areas;

- Exhaust vents are adequately fly-proofed;

- Positive air pressure exists in high risk processing areas.

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11.2.9 Premises and Equipment Maintenance

11.2.9.1 The methods and responsibility for the maintenance and repair of plant, equipment and buildings shall be documented, planned and carried out in a manner that minimizes the risk of product, packaging or equipment contamination.

11.2.9.2 Maintenance staff and contractors shall observe the following practices when undertaking maintenance and repairs in any food processing, handling or storage area:

    i.   Routine maintenance of plant and equipment shall be performed according to a maintenance-control schedule and recorded;

    ii.   Failures of plant and equipment shall be documented, reviewed and their repair incorporated into the maintenance control schedule;

    iii.   Compliance with the personnel and process hygiene requirements (refer 11.3.1, 11.3.2, 11.3.3, 11.3.4) by maintenance staff and contractors;

    iv.   Ensure facility supervisors are notified when maintenance or repairs are to be undertaken in any food handling area;

    v.   Inform the maintenance supervisor and the facility supervisor if any repairs or maintenance pose a potential threat to product safety (i.e. pieces of electrical wire, damaged light fittings, and loose overhead fittings). When possible, maintenance is to be conducted outside processing times;

    vi.   Remove all tools and debris from any maintenance activity once it has been completed and inform the area supervisor and maintenance supervisor so appropriate hygiene and sanitation can be completed prior to the commencement of facility operations.

11.2.9.3 The maintenance schedule shall be prepared to cover building, equipment and other areas of the premises critical to the maintenance of product safety and quality.

11.2.9.4 Equipment located over product or product conveyors shall be lubricated with food grade lubricants and their use controlled so as to minimize the contamination of the product.

11.2.9.5 Paint used in a food handling or contact zone shall be suitable for use and in good condition and shall not be used on any product contact surface.

11.2.9 Implementation Guidance

What does it mean?

Maintenance activities – both planned and breakdown – can have a major impact on food safety and quality, if not effectively implemented. Maintenance procedures must be carefully planned, designed, documented and implemented to avoid contamination of product, materials or equipment and to ensure that maintenance staff, including contractors, have an understanding of the safety and quality implications of maintenance activities.

What do I have to do?

The protocol must outline that maintenance staff and service contractors engaged to complete work in food production areas must observe all personnel and process hygiene requirements. Service contractors must be provided with protective clothing, as required. The procedures must describe the practices under which repairs are to be completed in any product handling or storage areas including the following requirements that maintenance staff must observe:

- Maintenance of equipment or building structures must be completed in a manner that does not pose a risk to the product, materials (including packaging materials) or equipment;

- The maintenance supervisors must ensure they are notified by all contractors engaged to complete work in any product handling areas. They must ensure that all service contractors are aware of the supplier's personnel hygiene requirements and that they are provided with any necessary protective clothing, or that protective clothing meets the same requirements as those of the supplier staff;

- Maintenance staff and service contractors must ensure that they account for and remove all tools and debris from any maintenance activity once it has been completed in any product handling area and inform the area supervisor so appropriate sanitation can be completed;

- Service contractors are to inform the maintenance supervisor if any required work poses a potential threat to product, packaging or equipment safety (i.e. pieces of electrical wire, damaged light

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fittings, loose fittings overhead, etc.). When necessary, maintenance must be conducted outside processing times;

- Service contractors shall notify the maintenance supervisor in the event of any breakage or damage that could expose products, packaging or equipment to contamination;

- Service contractors must notify the maintenance supervisor when work has been completed;

- Plant supervisors and operators must ensure appropriate and effective clean up measures are taken once all maintenance or service contractor activity is completed and prior to the commencement of plant operations.

It is essential that supplier staff, maintenance personnel and service contractors adhere to the correct procedures when completing maintenance on all equipment. As part of maintenance procedures, repaired equipment must be inspected for missing parts (nuts, bolts, springs, etc.) prior to use.

Those responsible for reporting and completing repairs and cleaning the equipment after repairs must be specified in maintenance procedures.

The use of temporary fasteners such as string, wire or tape is not permitted (refer 11.7.5.1).

Where machinery that exists over product lines or food contact surfaces requires lubrication, only food grade lubricant is to be used. Even then, food-grade lubricant is still a quality hazard and must be used sparingly to avoid contact with product.

Where paint is used on equipment, roofs, walls or floors, it must be in good condition and suitable for use. Paint must not be used on food contact surfaces.

11.2.9 Auditing Guidance

Maintenance schedule and procedures shall be reviewed at the initial desk audit. Subsequently, compliance to this requirement and the supplier maintenance schedule and procedures shall be reviewed at each facility audit through observation, review of records and interview with operational, maintenance staff and contractors. Evidence may include:

- There is a planned maintenance schedule;

- The maintenance schedule includes critical equipment and areas of the site;

- There are maintenance procedures that include food safety and quality issues;

- The planned maintenance schedule is being followed;

- Maintenance procedures afford no risk to product safety and integrity;

- Maintenance procedures are known by maintenance personnel and contractors;

- Maintenance procedures are being followed;

- Maintenance procedures include food safety and hygiene practices;

- Maintenance staff follow food safety and hygiene practices;

- Maintenance contractors follow food safety and hygiene practices;

- Preventative maintenance activities are documented;

- Plant and equipment failures are documented;

- The maintenance schedule is adjusted for plant and equipment failures;

- Operating staff and supervisors are notified when repairs are made/completed;

- All tools, parts and debris are removed from repair areas;

- Sanitation activity occurs after maintenance repair in food processing 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

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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;

- Maintenance records are available and complete.

11.2.10 Calibration

11.2.10.1 The methods and responsibility for the calibration and re-calibration of measuring, test and inspection equipment used for monitoring activities outlined in pre-requisite program, food safety plans and food quality plans and other process controls, or to demonstrate compliance with customer specifications shall be documented and implemented.

11.2.10.2 Procedures shall be documented and implemented to address the disposition of potentially affected products should measuring, test and inspection equipment be found to be out of calibration state.

11.2.10.3 Calibrated measuring, test and inspected equipment shall be protected from damage and unauthorized adjustment.

11.2.10.4 Equipment shall be calibrated against national or international reference standards and methods or to accuracy appropriate to its use. In cases where standards are not available, the supplier shall provide evidence to support the calibration reference method applied.

11.2.10.5 Calibration shall be performed according to regulatory requirements and/or to the equipment manufacturers recommended schedule.

11.2.10.6 Calibration records shall be maintained.

11.2.10 Implementation Guidance

What does it mean?

The accuracy of measuring, and inspection equipment that is used to test food safety and quality parameters (e.g., temperature, pH, product weight) is essential in ensuring that product meets regulatory, legal and customer requirements. The equipment itself must itself 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., 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.

- pH meters are calibrated against reference buffer solutions according to the manufacturer instructions.

- Thermometers can be calibrated against boiling water or ice-water if these approximate the temperatures the thermometer is required to measure when in use.

To ensure that measuring equipment gives reliable results, the supplier must:

- Identify all the equipment that requires calibration (e.g., thermometers, scales, pH meters, 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 supplier need to comply with industry or national standards? If the calibration is designed to check measurements implemented to improve a process the supplier 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

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manufacturer's instructions.

- 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 labeling equipment to indicate when it was last calibrated and when recalibration is due.

11.2.10 Auditing Guidance

Calibration procedures shall be reviewed at the initial desk audit. Subsequently, compliance to this requirement and the supplier calibration procedures shall be reviewed at each facility 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 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;

- Calibration records are available and complete.

11.2.11   Management of Pests and Vermin

11.2.11.1 The methods and responsibility for integrated pest management shall be documented and effectively implemented. The premises, its surrounding areas, storage facilities, machinery and equipment shall be kept free of waste or accumulated debris so as not to attract pests and vermin.

11.2.11.2 The pest and vermin management program shall:

i.   Describe the methods and responsibility for the development, implementation and maintenance of the pest and vermin management program;

ii.   Identify the target pests for each pesticide application;

iii.   Outline the methods used to prevent pest problems;

iv.   Outline the pest elimination methods;

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 staff aware of the bait control program and the measures to take when they come in contact with a bait station;

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ix.   Outline the requirements for staff awareness and training in the use of pest and vermin control chemicals and baits; and

x.   Measure the effectiveness of the program to verify the elimination of applicable pests.

11.2.11.3 Inspections for pest activity shall be undertaken on a regular basis by trained personnel and the appropriate action taken if pests are present.

11.2.11.4 Records of all pest control must be maintained.

11.2.11.5 Pesticides and other toxic chemicals shall be clearly labeled and stored as described in element 11.6.4 and handled and applied by properly trained personnel. They shall be used by or under the direct supervision of trained personnel with a thorough understanding of the hazards involved, including the potential for the contamination of food and food contact surfaces.

11.2.11.6 Pest control contractors shall be:

i.   Licensed and approved by the local relevant authority;

ii.   Use only trained and qualified operators who comply with regulatory requirements;

iii.   Use only approved chemicals;

iv.   Provide a pest control management plan (see contract services 2.3.3.) which will include a site map indicating the location of bait stations and traps;

v.   Report to a responsible authorized person on entering the premises and after the completion of inspections or treatments and

vi.   Provide a written report of their findings and the inspections and treatments applied.

11.2.11.7 The supplier shall dispose of unused pest control chemicals and empty containers in accordance with regulatory requirements and ensure that:

i.   Empty chemical containers are not reused;

ii.   Empty containers are labelled, isolated and securely stored while awaiting collection; and

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

11.2.11 Implementation Guidance

What does it mean?

Integrated pest management (IPM) 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, air curtains, etc.), mechanical controls (e.g., baits, traps, etc.), waste minimization, appropriate use of pesticides, etc.

This element covers primarily traditional pest management activities, including pesticide application. However it is related to *11.2.7 Dust, fly, and vermin proofing*, which is also part of an overall IPM approach.

What do I have to do?

A fully maintained pest and vermin control program is essential to the safe function of any general processing operation. The pest and vermin control 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;

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- 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 product type, processing type, location of site, surrounding environment, types of facilities, external storage of equipment (such as equipment graveyards), 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 vermin.

Pest control devices should be located at all product storage, material and packaging storage facilities in addition to the main processing facilities. Inspections for pest activity must take place on a regular basis, 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 include service reports, pesticide usage logs, pest sighting logs, corrective action reports and trending of activity by the service provider.

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

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 (refer 11.6.4.1), and used chemical containers disposed of correctly.

11.2.11 Auditing Guidance

Pest management procedures shall be reviewed at the initial desk audit. Subsequently, compliance to this requirement and the supplier pest management procedures shall be reviewed at each facility 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;

- There is a documented pest management program that integrates a number of preventative as well as control measures;

- The documented pest management program targets all known pests;

- The documented pest management program includes responsibilities for pest management;

- The documented pest management program targets includes methods to eliminate or minimize all known pests;

- The pest management program includes frequencies for checking pest status;

- The pest management program includes the exterior or surrounding areas of facility;

- The methods, frequencies and responsibilities identified in the pest management program are effectively implemented;

- External areas are kept clear and free from waste and debris;

- There are no observed pest harborage areas observed within the facility or in the immediate surrounds;

- There is a site map of pest control devices;

- Pest control devices meet regulatory requirements;

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- There is a list of approved pest control chemicals;

- Only approved pest control chemicals are used;

- SDS sheets are available for all pest control chemicals;

- Pesticides are correctly labeled;

- Empty or redundant pest control chemical containers are correctly disposed of;

- Pest control contractors are trained, licensed and approved;

- Pest control inspections are thorough and conducted at the correct frequency;

- Supplier's staff are aware of pest control devices;

- Appropriate corrective action is taken in response to pest control inspections;

- Pest control records are current and maintained.

11.2.12 Equipment, Utensils, and Protective Clothing

11.2.12.1 Equipment and utensils shall be designed, constructed, installed, operated and maintained so as not to pose a contamination threat to products.

11.2.12.2 Benches, tables, conveyors, graders, packers and other mechanical equipment shall be hygienically designed and for appropriate cleaning. Equipment surfaces shall be smooth, impervious and free from cracks or crevices.

11.2.12.3 Product containers, tubs, bins for edible and inedible material shall be constructed of materials that are non-toxic, smooth, impervious and readily cleaned. Bins used for inedible material shall be clearly identified.

11.2.12.4 Waste and overflow water from tubs, tanks and other equipment shall be discharged direct to the floor drainage system.

11.2.12.5 Protective clothing shall be manufactured from material that is not liable to contaminate food and easily cleaned.

11.2.12.6 Racks shall be provided for the temporary storage of protective clothing when staff leaves the processing area and shall be provided in close proximity or adjacent to the personnel access doorways and hand washing facilities.

11.2.12 Implementation Guidance

What does it mean?

This is a general provision covering the condition and use of equipment, including utensils, benches, tables, bins, and protective clothing, so that they do not pose a threat to product safety or quality.

What do I have to do?

Food processing equipment shall be designed, constructed and maintained in accordance with manufacturer and/or industry standards. Metal frames, supports and brackets supporting sinks, wash basins, benches, tables and shelves are generally constructed of solid materials such as hot dipped galvanized iron, stainless steel or aluminium and securely fixed to the walls or on metal frames. Equipment shall be smooth-finished, free from angles, ledges and crevices and easy to clean. The open ends of tubular legs or rails must be sealed to prevent the accumulation of process waste and residues.

Where equipment is dismantled for cleaning, it is to be designed free of loose bolts or nuts or other objects that could inadvertently find their way into a food product or provide points for accumulation of food waste.

Containers (e.g., tubs, bins, etc.) used for inedible food or materials must be clearly identified (i.e., color-coded or labelled). Containers previously used for pesticides, insecticides or other deleterious materials must not be re-used for product handling (refer 11.2.11.7).

Where protective clothing (e.g., gloves, face shields, etc.) is provided and used, it must be made of a material that is food-safe and is easily cleaned. There must be a cleaning regime in place for protective clothing.

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11.2.12 Auditing Guidance

This element shall be reviewed at each facility audit through observation and interview with operational staff. Evidence may include:
 	
  °   Food processing equipment is properly designed;
 	
  °   Food processing equipment is properly maintained;
 	
  °   Food contact utensils are properly designed;
 	
  °   Food contact utensils are properly maintained;
 	
  °   Containers for inedible materials are correctly labeled;
 	
  °   Waste water and overflow from tanks and tubs is properly drained;
 	
  °   Protective clothing is provided that is fit for purpose;
 	
  °   Protective clothing is provided that is made of material that will not contaminate food and is easily cleaned;
 	
  °   There is a cleaning process in place for protective clothing;
 	
  °   Properly designed racks are provided for protective clothing;
 	
  °   Protective clothing is stored in an area accessible to staff.

11.2.13 Cleaning and Sanitation

11.2.13.1 The methods and responsibility for the cleaning of the food handling and processing equipment and environment, storage areas, staff amenities and toilet 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;

   v.   Methods used to confirm the correct concentrations of detergents and sanitizers, and

   vi.   The responsibility and methods used to verify the effectiveness of the cleaning and sanitation program.

11.2.13.2 Provision shall be made for the effective cleaning of processing equipment, utensils and protective clothing.

11.2.13.3 Suitably equipped areas shall be designated for cleaning product containers, knives, cutting boards and other utensils and for cleaning of protective clothing used by staff. These cleaning operations shall be controlled so as not to interfere with manufacturing operations, equipment or product. Racks and containers for storing cleaned utensils and protective clothing shall be provided as required.

11.2.13.4 Pre-operational hygiene and sanitation inspections shall be conducted by qualified personnel to ensure food processing areas, product contact surfaces, equipment, staff amenities and sanitary facilities and other essential areas are clean before the commencement of production.

11.2.13.5 The responsibility and methods used to verify the effectiveness of the cleaning procedures shall be documented and implemented. A verification schedule shall be prepared.

11.2.13.6 Detergents and sanitizers shall be suitable for use in a food manufacturing environment, and purchased in accordance with applicable legislation. The organization shall ensure:

   i.   An inventory of all chemicals purchased and used shall be maintained;

   ii.   Detergents and sanitizers are stored as outlined in element 11.6.4;

   iii.   Safety Data Sheets (SDS) are provided for all detergents and sanitizers purchased; and

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iv. Only trained staff handles sanitizers and detergents.

11.2.13.7 The supplier shall dispose of unused detergents and sanitizers and empty containers in accordance with regulatory requirements and ensure that:

i. Empty detergent and sanitizer containers are appropriately cleaned, treated and labelled before used;

ii. Empty detergent and sanitizer containers are labelled, isolated and securely stored while awaiting collection; and

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

11.2.13.8 A record of pre-operational hygiene inspections, cleaning and sanitation activities, and verification activities shall be maintained.

11.2.13 Implementation Guidance

What does it mean?

Cleaning and sanitation methods will vary depending on the nature of the operation, and the microbiological and allergen risk. Some food facilities (e.g. flour milling operations) require a dry clean, whereas dairy and beverage facilities will utilize clean-in-place (CIP) and high risk facilities will have very 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 production and risk, all food facilities 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 equipment, facilities, utensils, amenities and external areas. The cleaning program shall identify the what, how, when and who for every item of equipment and part of the facility. Responsibilities shall be identified, including responsibility for the visual or test inspection, and the verification of cleaning methods.

For small items of equipment such as tools, knives, tubs, cutting boards, 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 equipment, utensils, and protective clothing. These areas shall be identified and constructed so they do not present a hazard to other food processing operations. Protective clothing racks (refer 11.2.12.6) provide temporary storage for gloves, aprons and other items when staff needs to leave the processing 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 premises and all associated equipment including pre-operative cleaning and cleaning between breaks;

- A full description of the cleaning and sanitation procedures for each piece of equipment or area of the 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;

  ° Rinse to remove residual sanitizer, if indicated on product label;

  ° Dry, as indicated, in a manner that will prevent recontamination.

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- Ensure operators 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. Describe the chemicals used, their dilution rate and method of application;

- Chemical cleaners and sanitizers must be used and stored in an approved manner (refer 11.6.4);

- Evaluation of cleaning. Monitor the effectiveness of cleaning and keep records of all inspections implemented to verify the effectiveness of the cleaning program;

- Maintain an inventory of chemicals purchased and used;

- Outline requirements for the disposal of unused compounds and empty containers in accordance with regulatory requirements.

To verify the effectiveness of sanitation, a visual pre-operational inspection of equipment and facility is to be conducted prior to the start of operations, after a sanitation activity or the beginning of a shift. For high risk operations and allergen cleaning verification (refer 2.8.2.1), a more thorough swabbing program shall be implemented to verify the integrity of the cleaning regime.

To verify the facility is operating in a sanitary manner throughout the shift, sanitation shall be monitored and documented regularly by the shift supervisor or a designated employee.

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

11.2.13 Auditing Guidance

Cleaning and sanitation procedures and schedule shall be reviewed at the initial desk audit. Subsequent compliance to this requirement and the supplier cleaning and sanitation procedures shall be reviewed at each facility audit through observation, review of records, and interviews with operational staff and cleaning contractors if applicable. Evidence may include:

- The facility has an effective and appropriate cleaning program in place;

- All critical equipment and areas of the facility 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 processing 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 processing operations;

- Racks and areas for storing cleaned utensils are provided and appropriate;

- Pre-operational inspections are completed to ensure cleanliness;

- All critical areas of the facility are include in pre-operational inspections;

- Personnel conducting pre-operational inspections are trained and qualified;

- A sanitation verification schedule is available;

- Methods are established for verification of sanitation;

- Responsibility is established for verification of sanitation;

- An inventory of purchased chemicals is available and is current;

- Detergents and sanitizers meet local regulatory requirements;

- SDS sheets are available for all cleaning chemicals purchased;

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- 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;

- Records of hygiene inspections are maintained and complete.

11.3   Personnel Hygiene and Welfare

11.3.1 Personnel

11.3.1.1 Personnel suffering from infectious diseases or are carriers of any infectious disease shall not engage in product handling or processing operation.

11.3.1.2 Personnel with exposed cuts, sores or lesions shall not be engaged in handling or processing products or handling primary packaging materials or food contact surfaces. Minor cuts or abrasions on exposed parts of the body shall be covered with a colored bandage containing a metal strip or an alternative suitable waterproof and colored dressing.

11.3.1.3 Smoking, chewing, eating, drinking or spitting is not permitted in any food processing or food handling areas.

11.3.1   Implementation Guidance

What does it mean?

In many jurisdictions, personnel requirements in food plants are covered by food safety legislation. Where this applies, the legislative requirements must underpin the requirements of 11.3.1. This element covers the basic personal hygiene requirement for working in a food manufacturing facility.

What do I have to do?

In high risk facilities, e.g., those plants that manufacture food that will support the growth or formation of pathogenic microorganisms or toxins, medical screening of staff and contractors must be undertaken to detect carriers of infectious diseases. Staff identified as carriers of infectious diseases are not to be permitted to handle raw materials, work in progress, or finished product.

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

Staff in food 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. Bandages are to be brightly colored to ensure they can be easily seen and include a metal strip for ease of detection if the facility uses metal detection.

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

Smoking, eating, chewing and drinking are not permitted in production areas. A risk analysis for drinking water must be conducted and controls must be developed by the facility to minimize the risk to the safety and quality of the product if it is provided in a production area. If water is consumed in the processing area, it is recommended that employees wash hands before returning to their station, or, at a minimum, hand sanitizer needs to be applied prior to returning to their work station.

11.3.1   Auditing Guidance

Medical screening and personal hygiene policies and procedures shall be reviewed at the initial desk audit, and the effective implementation checked at each facility audit though 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:

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- 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 processing;

- Personnel sores or cuts on hands are redeployed to low risk areas or have cuts suitably bandaged and gloved;

- Bandages provided to staff are brightly covered and have a metal strip (where metal detection is used);

- There is no smoking, eating or drinking in food product processing or handling areas.

11.3.2 Hand Washing

11.3.2.1 Hand wash basins shall be provided adjacent to all personnel access points and in accessible locations throughout food handling and processing areas as required.

11.3.2.2 Hand wash basins shall be constructed of stainless steel or similar non-corrosive material and as a minimum supplied with:

   i.   A potable water supply at an appropriate temperature;

   ii.   Liquid soap contained within a fixed dispenser;

   iii.   Paper towels in a hands free cleanable dispenser; and

   iv.   A means of containing used paper towels.

11.3.2.3 The following additional facilities shall be provided in high risk areas:

   i.   Hands free operated taps; and

   ii.   Hand sanitizers.

11.3.2.4 A sign instructing people to wash their hands, and in appropriate languages, shall be provided in a prominent position.

11.3.2.5 Personnel shall have clean hands and hands shall be washed by all personnel, including staff, contractors and visitors:

   i.   On entering food handling or processing areas;

   ii.   After each visit to a toilet;

   iii.   After using a handkerchief;

   iv.   After smoking, eating or drinking; and

   v.   After handling wash down hoses, dropped product or contaminated material.

11.3.2.6 When gloves are used, personnel shall maintain the hand washing practices outlined above.

11.3.2 Implementation Guidance

What does it mean?

In all food manufacturing facilities, employees, contractors and visitors must have clean hands upon entering food handling or processing areas; after each visit to a toilet; after using a handkerchief; after smoking, eating or drinking; and after handling wash down hoses, dropped product or contaminated material. Hand wash stations must therefore be correctly equipped and available at convenient locations for use.

What do I have to do?

Hand wash basins must be provided in close proximity to pedestrian entry points at each area of the facility, with instructions for all staff, contractors and visitors to wash hands immediately before entering the processing area. Additional hand basins are required where hands could become contaminated prior to

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working with product.

Potable water 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 station. Hands-free operated taps and hand sanitizers are also required for high risk operations. Hands-free operated taps can include foot, knee or elbow operated handles, auto-sensing devices or any other method that does not require the user to touch the handle with their washed hands to turn it off.

Hand sanitizers for low risk processes are optional.

Where alternative methods of hand-drying are preferred (e.g. high-speed air dryers). Their use must be justified and their effectiveness validated (refer 2.4.2.2).

Hand-wash basins are to be constructed of stainless steel or similar non-corrodible material. Hand-wash basins constructed of porcelain or similar materials must be located at a distance from food handling areas.

11.3.2 Auditing Guidance

The location and construction of hand-wash stations and their use by staff, contractors and visitors shall be reviewed at each facility audit. Evidence may include:

- Hand wash basins are available for staff, contractors, and visitors;

- Hand wash basins are located at personnel access points and areas where hands could become contaminated;

- Hand wash basins are constructed of an appropriate material;

- 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;

- There are hands-free taps at hand wash stations in high risk areas;

- There is hand sanitizer at hand wash stations in high risk areas;

- Personnel in food handling areas have clean hands;

- Personnel wash their hands on entering processing areas;

- 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;

- Personnel who use gloves also follow hand washing requirements.

11.3.3 Clothing

11.3.3.1 Clothing worn by staff engaged in handling food shall be maintained, stored, laundered and worn so as not to present a contamination risk to products.

11.3.3.2 Staff engaged in high-risk areas shall change into clean clothing or don temporary protective outerwear when entering high-risk areas.

11.3.3.3 Clothing, including shoes shall be clean at the commencement of each shift and maintained in a serviceable condition. Excessively soiled uniforms shall be changed where they present a product contamination risk.

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11.3.3.4 Disposable gloves and aprons shall be changed after each break, upon re-entry into the processing area and when damaged. Non-disposable aprons and gloves shall be cleaned and sanitized as required and when not in use stored on racks provided in the processing area and not on packaging, ingredients, product or equipment.

11.3.3 Implementation Guidance

What does it mean?

Uniforms that are provided to employees in food manufacturing facilities are primarily for the protection of materials, work-in-progress (WIP), finished product 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 the processing area. Employees and visitors with excessively soiled clothing are not to handle products or packaging materials. In high risk areas, employees must not wear processing uniforms off site. Employees engaged in low risk processes can wear uniforms off site provided they are properly cleaned at the beginning of their work operation.

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.

Disposable gloves shall be removed before each break, changed upon re-entry into the processing area 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 processing 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, product or packaging materials. Hairnets and beard snoods are to be worn by employees working on the packing or processing line or who work around exposed product.

11.3.3 Auditing Guidance

Company policies on clothing, including uniforms, gloves, hairnets, snoods and footwear shall be reviewed at the initial desk audit. Clothing worn by staff, contractors and visitors (where appropriate) shall be reviewed at each facility audit through observation and interview. Evidence may include:

- Company policies on clothing including uniforms, gloves, hairnets, snoods and footwear are in place and are appropriate for the type of operation;
- Company clothing policies are implemented by all staff;
- Clothing provided to staff is appropriate and properly maintained;
- Clothing worn by staff is clean;
- Clothing worn by staff in high risk areas is not worn off-site;
- There is clean or temporary clothing available for staff in high risk areas;
- Items such as hair nets, snoods and disposable gloves are available at accessible locations;
- Clothing designations (e.g. color coding) for high risk/low risk areas are fully implemented;
- Clothing requirements for contractors and visitors are followed:
- Staff clothing is clean at the start of each shift;
- Staff clothing is changed when excessively soiled;
- Disposable gloves and hairnets are correctly disposed of;
- Non-disposable gloves and/or aprons are properly cleaned between uses.

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11.3.4 Jewelry and Personal Effects

11.3.4.1 Jewelry and other loose objects shall not be worn or taken into a food handling or processing operation or any area where food is exposed. The wearing of plain bands with no stones and medical alert bracelets that cannot be removed can be permitted, however the supplier will need to consider their customer requirements and the applicable food legislation.

11.3.4 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 food manufacturing is therefore dependent on the risk to the product and exposure to the product. In high risk processes, or those where product is exposed, company policies shall require the removal of all jewelry and loose objects prior to entering the processing areas.

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. 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. Facilities can adjust their good employee hygiene practices based on customer requirements, risk to their product, product exposure and processing conditions.

11.3.4 Auditing Guidance

As with clothing, company policies on jewelry shall be reviewed at the initial desk audit, and the implementation of that policy reviewed at each facility audit through observation and interview. Evidence may include:

- The jewelry policy is appropriate to the risk, product exposure and processing conditions;

- The jewelry policy is effectively implemented for staff, contractors and visitors.

11.3.5 Visitors

11.3.5.1 All visitors, including management and maintenance staff, shall wear suitable clothing and footwear when entering any food processing or handling area.

11.3.5.2 All visitors shall be required to remove jewellery and other loose objects.

11.3.5.3 Visitors exhibiting visible signs of illness shall be prevented from entering areas in which food is handled or processed.

11.3.5.4 Visitors shall enter and exit food handling areas through the proper staff entrance points and comply with all hand washing and personnel practice requirements.

11.3.5 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 in the facility, thus, corporate personnel could be considered visitors.

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

What do I have to do?

The requirements for visitors in food manufacturing are dependent on the risk to the product, exposure to the product and the proximity of visitors to the process.   In high risk areas, or those where product is

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exposed, visitors must follow exactly the same provisions as staff.

The facility 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.

Visitors shall enter and exit product packing and processing areas through designated staff entrance points and must comply with all hand washing and personal requirements. Visitors must not be permitted to handle any product or equipment.

Visitors shall sign in the visitor log and shall be accompanied at all times by a company employee. For their personal safety, as well as the security of the product and process, they cannot be unsupervised.

11.3.5 Auditing Guidance

The company policy on visitors shall be reviewed at the initial desk audit and the implementation of that policy reviewed at each facility 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 the facility. Evidence may include:

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

11.3.6 Staff Amenities

11.3.6.1 Staff amenities supplied with appropriate lighting and ventilation shall be made available for the use of all persons engaged in the handling and processing of product.

11.3.6 Implementation Guidance

What does it mean?

This is a header element, which leads to the further descriptions in 11.3.7 – 11.3.10 addressing change rooms, laundry, restrooms, and lunch rooms.

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.

11.3.6 Auditing Guidance

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

- Amenities are provided commensurate with 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.

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11.3.7 Change Rooms

11.3.7.1 Facilities shall be provided to enable staff and visitors to change into and out of protective clothing as required.

11.3.7.2 Change rooms shall be provided for staff engaged in the processing of high-risk foods or processing operations in which clothing can be soiled.

11.3.7.3 Provision shall be made for staff to store their street clothing and personal items separate from food contact zones and food and packaging storage areas.

11.3.7.4 Where required, a sufficient number of showers shall be provided for use by staff.

11.3.7 Implementation Guidance

What does it mean?

Provide a designated area (i.e., locker room) for employee and visitor garments and personal items.

What do I have to do?

Change rooms (i.e., locker rooms) must be provided with lockers for staff and visitors when they are required to change from street clothing to protective clothing to enter the food processing operation. The areas shall be designed so materials and personal items cannot be stored on top of the lockers. The area around and under lockers if not fully sealed, must be able to be easily cleaned. It is generally recommended that lockers be fitted flush with the ceiling and placed on stands raised off the floor to allow ease of cleaning.

See also the reference to high risk processes in 11.7.4.

Showers are only required for those food processing plants required by legislation to have such facilities available or if the supplier's risk assessment indicates the facilities are required for high risk processes. The number is to be based on the maximum number of staff likely to use the facilities at one time.

11.3.7 Auditing Guidance

This element will be audited as part of each facility audit through observation and interview with operational staff. Evidence may include:

- Change rooms are provided commensurate with the type of operation and the number of employees;

- Change rooms are available for all employees who work in high risk areas;

- Change rooms are designed to avoid storage on top of lockers, and ease of cleaning;

- There are sufficient showers for staff working in high risk areas or areas where clothing can become heavily soiled;

- There are facilities for staff to secure personal items.

11.3.8 Laundry

11.3.8.1 Provision shall be made for the laundering and storage of clothing worn by staff engaged in high-risk processes and for staff engaged in processing operations in which clothing can be heavily soiled.

11.3.8 Implementation Guidance

What does it mean?

In high risk areas or facilities where clothing can be heavily soiled, provision must be made for the laundering of uniforms.

What do I have to do?

Laundering of uniforms can be on-site or off-site, but must ensure that clean uniforms are available for staff at shift commencement, or when uniforms become soiled.

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Change rooms (refer 11.3.7) are required when clean, laundered uniforms are brought on site and staff have to change into them. Restrooms are not adequate to be used as change rooms for this purpose.

11.3.8 Auditing Guidance

This element will be audited as part of each facility audit through observation and interview with operational staff. Evidence may include:

- Provision is made for laundering of protective clothing worn by staff;

- Provision is made for laundering of uniforms of staff working in high risk areas;

- Sufficient numbers of clean, laundered uniforms are available.

11.3.9 Sanitary Facilities

11.3.9.1 Toilet rooms shall be:

i. Designed and constructed so that they are accessible to staff and separate from any processing and food handling operations;

ii. Accessed from the processing area via an airlock vented to the exterior or through an adjoining room;

iii. Sufficient in number for the maximum number of staff;

iv. Constructed so that they can be easily cleaned and maintained; and

v. Kept clean and tidy.

11.3.9.2 Sanitary drainage shall not be connected to any other drains within the premises and shall be directed to a septic tank or a sewerage system.

11.3.9.3 Hand washbasins shall be provided immediately outside or inside the toilet room and designed as outlined in 11.3.2.2.

11.3.9 Implementation Guidance

What does it mean?

Sufficient restrooms/toilets are required to accommodate the number of staff. Their location and design must be such that they do not cause a contamination risk to product, food contact surfaces, areas where product is exposed or to food handlers.

What do I have to do?

Restroom/toilet facilities must be located so that they do not open directly into the processing area. In existing facilities where they are in close proximity to areas where product is exposed, an airlock vented to the exterior must be maintained (negative pressure). Staff shall enter toilet rooms from processing areas through either an intervening change room or air lock which is ventilated to external air.

Where exhaust fans are fitted, they must be exhausted to the outside and not into a food production area. The light and exhaust fan can be inter-wired to create negative pressure as an option or the light and exhaust fan can be left on continuously.

To eliminate the risk of air flow from restrooms into the processing room, exhaust fan off-switches may be on timer delay. The light and exhaust fan may be on a single switch located on the outside of the restroom.

Separate toilet rooms shall be provided for each gender and are typically located adjacent to and separate from the change room. The number of toilet cubicles to be provided depends on the number of staff or is based on applicable legislation. Suppliers must be aware of local legislation, but as a guide:

Persons of the same sex	No. of bowls
1-15	1
16-35	2

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36-55	3
56-80	4
>80 for each additional 30 persons	1

In male toilets, urinals can substitute for up to one-third of the total number of bowls.

Employee restrooms shall be properly equipped with hand wash facilities (refer 11.3.2). Hands-free taps are preferred, particularly in high risk facilities and include those than can be operated by foot, knee or elbow or turned on/off via electronic sensing devices.

Signage may consist solely of icons (such as those published by the International Association for Food Protection) to accomplish these requirements, with exception of restroom signage, where other regulatory requirements must be applied.

Sanitary drainage must be kept separate from drainage from food production areas.

11.3.9 Auditing Guidance

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

- There are sufficient toilets available for each gender and the number of employees;

- Toilets do not open directly into processing areas;

- Toilets can be easily cleaned;

- Toilets are clean and tidy;

- Sufficient hand wash basins are available near the toilets;

- Sanitary drainage is separated from processing facility drains.

11.3.10 Lunch Rooms

11.3.10.1 Separate lunchroom facilities shall be provided away from a food contact/handling zone.

11.3.10.2 Lunch room facilities shall be:

i. Ventilated and well lit;

ii. Provided with adequate tables and seating to cater for the maximum number of staff at one sitting;

iii. Equipped with a sink serviced with hot and cold potable water for washing utensils;

iv. Equipped with refrigeration and heating facilities enabling them to store or heat food and to prepare non-alcoholic beverages if required, and

v. Kept clean and free from waste materials and pests.

11.3.10.3 Signage in appropriate languages instructing people to wash their hands before entering the food processing areas shall be provided in a prominent position in lunchrooms and at lunchroom exits.

11.3.10 Implementation Guidance

What does it mean?

Employees, contractors and visitors are not permitted to eat or drink in food handling areas (refer 11.3.1.3). Designated lunch rooms must therefore be available for staff to take breaks and eat meals. These areas must be physically separated from food handling areas.

What do I have to do?

The supplier may provide additional outdoor lunchroom facilities (e.g., picnic tables) where they do not pose a dust or pest hazard to the processing area of the site. Covered facilities and sealed paths are one way to address these hazards. Where hazards presented by such facilities are minimal, the supplier may employ

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alternative controls such as routine cleaning of tables and steps to minimize dust on non-sealed paths.

Foot baths also provide another means to ensure that foot traffic does not bring dust or other contaminants into the processing area, if practical to do so.

Each site shall be equipped with a ventilated and well-lit lunch/break room for employees. The room must be equipped with a sink serviced with hot and cold potable water, a refrigerator and a microwave. The area must be kept clean.

11.3.10 Auditing Guidance

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

- Separate lunch facilities are provided;

- Lunch room facilities are adequate for the number of staff;

- Lunch facilities are separated from processing, product storage or handling areas;

- Lunch room facilities are properly ventilated;

- Lunch room facilities are well lit;

- Lunch room facilities include a sink with hot and cold running water;

- Lunch room facilities are clean and tidy;

- Proper heating or cooling facilities are provided in lunch facilities;

- Hand wash signage is available at the exit of the lunch facilities;

- Hand wash signage at the exit of lunch facilities is in appropriate languages.

11.3.11 First Aid

11.3.11.1 First aid facilities shall be provided to treat minor injuries and suitable arrangements shall be provided in circumstances when a patient requires more specialized care.

11.3.11 Implementation Guidance

What does it mean?

The supplier site shall have first aid equipment available to treat minor injuries and arrangements in place to deal with more serious injuries.

What do I have to do?

First aid materials must be provided and made available to treat injuries involving minor burns, cuts or wounds. There needs to be a designated person on site who is trained in first aid procedures. First aid kits must be located so they do not present a hazard to foods or food contact surfaces of equipment; typically, they are located in change rooms. Staff must be aware of first aid procedures and the location of first aid stations. As per 11.3.1.2, bandages need to be brightly colored to ensure that they can be easily seen and include a metal strip for ease of detection, where metal detection is applied in the facility.

A procedure must be in place to deal with more serious injuries, including having a trained, designated first-aider available on all shifts. Applicable phone numbers of contact persons or suitable arrangements made when staff requires more specialized care shall be listed in close proximity to the first aid facility.

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11.3.11 Auditing Guidance

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

- First aid facilities are available;

- Staff are aware of the location of first aid facilities;

- Arrangements are in place to provide for more specialized care as required.

11.4   Personnel Processing Practices

11.4.1 Staff Engaged In Food Handling and Processing Operations

11.4.1.1 All personnel engaged in any food handling, preparation or processing operations shall ensure that products and materials are handled and stored in such a way as to prevent damage or product contamination. They shall comply with the following processing practices:

- i.   Personnel entry to processing areas shall be through the personnel access doors only;

- ii.   All doors are to be kept closed. Doors shall not be left open for extended periods when access for waste removal or receiving of product/ingredient/packaging is required;

- iii. The wearing of false fingernails or fingernail polish is not permitted when handling food;

- iv.   Packaging material, product, and ingredients shall be kept in appropriate containers as required and off the floor;

- v.   Waste shall be contained in the bins identified for this purpose and removed from the processing area on a regular basis and not left to accumulate;

- vi.   Staff shall not eat or taste any product being processed in the food handling/contact zone, except as noted in section 11.4.1.2.

11.4.1.2 In circumstances where it is necessary to undertake sensory evaluations in a food handling/contact zone the supplier shall implement proper controls and procedures to ensure:

- i.   Food safety is not compromised;

- ii.   Sensory evaluations are conducted by authorized personnel;

- iii. A high standard of personal hygiene is practiced by personnel conducting sensory evaluations;

- iv.   Sensory evaluations are conducted in areas equipped for the purpose; and

- v.   Equipment used for sensory evaluations is sanitized, maintained and stored separate from processing equipment.

11.4.1.3 All wash down hoses shall be stored on hose racks after use and not left on the floor.

11.4.1   Implementation Guidance

What does it mean?

Proper product handling practices combined with sanitary conditions result in:

- Extended storage life of product;

- Reduced risk of product contamination; and

- Fewer product returns or complaints.

While management has overall responsibility for ensuring that sanitary processing practices are adopted, and for establishing hygiene procedures, line operators have a responsibility for ensuring these procedures are carried out properly and effectively.

What do I have to do?

Management must develop a list of good hygiene practices of "dos and don'ts." This list must be consistent

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with sections 11.3 and 11.4 of the SQF Code. This will be part of the documented procedures and work instructions. All staff, contractors, and visitors (where applicable) must be made aware of these requirements before entering the site.

The site shall have designated access points for personnel to enter and exit. This is particularly important in high risk areas where product is exposed and when specific entry conditions apply (e.g., change of uniforms, foot baths, etc., refer 11.3.3.2).

Access points are defined as dock doors, pedestrian doors, office doors and any door that enters into the site from the outside or from a lower risk area. Doors that are opened for ventilation must be screened. All processing areas must have areas for employees to be able to wash their hands upon entry into processing and exposed food handling areas.

Appropriate containers for waste storage are containers that are considered easily cleanable, properly labelled, not absorbable and designed for the purpose. No packaging container is to be used for the storage of waste or scrap. Waste containers are to be clearly labelled or designated as waste in languages relevant to the employee workforce.

Where sensory analysis is conducted within processing area, the supplier is to develop specific hygiene practices that are intended to control food safety and quality risks to the product and be consistent with those defined within this section.

11.4.1 Auditing Guidance

Good hygiene practices will be reviewed as part of the initial desk audit. Subsequently, this element will be audited as part of each facility audit through observation and interviews with operating personnel. Evidence may include:

- Good hygiene practices have been developed;

- Staff are aware of the company's good hygiene practices;

- Staff adhere to the company's good hygiene practices;

- All exterior doors have protective controls in place;

- Doors or access points between low risk and high risk areas have no protective controls in place;

- Hand wash stations are available at designated access points;

- Employees, contractors and visitors wash their hands at designated access points;

- Employees, contractors and visitors follow hygiene protocols when entering high risk areas;

- Employees do not wear false fingernails in food handling areas;

- Food products or ingredients are stored in appropriate containers and not on the floor;

- Packaging materials are stored appropriately and not on the floor;

- Waste containers are properly identified;

- Waste is not left to accumulate in waste containers and is removed at appropriate intervals;

- Sensory evaluations are conducted as per company protocols;

- Sensory evaluations do not compromise food safety or product integrity;

- Sensory evaluation equipment is cleaned and sanitized after use;

- Wash down hoses are stored correctly and not left on the floor.

11.5   Water, Ice, and Air Supply
11.5.1 Water Supply

11.5.1.1 Adequate supplies of potable water drawn from a known clean source shall be provided for use during processing operations, as an ingredient and for cleaning the premises and equipment.

11.5.1.2 Supplies of hot and cold water shall be provided as required to enable the effective cleaning of the premises and equipment.

11.5.1   Implementation Guidance

What does it mean?

Potable water supply at the correct temperature and pressure prescribed by applicable legislation must be of sufficient capacity for all scheduled production needs and meet cleaning and sanitation requirements (refer 11.2.13).

What do I have to do?

Potable water, or drinking water, is water that is safe enough to be consumed by humans or used with low risk of harm. In most developed countries, sufficient quantities of potable water are delivered to food manufacturing facilities for operational purposes. In some countries however, and some regions in developed countries, the potability of municipal water cannot be relied on. The supplier must ensure the availability of sufficient supplies of water both as a processing ingredient and for cleaning purposes.

11.5.1   Auditing Guidance

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

- Water used in processing is from a potable source;

- Potable water availability is adequate for processing needs;

- Potable water availability is adequate to meet cleaning requirements;

- Hot water is available for cleaning purposes.

11.5.2 Monitoring and Water Microbiology and Quality

11.5.2.1 Water used for

i.   washing, thawing and treating food;

ii.   an ingredient or food processing aid;

iii.   cleaning food contact surfaces;

iv.   the manufacture of ice; and

v.   the manufacture of steam that will come in contact with food or used to heat water that will come in contact with food

shall comply with local, national or internationally recognized potable water microbiological and quality standards as required.

11.5.2   Implementation Guidance

What does it mean?

Any water that is used in the process that could come in contact with the product must be verified to be in compliance with local and national standards. In the US and Australia for example, the potability standard for drinking water is <1 coliform / 100 mL water and membrane filtration is the preferred method. However, standards also apply for *Salmonella* spp, *Shigella* spp, enterovirulent *E.coli, Vibrio cholera, Yersinia enterocolitica, Campylobacter jejuni,* and protozoa.

What do I have to do?

This element elaborates on 11.5.1 and identifies the areas where potable water must be used, e.g. washing of food product, as an ingredient, cleaning and the manufacture of ice or steam that comes into contact with

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food product or food contact surfaces.

Where grey water is available (i.e. non-potable, recycled water), it must not be used in any of these areas and must be kept separate from potable water supply. The only exception here may be where potable water used for blanching, fluming or washing may be recycled and used in an earlier stage of the same process.

The supplier must be aware of the national and/or international potable water standards and any microbiological or chemical water standards imposed by customers. Analysis (refer 11.5.6) must be conducted to ensure water continues to meet the required standard.

11.5.2   Auditing Guidance

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

- The supplier is aware of the relevant water potability standards;

- Only potable water is used to treat, wash or rinse product;

- Water used as an ingredient meets quality requirements;

- Only potable water is used to clean food contact surfaces;

- Only potable water is used to make ice (where applicable);

- Only potable water used to make steam that will come in contact with food.

11.5.3 Water Delivery

11.5.3.1 The delivery of water within the premises shall ensure potable water is not contaminated.

11.5.3.2 The use of non-potable water shall be controlled such that:

   i. There is no cross contamination between potable and non-potable water lines;

   ii. Non-potable water piping and outlets are clearly identified.

11.5.3   Implementation Guidance

What does it mean?

Even though potable water may be available to the site, the supplier must ensure that the delivery systems for water within the premises are safe with no risk of cross-contamination.

What do I have to do?

The supplier must ensure that water reticulation lines within the site are constructed of suitable material and in good condition, with no rust or corrosion.

All water systems must be protected against backflow. Backflow prevention devices shall be installed on all water and steam lines in the processing facility. Except where justified, "grey" or non-potable water is not to be used in any food processing or handling area. At no time can non-potable water be substituted for potable water where potable water is required to be used by applicable legislation.

If non-potable water is used on the premises, a map indicating potable and non-potable water lines shall be maintained and updated as needed. Descriptions of the mechanisms used to prevent cross-contamination shall be fully described.

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11.5.3   Auditing Guidance

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

- Water delivery lines within the premises are in good condition;

- The supply of potable water is adequately protected;

- Potable and non-potable water lines and outlets are clearly labeled;

- Where grey water is used, there is no opportunity for cross-contamination between potable and non-potable water lines;

- There is no opportunity for non-potable water to be used in lieu of potable water.

11.5.4 Water Treatment

11.5.4.1 Water treatment methods, equipment and materials shall be designed, installed and operated to ensure water receives an effective treatment.

11.5.4.2 Water treatment equipment shall be monitored regularly to ensure it remains serviceable.

11.5.4.3 Treated water shall be regularly monitored to ensure it meets the indicators specified.

11.5.4   Implementation Guidance

What does it mean?

In many facilities, chemical treatment of water is required to maintain the correct pH or chemical balance for use in boilers, heaters or as an ingredient. Treatment must be controlled and carefully monitored where the above are required.

What do I have to do?

Water and boiler (water heater) treatment chemicals must be approved for such use and properly stored (refer 11.6.4).

Procedures must be written and implemented for all water treatment methods used within the premises.

Where in-plant chlorination of water is required for washing, rinsing or cleaning purposes, a free residual chlorine level of 0.25 ppm after 20 minutes of contact time (or equivalent at the point of use) is recommended. In-line chlorination that provides higher levels of free residual chlorine at specific points is also acceptable. Regular sampling and testing of residual chlorine is implemented to ensure a safe water supply. Other methods of bactericidal treatment such as UV lighting may be used. In all cases, a program of regular microbiological testing of water is required to verify in-plant effectiveness of all water treatments (refer 11.5.6).

11.5.4   Auditing Guidance

Water treatment procedures (where applicable) will be reviewed as part of the initial desk audit. Subsequently, this element will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- Water treatment is performed as per written instructions;

- Water treatment that is carried out is appropriate;

- Water treatment is carried out using approved chemicals;

- Water treatment equipment is regularly monitored;

- Treated water is regularly monitored.

11.5.5 Ice Supply

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11.5.5.1 Ice provided for use during processing operations or as a processing aid or an ingredient shall comply with 11.5.2.1.

11.5.5.2 Ice rooms and receptacles shall be constructed of materials as outlined in elements 11.2.1, 11.2.2 and 11.2.3 and designed to minimize contamination of the ice during storage and distribution.

11.5.5   Implementation Guidance

What does it mean?

Where ice is required for processing or storage of product, it must be made from potable water and under hygienic conditions. Ice storage rooms and containers must be designed and constructed of suitable materials and be maintained in good condition.

What do I have to do?

Ice used as an ingredient or processing aid or ice that comes into contact with food or food contact surfaces or equipment must meet potable water requirements, microbiological and quality standards as required. Ice storage areas, equipment and dispensing tools shall be easy to clean.

11.5.5   Auditing Guidance

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

- Ice is made from potable water;
- Ice is made under hygienic conditions;
- Ice is properly protected during manufacture, storage and use;
- Ice in contact with food product complies with national or customer standards;
- Ice storage areas are properly designed and constructed;
- Ice storage areas are maintained in good condition.

11.5.6 Analysis

11.5.6.1 Microbiological analysis of the water and ice supply shall be conducted to verify the cleanliness of the supply, the monitoring activities and the effectiveness of the treatment measures implemented.

11.5.6.2 Water and ice shall be analyzed using reference standards and methods.

11.5.6   Implementation Guidance

What does it mean?

Even though the water supply may come from the town or regional water supply in which the water is treated, safety tested and maintained by the local authority, it is required that food processers implement their own testing to ensure the safety of the potable water used within the facility.

What do I have to do?

The monitoring may involve one or a number of the following:

- Regular testing of water (e.g., pH, turbidity);
- Checking filtration apparatus and changing it as required (refer to supplier specifications);
- Regular cleaning of water holding tanks and reservoirs;
- Regular monitoring of sanitizer levels in water (levels normally tested at various sites in the food handling and processing areas).

Water should be tested at least every 12 months for potability and any additional quality or safety attribute. When utilizing an outside laboratory, seeking a laboratory that is properly accredited to complete the desired analysis is required. The water must be retested any time the water source is changed or when equipment is

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added to treat the water system.

If ice is supplied by an outside source, the site must have a current analysis of potability on file. Any treatment of water on-site, either prior to usage or as a treatment of waste water, the treatment needs to have applicable analysis verifying the efficiency of the treatment.

11.5.6   Auditing Guidance

Water testing procedures will be reviewed as part of the initial desk audit. Subsequently, this element will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- There is a documented water testing procedure in place, including frequency and test method;

- Water (and ice, where applicable) are microbiologically tested to verify cleanliness of the supply;

- Water (and ice, where applicable) are microbiologically tested to verify the effectiveness of treatment methods;

- Appropriate standards are used to analyze water or ice;

- Where external laboratories are used, the laboratories are accredited to offer water testing services.

11.5.7 Air Quality

11.5.7.1 Compressed air that contacts food or food contact surfaces shall be clean and present no risk to food safety;

11.5.7.2 Compressed air systems used in the manufacturing process shall be maintained and regularly monitored for purity.

11.5.7   Implementation Guidance

What does it mean?

This applies to compressed air that comes into contact with exposed food product (e.g. pneumatic conveying), food contact surfaces and interior surface packaging. It does not apply to air that does not come into contact with food or food contact surfaces.

Purity means absence of contaminants that could cause a food safety hazard. Pure air means the air is free of risk for contamination of the products. Essentially, the air must not contribute any contamination to the product.

What do I have to do?

11.5.7.1
Compressed air can be a source of chemical and microbiological contamination. Potential contaminants can include particulates, including dirt (microorganisms, atmospheric dirt and solid particulates, rust and pipe scales), water (water vapor, condensed liquid water and water aerosols) and oil (oil vapor, liquid oil and oil aerosols).

Food operations must verify and validate that the compressed air used is appropriate and does not serve as a source of contamination. When compressed air comes in contact with exposed product or direct product contact surfaces, the air compressor must use food grade oil.

Preventive maintenance programs need to ensure that an appropriate filtration program is in place at the point of use and the filters are cleaned or changed at a frequency appropriate to the product and process or following any maintenance to air supply source or equipment. Any maintenance must be done in a hygienic manner.

Wherever the compressed air comes in contact with the food, either directly or indirectly, high efficiency filters are to be in place at point-of-use where the air enters the final section of tubing (not in the compressor room). This will significantly reduce the risk of microbial contamination of the food from the air. The

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recommended final stage of filtration in these food contact areas should have a rating of 0.01 micron with an efficiency of 99.999% (or as determined by appropriate risk analysis). Sufficient filtration is to be in place directly upstream of the final stage to protect the final stage from oil and water aerosols.

Nozzles and air hoses are to be in good condition, properly repaired and maintained in a hygienic state (e.g., cleaned and sanitized). Hoses and nozzles are to be kept off the ground.

It is generally advisable to locate the filtration as close as practically possible (near the "point of use," or the point where air contacts the food), so as to not have long lengths of piping/tubing between the microbial removal filter and the air/food contact point.

11.5.7.2
Testing can be conducted to validate the compressed air-filtration control system's effectiveness based on the risk to the product; however, testing must be conducted at a minimum of once a year. Testing can be done in-house or by a contracted party. Test requirements and number of samples will be based on the risk to the product and process. Microbiological testing can include testing for aerobic plate count and/or indicator organisms as appropriate to the operation. Testing for moisture is to be considered if moisture is a potential risk to the product (e.g., dry operations).

Aseptic sample collection needs to be used. There are a wide variety of measures available, including the use of air sampling equipment, use of sterile sponges, membrane filtration and others.

The site may consider the following controls for particulates
   i.   Intake filters to remove atmospheric dirt and solid particulates.
   ii. Microorganisms – A point-of-use filter, minimum 0.01 micron, prevent pathogenic microorganisms from contaminating food. An effective PM program should be in place to maintain the integrity of the filter. Validation from the filter manufacturer is often considered adequate validation.
   iii. Water, including vapor, liquid, condensed. A dryer in the compressed air system provides effective control. An effective PM program should be in place.
   iv. Oil, including vapor, liquid and aerosols. The presence of coalescing filters in the compressed air system effectively removes contamination. An effective PM program should be in place to maintain the integrity of the filter.

Industry Standards of Reference:

For general compressed air quality standards within a food plant, ISO 8573-1 standards are a very good reference. These standards provide a good baseline for quantifying compressed air quality relative to moisture, oil content (carryover from compressor), as well as general particulate contamination. ISO 8573-1 does not, however, provide guidance for microbial contamination. For areas where the compressed air comes in direct contact with food or food contact surfaces, ISO 8573-7 provides a standardized method for collecting compressed air samples for microbial testing; however, it leaves the user to determine the acceptable type and level of CFU content.

11.5.7   Auditing Guidance

Air quality program and test procedures will be reviewed as part of the initial desk audit. Subsequently, this element will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- The condition of air compressors and compressed air used to transport product, or otherwise to come into contact with exposed product, product contact surfaces or packaging materials;

- Compressed air that is in contact with food is filtered in accordance with the site's risk assessment or otherwise treated;

- Filters are checked or changed at a frequency based on the air quality program;

- The site has a standard for microbiological purity of compressed air that contacts foods as well as a process for testing;

- Maintenance staff has the data specification sheet for the filter housing;

- Follow up with preventative maintenance and SSOPs;

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- Performance characteristics of the filter in place must match the risks identified in the site's assessment.

- Identification of the level of filtration at the point-of-use for commercially sterile air.

- Compressed air that is in contact with food is checked for purity using methods and at a frequency based on the air quality program and test procedures.

11.6   Storage and Transport

11.6.1 Cold Storage, Freezing, and Chilling of Foods

11.6.1.1 The supplier shall provide confirmation of the effective operational performance of freezing, chilling and cold storage facilities. Chillers, blast freezers and cold storage rooms shall be:

   i.   Designed and constructed to allow for the hygienic and efficient refrigeration of food; and

   ii. Easily accessible for inspection and cleaning.

11.6.1.2 Sufficient refrigeration capacity shall be available to chill, freeze, store chilled or store frozen the maximum anticipated throughput of product with allowance for periodic cleaning of refrigerated areas.

11.6.1.3 Discharges from defrost and condensate lines shall be controlled and discharged to the drainage system.

11.6.1.4 Freezing, chilling and cold storage rooms shall be fitted with temperature monitoring equipment and located so as to monitor the warmest part of the room and be fitted with a temperature measurement device that is easily readable and accessible.

11.6.1.5 Loading and unloading docks shall be designed to protect the product during loading and unloading.

11.6.1   Implementation Guidance

What does it mean?

Freezing and cold storage apply to the process of Individually Quick Frozen (IQF) product down to sub-zero temperatures and storage of the product at that temperature for preservation. Ideally, frozen food is stored at less than -18°C (0°F).

Chilling refers to the process of reducing the temperature of a high risk food to 0 - 5°C (32 - 40°F), and storing within that temperature range, to minimize pathogen growth and extend shelf-life.

In both cases, the equipment required to chill, freeze or store product must be effective and cater for the maximum throughput.

Controlled atmosphere storage for seasonal fruit and vegetable products in which oxygen, carbon dioxide and nitrogen concentrations are controlled and must also meet the requirements of 11.6.1 as well as temperature and humidity.

What do I have to do?

Refrigeration equipment shall have the capacity to maintain an ambient temperature at or below 5°C (40°F) except when loading or unloading product from the cooler unless other temperatures are prescribed by legislation. During these operations, the ambient temperature must return to 5°C (40°F) within a short time after access doors are closed.

Freezing and cold storage equipment shall have the capacity to maintain a product temperature below -15°C (5°F) and must be maintained during loading and unloading.

A description of the refrigeration capacity needs to be included in the site plan. Verification may be demonstrated through historical temperature recordings.

Refrigeration facilities will be capable of reducing temperatures of product at rates suitable to maintain food safety and/or quality or as prescribed by legislation appropriate to the commodities being processed.

Documentation of floor materials shall be included in the site plan or description of the plant/processing area. A written SOP shall address the timely and effective removal of water or excessive ice build-up. Dense waterproof concrete is the material generally used for flooring and needs to be smooth and graded to reduce water accumulation.

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The tops of refrigerated rooms are to be covered with a rodent-proof material. Inaccessible cavities need to be sealed to prevent the access of rodents or other pests. Storage racks and shelving need to be constructed of a non-corrosive material and easily cleanable. The product on these racks or shelves should be at least 30 cm (twelve inches) from walls and 150 mm (6 inches) off the floor to prevent contamination and allow for adequate air circulation around the product (refer 11.2.3).

Condensation from cooling equipment must be piped to the plant drainage system or to the exterior of the building in a manner which does not create pools or standing water. When defrosting refrigeration units in a processing area, it is necessary that the timing of the defrosting be such that it does not pose a threat to the sanitary conditions of the area or product.

Monitoring and validation of the cooler temperature shall be done in accordance with the site's Food Safety Plan or similar document. The site shall be able to verify and validate cooling or storage temperatures prescribed by legislation. Manual monitoring of cold storage rooms on a predetermined frequency is acceptable provided there is a justification in place for the frequency and documentation is kept on file with corrective actions, if applicable.

Where open docks exist, products are to be loaded and unloaded in a manner which protects the premises, the product and/or packaging from inclement weather, pests and temperature abuse.

11.6.1   Auditing Guidance

Cold storage, freezing, and chilling procedures (SOPs) and temperature validation procedures will be reviewed as part of the initial desk audit. Subsequently, they will be audited as part of each facility audit through observation, review of records and interviews with refrigeration mechanics and operating personnel. Evidence may include:

- SOPs exist for chilling, freezing and cold storage;

- SOPs exist for validation of chilled and frozen temperatures and times;

- Supplier can confirm the effective operation of the chillers/freezers;

- Supplier can confirm the effective operation of the chilled and cold storage rooms;

- Cold storage rooms are properly designed and constructed;

- Cold storage rooms are easily cleaned;

- Cold storage areas are easily accessible for inspection;

- There is adequate refrigeration capacity;

- There is adequate freezer capacity;

- There is no condensation in the cold storage area;

- There is no frost or ice build-up in the cold storage area;

- Defrost water is discharged appropriately.

- Temperature monitoring is adequate;

- Temperature records are retained;

- Loading/unloading docks are adequately designed to protect product and product temperature.

11.6.2 Storage of Dry Ingredients, Packaging, and Shelf Stable Packaged Goods

11.6.2.1 Rooms used for the storage of product ingredients, packaging, and other dry goods shall be located away from wet areas and constructed to protect the product from contamination and deterioration.

11.6.2.2 Racks provided for the storage of packaging shall be constructed of impervious materials and designed to enable cleaning of the floors and the storage room. Storage areas shall be constructed to prevent packaging from becoming a harborage for pests or vermin.

11.6.2.3 Vehicles used in food contact, handling or processing zones or in cold storage rooms shall be designed and operated so as not to present a food safety hazard.

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11.6.2   Implementation Guidance

What does it mean?

Rooms where materials, ingredients, packaging and other dry goods - apart from hazardous chemicals, (refer 11.6.4) are stored, must be clean, dry and accessible.

What do I have to do?

Ingredients, raw materials, packaging and packing materials must be stored in designated storage areas which protect the materials from contamination and deterioration. These materials shall be stored only in dry areas of the processing room when staged for use during processing or packing. Ensure that packaging storage areas are adequately protected from the elements, rodents and other pests. Packaging materials which become food contact surfaces must be protected from dust and other contaminants while in storage. This can be accomplished by the use of plastic wrap or other means to protect the packaging material.

Suppliers must also be aware of the need to segregate identity preserved products (refer 2.8.1) and in particular materials and products containing allergens (refer 2.8.2). These materials may require separate, dedicated storage rooms.

Materials used in the construction of storage rooms must comply with 11.2.1.1 and light fittings in storage areas must comply with 11.2.5.2.

The racks provided for the storage of packaging shall be constructed of impervious materials and designed to be easy to clean. The supplier must limit the use of wooden racks for storage of packaging and packing materials to dry areas only. Stands and the lower shelves of stands should be at least 150 mm (6 inches), or as required by applicable regulation above floor level to facilitate proper cleaning.

Fork lifts, hand-forks and other vehicles used in storage areas must be safe to use, hydrocarbon emissions must be controlled and operated in a manner that does not cause damage to product and equipment.

11.6.2   Auditing Guidance

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

- Product storage rooms are located away from wet processing areas;

- Storage rooms are adequately designed to protect product, ingredients, materials, or packaging materials;

- Packaging racks are made of material that is easily cleanable;

- Packaging racks allow access to floor/wall junction for cleaning;

- Vehicles used in food processing, storage or cold storage areas release hydrocarbon emissions or present a hazard to food product, ingredients, materials or packaging materials.

11.6.3 Storage of Equipment and Containers

11.6.3.1 Storage rooms shall be designed and constructed to allow for the hygienic and efficient storage of equipment and containers.

11.6.3   Implementation Guidance

What does it mean?

Rooms and areas designated as storage areas for equipment, tools, utensils and re-useable containers must be designed and constructed to protect clean equipment.

What do I have to do?

Materials used in the construction of storage rooms must comply with 11.2.1.1 and light fittings in storage areas must comply with 11.2.5.2.

Equipment storage rooms may be adjacent to equipment cleaning areas but kept separate to ensure there is

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no commingling of dirty and cleaned tools, utensils and equipment.

Racks are to be provided to ensure tools and equipment are not stored on the floor.

11.6.3   Auditing Guidance

This element will be audited as part of each facility audit through observation. Evidence may include:

- There is a dedicated storage area for clean tools, utensils and equipment;

- The equipment storage area does allows access for cleaning;

- The equipment storage area protects equipment during storage.

11.6.4 Storage of Hazardous Chemicals and Toxic Substances

11.6.4.1 Hazardous chemicals and toxic substances with the potential for food contamination shall be stored so as not to present a hazard to staff, product, packaging, product handling equipment or areas in which the product is handled, stored or transported.

11.6.4.2 Processing utensils and packaging shall not be stored in areas used to store hazardous chemicals and toxic substances.

11.6.4.3 Daily supplies of chemical used for continuous sanitizing of water or as a processing aid, or for emergency cleaning of food processing equipment or surfaces in food contact zones, may be stored within or in close proximity to a processing area provided access to the chemical storage area is restricted to authorized personnel.

11.6.4.4 Pesticides, rodenticides, fumigants and insecticides shall be stored separate from sanitizers and detergents. All chemicals shall be stored in their original containers.

11.6.4.5 Hazardous chemical and toxic substance storage facilities shall:

i. Be compliant with national and local legislation and designed such that there is no cross-contamination between chemicals;

ii. Be adequately ventilated;

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 hazardous chemicals and toxic substances;

v. Have instructions on the safe handling of hazardous chemicals and toxic substances readily accessible to staff;

vi. Be equipped with a detailed and up-to-date inventory of all chemicals contained in the storage area;

vii. Have suitable first aid equipment and protective clothing available in close proximity to the storage area;

viii. In the event of a hazardous spill, be designed such that spillage and drainage from the area is contained; and

viiii. Be equipped with spillage kits and cleaning equipment.

11.6.4   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 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. They must not be stored on the same shelf or above each other on the same rack. Pest management chemicals shall be stored separate from cleaning chemicals and separate from engineering chemicals. Bulk containers of hazardous chemicals or toxic substances must have sufficient spill-proof procedures that ensure that no cross-

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contamination can occur.   There must be signage indicating this area is a hazardous chemical storage area.

Chemical delivery systems installed in manufacturing areas will be clearly labelled to identify their use and all chemical containers connected to these systems will remain connected while in use and identified through proper labels. Only personnel who have been properly trained in the use of the system will be authorized for access and use of the system.

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 food product must not be stored in the same room as hazardous chemicals.

The supplier must ensure that Safety Data Sheets (SDS) are readily available and accessible to personnel handling or coming into contact with hazardous chemicals. The supplier 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.

Please refer to 11.2.11.5 for pest control chemicals and 11.2.13.6 for cleaning chemicals.

11.6.4   Auditing Guidance

This element will be audited as part of each facility audit through observation and interviews with operators, cleaners and pest control personnel. 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 production areas;

- There is spill control and spill kits available in the chemical storage rooms;

- There are no food processing tools, utensils or equipment stored with hazardous chemicals;

- Daily/shift supplies of chemicals are stored correctly;

- Packaging is not stored in an area used to store hazardous chemicals;

- Sanitizers and detergents are not stored with pesticides or other toxic chemicals

- Chemicals are stored in original containers;

- There are instructions on safe handling of chemicals available.

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11.6.5 Alternative Storage and Handling of Goods

11.6.5.1 Where goods described in 11.6.1 to 11.6.4 are held under temporary or overflow conditions that are not designed for the safe storage of goods, a risk analysis shall be undertaken to ensure there is no risk to the integrity of those goods or contamination or adverse effect on food safety and quality.

11.6.5   Implementation Guidance

What does it mean?

There may be times when temporary or overflow storage is required for refrigerated goods, ingredients, packaging materials or chemicals. This must be an occasional occurrence only and must not become the status quo. Temporary storage must be evaluated according to a risk analysis.

What do I have to do?

Where temporary or overflow storage is used, a risk analysis must be undertaken to ensure the stored product is not at risk or pose a risk to products, processes or personnel. The risk analysis must be documented and be available every time overflow storage is applied.

In particular:

- Frozen or refrigerated product must be held at the required temperature and in clean and sanitary conditions;

- Dry ingredients, and packaging materials must be held in a dry, clean area that is free from pests;

- Chemicals must be stored in a safe secure area that complies with local regulations and does not pose a risk to personnel or other products.

11.6.5   Auditing Guidance

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

- Alternative storage is being used;

- Risk analysis has been conducted for alternative storage;

- Materials or products are not being stored continuously in temporary storage;

- There is no risk of product contamination from the use of temporary storage.

11.6.6 Loading, Transport and Unloading Practices

11.6.6.1 The practices applied during loading, transport and unloading of food shall be documented, implemented and designed to maintain appropriate storage conditions and product integrity. Foods shall be loaded, transported and unloaded under conditions suitable to prevent cross contamination.

11.6.6   Implementation Guidance

What does it mean?

The duty of assuring food safety and quality of the supplier's product continues from when ingredients and materials are first unloaded at the site through when the finished product is placed into storage and loaded ready for distribution. Loading, unloading and distribution procedures must be documented and implemented.

What do I have to do?

Conditions for storage, loading and unloading will vary depending on the type, nature and temperature of the commodity. Documented procedures must cover each type (e.g., bulk, bagged, packaging, refrigerated and frozen) of product delivered into or out from the site.

Some suppliers have their own transport, some suppliers use contract transport. Where contract services are used, the transport protocol will be referenced in the contract with the provider (refer 2.3.3).

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11.6.6   Auditing Guidance

Transport (i.e., loading, unloading and distribution) procedures will be reviewed as part of the initial desk audit. Subsequently, this element will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- Methods used to load and unload materials and products are documented:
- Methods used for the transportation of products are documented;
- The documented methods adequately protect the product;
- The documented methods are effectively implemented.

11.6.7 Loading

11.6.7.1 Vehicles (e.g., trucks, vans or containers) used for transporting food shall be inspected prior to loading to ensure they are clean, in good repair, suitable for the purpose and free from odors or other conditions that may impact negatively on the product.

11.6.7.2 Loading practices shall be designed to minimize unnecessary exposure of the product to conditions detrimental to maintaining the product and package integrity.

11.6.7   Implementation Guidance

What does it mean?

Loading practices shall be documented as per 11.6.7. They shall include conditions and inspections for outbound refrigerated and ambient trucks and trailers.

What do I have to do?

Prior to loading, vehicles carrying refrigerated product must be pre-chilled.   Refrigerated units need to be capable of cooling and maintaining finished product at ambient temperature of 5°C (40°F) or below at the point of origin. Inspections must ensure the ability to cool and maintain temperatures (where applicable) on all outbound trucks/trailers. Inspections must verify the setting of the refrigeration unit of the trailer (when applicable).

For all outbound trucks and trailers a visual inspection must be conducted for cleanliness, pest infestation and structural conditions and to verify that all trucks/trailers are free of offensive odors. All inspection findings are to be maintained in records.

11.6.7   Auditing Guidance

This element will be audited as part of each facility audit by observations, review of records and interview with warehouse operators and drivers Evidence may include:

- Pre-shipment reviews are conducted on transportation vehicles for cleanliness, maintenance, and suitability;
- The requirement for pre-shipment inspection is included in the transport protocol (refer 11.6.6) and the transport contract (refer 2.3.3);
- Loading and staging of product does not expose product to potential abuse or contamination.

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11.6.8 Transport

11.6.8.1 Refrigerated units shall maintain the food at required temperatures and the unit's temperature settings shall be set, checked and recorded before loading and core product temperatures recorded at regular intervals during loading as appropriate.

11.6.8.2 The refrigeration unit shall be operational at all times and checks completed of the unit's operation, the door seals and the storage temperature checked at regular intervals during transit.

11.6.8   Implementation Guidance

What does it mean?

This element refers to loading practices for refrigerated (i.e. chilled or frozen) goods and specifies practices that shall be included in the transport protocol (refer 11.6.6), if applicable. It will generally apply to outgoing finished product.

What do I have to do?

Temperature abuse during delivery and transport can occur if the process is not controlled. The transport and delivery protocol shall cover those aspects necessary to ensure refrigerated product is protected during transport.

On all transport journeys, the driver must ensure that the refrigeration unit is operational at all times. Facilities may choose to verify refrigeration with regular monitoring of temperature during transport by means of devices similar to a time–temperature recorder (TTR).

The supplier must use clean equipment when taking core product temperatures and open outer packaging to access units in the middle of larger cartons. In circumstances where it is difficult to core test product, or if core testing destroys the serviceability of the packaging, alternative methods of determining a products temperature can be used.

Prior to loading, refrigeration units must be pre-chilled. Food is to be transported at its appropriate storage temperature. It is recommended that the air temperatures of the refrigeration units are recorded at regular intervals during shipment and this can be accomplished by the use if data logger temperature recording devices. Appropriate temperature requirements for chilled food range between $0 - 4°C$ ($32 - 40°F$) and for frozen foods $\leq -18°C$ ($\leq 0°F$).

11.6.8   Auditing Guidance

This element will be audited as part of each facility audit though observation, review of records and interviews with warehouse operators and drivers Evidence may include:

- Loading protocols for refrigerated vehicles are documented;

- Loading protocols for refrigerated vehicles are implemented;

- Pre-ship review of refrigerated transport vehicle include temperature checks;

- Loading and staging of refrigerated product includes monitoring product temperatures;

- Refrigerated vehicles are capable of maintaining the product at the correct temperature;

- Data loggers indicate that the refrigeration units are kept on at all times;

- Door seals are checked during transit;

- Product temperatures are recorded;

- Core product temperatures indicate that product remains within the required range;

- Corrective action is taken if core product temperatures are outside the required range.

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11.6.9 Unloading

11.6.9.1 Prior to opening the doors, the refrigeration unit's storage temperature settings and operating temperature shall be checked and recorded. Unloading shall be completed efficiently and product temperatures shall be recorded at the commencement of unloading and at regular intervals during unloading.

11.6.9.2 Unloading practices shall be designed to minimize unnecessary exposure of the product to conditions detrimental to maintaining the product and package integrity.

11.6.9   Implementation Guidance

What does it mean?

This element refers to unloading practices for refrigerated (i.e. chilled or frozen) goods, and specifies practices that shall be included in the transport protocol (refer 11.6.6) if applicable. It will generally apply to incoming ingredients and raw materials, but may also apply to the delivery of finished product to the customer warehouse, if under the responsibility of the supplier.

What do I have to do?

The supplier must verify all incoming shipments are from approved suppliers, or are being shipped under prior arrangements made by site management.

Visual inspection and documentation of all incoming shipments of raw materials is required. The supplier must verify that all incoming carriers are in good repair, clean and free of offensive odors. Proper securing of all shipments shall be checked when delivered.

All seal numbers shall be recorded on shipping documents before the seal is broken. The supplier must record receiving temperatures and supplier codes for traceability purposes and inspect all incoming materials.

11.6.9   Auditing Guidance

This element will be audited as part of each facility audit through observation, review of records and interviews with warehouse operators. Evidence may include:

- Unloading protocols for refrigerated vehicles are documented;

- Unloading protocols for refrigerated vehicles are implemented;

- Prior to opening the doors, the refrigeration units on incoming refrigerated vehicles are checked;

- Unloading and receiving of refrigerated product include monitoring product temperatures;

- All incoming materials are inspected prior to receiving;

- All incoming materials are transferred to appropriate storage as required to maintain the temperature and integrity of the product;

- Core product temperatures indicate that product remains within the required range;

- Corrective action is taken if core product temperatures are outside the required range;

- Corrective action is taken if inspection of incoming materials finds damage, infestation or product contamination.

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11.7   Separation of Functions

11.7.1 Process Flow

11.7.1.1 The process flow shall be designed to prevent cross contamination and organized so there is a continuous flow of product through the process. The flow of personnel shall be managed such that the potential for contamination is minimized.

11.7.1   Implementation Guidance

What does it mean?

The layout of process and packing lines must be designed to minimize the potential for contamination from materials, premises, other processes, other parts of the same process, vehicle (e.g. forklift) traffic and pedestrians (e.g. employees, contractors or visitors).

What do I have to do?

The layout of food manufacturing processes must consider the risks of product contamination and be designed to minimize or eliminate those risks. This is particularly relevant in processes where there is a kill-step or other CCP, and the potential for post-CCP contamination must be considered and avoided.

Process flow considerations may include, but is not limited to:

- Avoiding u-shape, or circular processes where the "clean" or high-risk end of the process can be contaminated by the raw material or "dirty" end of the process (refer 11.7.4.1.i);
- Controlling pedestrian walkways to avoid employees walking from the "dirty" to "clean" end of the process;
- Avoiding where possible overhead platforms, catwalks or stairways where debris can fall into the process line (refer 11.2.4)
- Ensuring separation of allergenic materials (refer 2.8.2);
- Covering exposed product tanks, bins and conveyors to avoid airborne contamination;
- Avoiding equipment bottlenecks, corners or areas where product can be held up or accumulate.

11.7.1   Auditing Guidance

This element will be audited as part of each facility audit through observation. Evidence may include:

- Process flow has been designed to minimize the risk of cross contamination;
- The flow of personnel is designed to minimize the risk of cross contamination;
- Post kill-step parts of the process are well protected.

11.7.2 Receipt of Raw and Packaging Materials and Ingredients

11.7.2.1 Dry ingredients and packaging shall be received and stored separately from frozen and chilled raw materials to ensure there is no cross contamination. Unprocessed raw materials shall be received and segregated to ensure there is no cross contamination.

11.7.2   Implementation Guidance

What does it mean?

This element relates to 11.6.1 (cold storage), 11.6.2 (storage of dry ingredients, packaging) and 2.4.5 (incoming goods and services). Dry ingredients, raw materials and packaging need to be received and stored separately from frozen and chilled products.

What do I have to do?

All raw materials and work in progress shall be kept in appropriate conditions as to the type of material (see refer 11.6.1 and 11.6.2).

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Special consideration must also be given to identity preserved materials (refer 2.8.1) and materials/ingredients containing allergens (refer 2.8.2).

Materials shall be kept dry and free from contamination which may lead to waste of materials and potential hazards in the final product.

11.7.2   Auditing Guidance

This element will be audited as part of each facility audit through observation. Evidence may include:

- Dry materials and packaging are received separately from chilled/frozen materials;
- Dry materials and packaging are stored separately from chilled/frozen materials.

11.7.3 Thawing of Food

11.7.3.1 Thawing of food shall be undertaken in equipment and rooms appropriate for the purpose.

11.7.3.2 Equipment for water thawing shall be continuous flow to ensure the water exchange rate and temperature does not contribute to product deterioration or contamination. Water overflow shall be directed into the floor drainage system and not onto the floor.

11.7.3.3 Air thawing facilities shall be designed to thaw food under controlled conditions at a rate and temperature that does not contribute to product deterioration or contamination.

11.7.3.4 Provision is to be made for the containment and regular disposal of used cartons and packaging from thawed product so that there is no risk to the product.

11.7.3   Implementation Guidance

What does it mean?

Where food is required to be thawed for processing (e.g. fish blocks), thawing must be conducted under controlled conditions to ensure consistent and even thawing, including water thawing and air thawing.

What do I have to do?

Thawing of food (where performed) must be undertaken in a room and on equipment designed and dedicated for that purpose. The room must be located in close proximity to cold storage to prevent surface thawing before entering the thawing room.

Thawing may be by water or air. In both instances, the flow must be regulated to ensure an even and consistent thawing process in an environment that does not pose a product risk or expose the food to deterioration. Where water is used, overflow must be directed to drain.

Time and temperature of product thawing must be established and validated, as must the shelf life of the food prior to use after thawing.

11.7.3   Auditing Guidance

This element will be audited as part of each facility audit through observation. Evidence may include:

- Time and temperature of the thawing process have been established and validated;
- Thawing is a controlled process in a custom-designed room;
- Food is thawed in a way that does not pose a food safety or quality risk;
- Water used in water thawing of food is properly disposed of;
- Water used in water thawing is properly cooled;
- Food temperature is monitored during the thawing process;
- Used packaging from thawed food is properly contained and disposed of.

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11.7.4 High Risk Processes

11.7.4.1 The processing of high risk food shall be conducted under controlled conditions such that:

 i. Sensitive areas in which high risk food has undergone a "kill" step, a "food safety intervention" or is subject to post process handling, are protected/segregated from other processes, raw materials or staff who handle raw materials to ensure cross contamination is minimized;

 ii. Areas in which high risk processes are conducted are only serviced by staff dedicated to that function;

 iii. Staff access points are located, designed and equipped to enable staff to don distinctive protective clothing and to practice a high standard of personal hygiene to prevent product contamination;

 iv. Product transfer points are located and designed so as not to compromise high risk segregation and to minimize the risk of cross contamination; and

 v. An environmental monitoring program shall be in place for high risk areas. At a minimum, a written procedure detailing the applicable pathogens or indicator organisms to test for that industry, the number of samples to be taken and the frequency of sampling and corrective actions shall be documented. The responsibility and methods shall be documented and implemented. A sampling schedule shall be prepared.

11.7.4   Implementation Guidance

What does it mean?

High risk processes are those in which high risk foods are handled, exposed, stored, processed or packed.

High risk food is food that may contain pathogenic microorganisms and will support the formation of toxins or growth of pathogenic microorganisms, and has a significant likelihood of growth causing illness or injury to a consumer if not properly produced, processed, distributed and/or prepared for consumption. It may also apply to a food that is deemed high risk by a customer, declared high risk by the relevant food regulation or has caused a major foodborne illness outbreak (refer SQF Code, Appendix 2: Glossary).

This element outlines the specific conditions required in areas where high risk foods are processed or handled.

What do I have to do?

The process flow is particularly relevant for high risk processes where the product is subject to handling or exposure after a "kill-step." This includes (refer 11.7.1) segregation of the post-process end from the raw material end of the process; controlling pedestrian walkways to avoid personnel contamination; dedicated tools and equipment post-process; dedicated staff servicing the post-process end; and dedicated uniforms for staff working post-process.

The reference to the environmental monitoring program is self-explanatory, but is worth repeating as it is considered mandatory for areas in which high risk food is processed, handled or exposed. Failure to have an effective environmental monitoring program will result in a major non-conformance.

An environmental monitoring program (EMP) is a program which includes pathogen swabbing to detect risk in the sanitary conditions of the processing environment and is a verification of the effectiveness of the pathogen controls that a management facility has in place for high risk foods (refer Appendix 2: Glossary of Terms).

Swabbing must include not only the smooth, accessible parts of the process, but also the transfer points, bearings, etc., where product is likely to build up.

11.7.4   Auditing Guidance

Control procedures for high risk areas shall be reviewed as part of the initial desk audit. Subsequently, high risk processes will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

• There are control procedures in place for high risk processes;

• Control procedures are effectively implemented for high risk processes;

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- High risk areas are adequately segregated from raw material handling areas;

- High risk areas are only serviced by staff dedicated to that function;

- Post-process areas are not at risk from pedestrian walkways;

- Protective clothing is provided in high risk areas;

- Dedicated tools and equipment are available in high risk areas;

- Product transfer between equipment and between high risk areas and other areas poses no risk to product;

- An effective environmental monitoring program (EMP) is in place;

- The EMP includes a sampling schedule and responsibility for sampling;

- Swabbing includes transfer points and joints in equipment;

- Swabbing records are maintained.

11.7.5 Control of Foreign Matter Contamination

11.7.5.1 The responsibility and methods used to prevent foreign matter contamination of the product shall be documented, implemented and communicated to all staff.

11.7.5.2 Inspections shall be performed to ensure plant and equipment remains in good condition and potential contaminants have not detached or become damaged or deteriorated.

11.7.5.3 The use of temporary fasteners such as string, wire or tape to fix or hold equipment shall not be permitted.

11.7.5.4 The following preventative measures shall be implemented where applicable to prevent glass contamination:

    i. All glass objects or similar material in food handling/contact zones shall be listed in a glass register including details of their location;

    ii. Containers, equipment and other utensils made of glass, porcelain, ceramics, laboratory glassware or other like material (except where the product is contained in packaging made from these materials, or measurement instruments with glass dial covers or MIG thermometers required under regulation) shall not be permitted in food processing /contact zones;

    iii. Conduct regular inspections of food handling/contact zones to ensure they are free of glass or other like material and to establish no changes to the condition of the objects listed in the glass register; and

    iv. Inspect glass instrument dial covers on processing equipment and MIG thermometers at the start and finish of each shift to confirm they have not been damaged.

11.7.5.5 Wooden pallets and other wooden utensils used in food handling/contact zones shall be dedicated for that purpose, clean, maintained in good order. Their condition is subject to regular inspection.

11.7.5.6 Loose metal objects on equipment, equipment covers and overhead structures shall be removed or tightly fixed so as not to present a hazard.

11.7.5.7 Knives and cutting instruments used in processing and packaging operations shall be controlled, and kept clean and well maintained.

11.7.5   Implementation Guidance

What does it mean?

Foreign matter can originate from:

- External sources such as pests, raw material and packaging material (e.g., plastic and/or cardboard embedded in product by the supplier);

- Internal sources of foreign matter include the building (e.g., rust, insects and insulation), surface

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coatings (e.g., flaking paint, damaged render), equipment (e.g., nuts, pins, screws, washers, etc.), metal swarf, glass (e.g., from windows, or utensils) and wood (e.g., from pallets or brooms or other equipment).

In all cases, where there is risk for potential foreign matter contamination, procedures must be in place to eliminate or minimize the risk of foreign materials entering the product. The supplier needs to be aware of potential sources of foreign matter contamination, however, customer complaints (refer 2.1.5) may provide an indication of the prevalence and priority.

What do I have to do?

The foreign matter (including glass) protocol must outline the sources of foreign materials, the methods of control and the responsibility for taking action when foreign materials or glass are detected in the manufacturing environment.

The protocol shall include removal of all tools and machine parts from the processing areas when maintenance has been completed (refer 11.2.9.2 v1) and this shall be implemented and supervised. Plant and equipment must be inspected regularly to ensure it remains in good condition so that nothing has detached, damaged or deteriorated. Personnel must be encouraged to report all recognized sources of potential contaminants. This includes potential deterioration of e.g. metal blades in mixers and other areas where metal/metal wear can cause metal swarf to tear off.

Fabricated equipment covers shall be used wherever possible to prevent potential contamination from nuts, bolts, etc. Temporary repairs shall not be utilized within general processing facilities. The use of plastic, tape, string, cardboard or other non-permanent materials as a means to repair or alter the operation or equipment must be avoided. The site shall have included within its maintenance process (refer 11.2.9) control measures to be taken when repairs are needed during process to protect product from foreign materials that could impact food safety and quality. Containers, equipment and other utensils made of glass, porcelain, ceramics or other like material must not be permitted in any processing or food handling area.

Quality assurance staff must replace all laboratory glass containers with plastic containers if possible and avoid using glass instruments in processing areas. Regular inspections must be made to ensure that these areas are free of glass and staff must be made aware of their responsibility to adhere to the company foreign matter and glass protocol. All overhead lighting must be protected and shielded (refer 11.2.5).

The risk assessment of foreign material contamination and preventative controls shall be included within the food safety plan (2.4.3) and food quality plan (2.4.4) development. Each site must assess its risks of foreign material contamination to product and develop specific controls within its environment.

Wooden pallets are part of the food industry and are not expected to be banned from processing environments. Depending on the type of operation and the products being produced, the types of controls for the management of pallets can vary from one facility to another. At a minimum, all general processing facilities should have a pallet management program in place where pallets undergo inspection for broken slats or wood pieces protruding which could pose a risk to products. If pallets are stored for prolonged periods outdoor, then the pallets may need to be cleaned and inspected for vermin prior to entry into the processing area.

For high-risk operations and wet processing environments, the use of clean slip sheets or plastic pallets may be utilized to help to minimize the risk of foreign material or microbiological contamination to the products.

Knives and cutting instruments must be counted and controlled and kept clean to avoid cross-contamination.

11.7.5   Auditing Guidance

Foreign matter control (including glass) procedures shall be reviewed as part of the initial desk audit. Subsequently, foreign matter control procedures will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- Foreign matter control procedures are documented;

- Foreign matter control procedures identify all potential sources of foreign matter contamination;

- Foreign matter control procedures are effectively implemented;

- Foreign matter control procedures include responsibility for foreign matter control;

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- 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 processing areas or where food is handled or stored;

- 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 processing / handling area well maintained and clean;

- There are no loose materials on processing equipment;

- Knives and cutting instruments are clean and sanitized.

11.7.6 Detection of Foreign Objects

11.7.6.1 The responsibility, methods and frequency for monitoring, maintaining, calibrating and using screens, sieves, filters or other technologies to remove or detect foreign matter shall be documented and implemented.

11.7.6.2 Metal detectors or other physical contaminant detection technologies shall be routinely monitored, validated and verified for operational effectiveness. The equipment shall be designed to isolate defective product and indicate when it is rejected.

11.7.6.3 Records shall be maintained of the inspection by foreign object detection devices, and their verification.

11.7.6   Implementation Guidance

What does it mean?

Foreign matter detectors can include metal detectors, x-ray, color sorters, screens, sieves and filters. They must be designed and installed to detect and/or trap foreign objects that have been identified in a detailed risk assessment.   Their management, control, and calibration must be documented in procedures and work instructions which include responsibility and frequency.

What do I have to do?

Specific work instructions must be written on the monitoring of foreign material detection and prevention devices. The frequency of monitoring such devices, the criteria used in monitoring, and the corrective actions to take when foreign materials are discovered, or issues are discovered with the effectiveness of the prevention device must be defined within the methods. For example, if a metal detector must reject three wands (2.0 Fe, 2.5 non Fe, 3.0 SS) to pass, then when all three wands are not rejected, the site must have defined criteria for how such an incident will be handled including product identification and disposition (i.e. if the detector should fail, all product since last good check is placed on hold and must be re-run through a working metal detector).

Some examples of frequency of monitoring may be hourly metal detector checks, screen checks once per shift, tailings check daily and filter check once per shift or once per load.

Metal detectors, x-ray, color sorters (if used for defects or foreign material) and all other detection devices must be validated to ensure that they can effectively detect a foreign object within the packaged product that is passed through the device. The passing of wands through the device to ensure that it is working is verification. An example of a means for validation of a metal detector could be the placing of a piece of metal within the package of product (product would be marked to ensure it does not enter market). All types of packaging and sizes of product that are passed through the device must be validated as well as all new packaging or size of product.

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11.7.6   Auditing Guidance

Procedures for foreign object detection devices shall be reviewed as part of the initial desk audit. Subsequently, procedures will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- Methods are documented for the monitoring, maintenance or calibration of filters and screens;

- Responsibility is assigned for the monitoring, maintenance or calibration of filters and screens;

- Methods are effectively implemented for the monitoring, maintenance or calibration of filters and screens;

- Methods are documented for the monitoring, maintenance or calibration of physical contaminant detection devices;

- Responsibility is assigned for the monitoring, maintenance or calibration of physical contaminant detection devices;

- Methods are effectively implemented for the monitoring, maintenance or calibration of physical contaminant detection devices;

- Physical contaminant detection technology is routinely monitored;

- Physical contaminant detection technology is validated;

- Records are maintained of foreign body inspections;

- Records are not maintained of the validation of foreign body detection equipment.

11.7.7 Managing Foreign Matter Contamination Incidents

11.7.7.1 In all cases of foreign matter contamination the affected batch or item shall be isolated, inspected, reworked or disposed of.

11.7.7.2 In circumstances where glass or similar material breakage occurs, the affected area is to be isolated, cleaned and thoroughly inspected (including cleaning equipment and footwear) and cleared by a suitably responsible person prior to the commencement of operations.

11.7.7   Implementation Guidance

What does it mean?

The site must have established criteria for the identification, isolation and disposition of product affected when a foreign material issue is detected. The supplier must manage the incident with established procedures consistent with element 2.5.5 (Corrections and Preventative Actions).

What do I have to do?

The supplier must have a procedure in place to identify, isolate, inspect and rework or dispose of product that is known to be at risk of foreign matter contamination. This shall include isolation, labeling, quarantine of affected product, and depending on the nature of the suspected contaminant, further inspection or examination of the product to determine the source and extent of the contamination so that a decision can be taken on its disposition.

Where a glass or similar breakage occurs, the procedure (refer 11.7.6) must include a glass clean-up process that covers the footprint of the tramp glass. For example, breakage on high speed beverage bottling lines can spray glass over a wide area. The procedure must include a shut-down of the whole area, and a thorough clean-up to eliminate all broken glass. Brooms, brushes, vacuums and footwear must be included in the clean-up. The area must be thoroughly inspected before recommencing operations.

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11.7.7   Auditing Guidance

The foreign matter control (including glass) procedures shall be reviewed as part of the initial desk audit. Subsequently, the procedure including glass clean-up protocols will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. Evidence may include:

- Isolation and rework/disposition is included in the foreign matter control procedure;

- Isolation and rework/disposition is effectively implemented;

- Glass breakage procedure is included in the foreign matter control procedure;

- Glass breakage procedure includes clean-up of footwear, tools, brooms, brushes and other equipment;

- Glass breakage procedure is effectively implemented.

11.8   On-Site Laboratories

11.8.1 Location

11.8.1.1 On site laboratories shall be located separate from any food processing or handling activity and designed to limit access only to authorized personnel.

11.8.1.2 Provisions shall be made to isolate and contain all laboratory waste held on the premises and manage it separately from food waste. Laboratory waste water outlet shall as a minimum be down stream of drains that service food processing and handling areas.

11.8.1.3 Signage shall be displayed identifying the laboratory area as a restricted area accessible only by authorized personnel.

11.8.1   Implementation Guidance

What does it mean?

On site laboratories are an option based on cost and needs of the supplier. In many cases, outsourcing laboratory services is applicable and reduces the risk of having on-site laboratories. In most instances, testing for monitoring purposes may be carried out in an on-site laboratory, while validation activities are outsourced to an accredited laboratory.

What do I have to do?

This guidance is specific to on-site laboratories only. Laboratories must be located away from any food processing or handling activities or food contact surfaces to avoid contamination. Raw materials, ingredients, work-in-progress, packaging or exposed product shall not be exposed to laboratory waste.

Signage shall be posted at laboratory entrance(s) restricting access to trained, authorized personnel. Signage may consist solely of icons such as those published by the International Association for Food Protection to accomplish these requirements, and other local regulatory requirements must be applied.

It is not necessary for the internal laboratory to be accredited to ISO 17025 or equivalent; this is required in the Code for only external laboratories (refer 2.5.6.1.iv); however the testing methods used must be justified and proficiency against an accredited laboratory is recommended to validate the testing methods.

Laboratory waste must be labeled, stored and disposed of separately from food waste. This applies to contained waste and waste flushed to drain.

11.8.1   Auditing Guidance

This element will be audited as part of each facility audit though observation. Evidence may include:

- The on-site laboratory is separated from food processing and handling areas;

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- Laboratory access is restricted to only authorized personnel;

- Laboratory waste is properly treated prior to disposal;

- Laboratory waste is adequately contained and separated from general food waste;

- Adequate signage is available for the laboratory.

11.9   Waste Disposal

11.9.1 Dry and Liquid Waste Disposal

11.9.1.1 The responsibility and methods used to collect and handle dry, wet and liquid waste and store prior to removal from the premises shall be documented and implemented.

11.9.1.2 Waste shall be removed on a regular basis and not build up in food handling or processing areas. Designated waste accumulation areas shall be maintained in a clean and tidy condition until such time as external waste collection is undertaken.

11.9.1.3 Trolleys, vehicles waste disposal equipment, collection bins and storage areas shall be maintained in a serviceable condition and cleaned and sanitized regularly so as not to attract pests and other vermin.

11.9.1.4 Adequate provision shall be made for the disposal of all solid processing waste including trimmings, inedible material and used packaging. Waste held on site prior to disposal shall be stored in a separate storage facility and suitably fly proofed and contained so as not to present a hazard.

11.9.1.5 Adequate provision shall be made for the disposal of all liquid waste from processing and food handling areas. Liquid waste shall be either removed from the processing environment continuously or held in a designated storage area in lidded containers prior to disposal so as not to present a hazard.

11.9.1.6 Reviews of the effectiveness of waste management will form part of daily hygiene inspections and the results of these inspections shall be included in the relevant hygiene reports.

11.9.1   Implementation Guidance

What does it mean?

The procedures for storage and disposal of all types of waste – dry and liquid – 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 and waste disposal and transport must also be considered.

What do I have to do?

As with solid waste, the disposal of any liquid waste from production and handling areas is essential to the maintenance of a clean and safe working environment. Procedures are to be in place to monitor the effective removal of liquid and solid wastes per written plant procedures.

On-site incinerators, compactors or other waste collecting/disposal equipment need to be designed, sited, constructed and operated so as not to create a hazard to product or the surrounding environment. Compactors and other waste storage areas must not be sited adjacent to any area where food product is exposed.

Cafeteria/lunch room 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.

At the end of the each shift or day (depending on the site and operation), all office trash, processing trash, packaging material trash, etc. needs to be removed by designated employees and disposed of in the external trash receptacle. All trash generated in the manufacturing and handling areas must be separated for recycling where possible.

Empty chemical drums shall be collected and transported to secured storage (refer 11.2.11.7 and 11.2.13.7).

Exterior waste containers need coverage or lids to prevent attracting flies or vermin. It is also advisable to secure waste containers in regards to site security requirements (refer 2.7)

Review of the waste collection and handling system should be incorporated as part of the internal audit program of the site (refer 2.5.7).

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11.9.1   Auditing Guidance

Waste handling, storage and disposal procedures shall be reviewed as part of the initial desk audit. Subsequently, waste storage and removal will be audited as part of each facility audit through observation, review of records and interviews with operating personnel. 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 processing and food handling areas;

- Waste collection and storage areas are maintained and cleaned;

- Containers for waste are properly maintained and cleaned;

- Trolleys, vehicles and equipment used for waste are properly cleaned;

- Daily inspections are conducted to monitor handling of waste;

- Records are maintained of waste disposal;

- The waste system is included in the internal audit program.

11.10   Exterior

11.10.1   Grounds and Roadways

11.10.1.1 The grounds and area surrounding the premises shall be maintained to minimize dust and be kept free of waste or accumulated debris so as not to attract pests and vermin.

11.10.1.2 Paths, roadways and loading and unloading areas shall be maintained so as not to present a hazard to the food safety operation of the premises.

11.10.1.3 Surroundings shall be kept neat and tidy and not present a hazard to the hygienic and sanitary operation of the premises.

11.10.1.4 Paths from amenities leading to facility entrances are required to be effectively sealed.

11.10.1   Implementation Guidance

What does it mean?

Unkempt surrounds (including the accumulation of unused equipment, pallets, bins, drums or waste) can provide harborage for vermin and other pests and in turn pose a serious hazard to the hygienic operation of a food premises.

What do I have to do?

The provision of lawn and landscaping is effective for sealing large traffic areas. High vehicle traffic areas are also required to be effectively sealed to prevent dusty conditions.

Exterior construction projects that impact sealed areas should be reviewed, and controls established on a temporary basis during the project timeline.

Where employee amenities are external to the site, the access to the amenities must be sealed, and should be covered to allow for weather conditions.

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11.10.1   Auditing Guidance
This element shall be reviewed as part of each facility audit. Evidence may include: • Exterior grounds are maintained, tidy and uncluttered and do not provide pest harborage areas;   • Exterior grounds are managed to minimize dust or other hazards;   • Exterior grounds are kept free of waste;   • Exterior paths and roadways are managed to minimize dust or other hazards;   • Exterior loading and unloading areas are maintained to minimize hazards;   • Grass and vegetation is kept under control in surrounding areas;   • Equipment that is stored outside is protected from the weather;   • External paths from amenities to the site are sealed.