

The AIB International

# Consolidated Standards for Inspection

# **Retail Facilities**

North America Latin America Europe/Middle East/Africa Asia/Pacific

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# **Preface**

#### **Description of the Document**

The AIB International Consolidated Standards for Inspection for Retail Facilities is a collection of information gathered to help a reader understand:

- What an inspection is
- The difference between an inspection and an audit
- · How to read and use the AIB International Consolidated Standards
- How an AIB International inspection is scored
- How to prepare for and participate in an AIB International inspection
- · Additional sources for understanding, implementing, and expanding Prerequisite and Food Safety Programs

#### **Design of the Document**

The design of the document employs the following strategies to support ease of use:

- Consistent terminology used throughout the document
- Unambiguous language that can be globally understood
- Current-use language and not "regulation speak"
- Related content grouped in one location
- Standards constructed with the same hierarchy:
  - ♦ Category
    - Standard
      - » Requirement
- · As much as possible, one item measured per Standard
- · Meaningful phrases highlighted to support quick scanning

## **Inspection and Audit**

#### **Definitions of Inspection and Audit**

An *inspection* is a thorough physical review of a food facility to assess what is actually happening in a facility at a moment in time. This snapshot gives a realistic assessment of conditions that can be both positive and negative for food processing. An inspection focuses on *physical review*.

An *audit* is a systematic evaluation of food facility documentation to determine if Programs and related activities achieve planned expectations. An auditor looks at data over time to see if positive or negative trends are developing. An audit focuses on *documentation review*.

# **Benefits of Inspection and Audit**

Choosing an inspection or an audit depends on the goal. Many organizations choose both because inspections and audits support each other.

Choose an inspection to:

- Reveal actual practices or issues that may not be apparent from paperwork
- Focus on root causes, not just on symptoms
- Educate personnel through interaction with an inspector
- · Identify, reduce, eliminate, and prevent food hazards in a facility
- Prevent expensive and damaging recalls
- · Comply with government regulation and industry expectations for safe food
- Improve and maintain a healthy, sanitary environment for food handling
- Produce safe food products

#### Choose an audit to:

- Comply with benchmarked standards
- Realize efficiencies through better management of documentation
- · Achieve certification
- · Look at trends over time

#### Introduction to the Standards

The AIB International Consolidated Standards for Inspection for Retail Facilities are statements that represent key requirements that a facility must meet in order to keep the food products in a facility wholesome and safe. The Standards also reflect what an inspector would expect to see in a facility that maintains a food-safe processing environment.

#### The Categories

The Standards include five categories:

#### 1. Operational Methods and Personnel Practices

The receipt, storage, monitoring, handling, and processing of raw materials to manufacture and distribute safe final product.

Standards in this category are related to **food handling and processing**. Facilities need to be confident that personnel, processes, and conditions do not introduce a food safety concern as raw materials are received, transferred, stored, transported, manipulated, or processed to deliver a final product. The Operational Methods and Personnel Practices Standards show how a facility can prevent people and processes from contaminating a product.

#### 2. Maintenance for Food Safety

The design, upkeep, and management of equipment, buildings, and grounds to provide a sanitary, efficient, and reliable manufacturing environment.

Standards in this category are related to **equipment**, **grounds**, **and structures**. The design, construction, and maintenance of equipment and buildings are critical to providing and maintaining a food-safe environment. The Maintenance for Food Safety Standards provide best practices for optimizing the design and care of the facility and equipment so that they are easy to manage and do not create sanitation or food safety issues.

#### 3. Cleaning Practices

The cleaning and sanitizing of equipment, utensils, and buildings to provide a wholesome and safe processing environment.

Standards in this category are related to **cleaning and sanitizing**. The methods of cleaning and sanitizing, the types of chemicals used, the frequency of cleaning activities, and the control of microbes must all be done expertly to protect products from food safety issues. The Cleaning Practices Standards give cleaning guidelines to prevent contamination.

#### 4. Integrated Pest Management

The assessment, monitoring, and management of pest activity to identify, prevent, and eliminate conditions that could promote or sustain a pest population.

Standards in this category are related to **pest management**. While it is important to remove pests from a facility, it is more important to prevent pests from ever having the opportunity to thrive in a food environment. The Integrated Pest Management Standards give strategies for managing multiple approaches to ensure that pests do not adulterate food products.

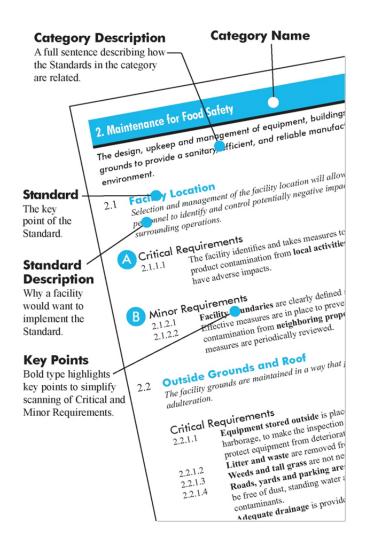
#### 5. Adequacy of Prerequisite and Food Safety Programs

The coordination of management support, cross-functional teams, documentation, education, training, and monitoring systems to ensure all departments of the facility work together effectively to deliver a wholesome and safe final product.

Standards in this category are related to **management and teamwork**. It is important to have Programs in place, but if a Program is not formalized through designing, planning, management, documentation, and review, then Prerequisite Programs will depend on who is undertaking a given activity or task that day. The Adequacy Standards make sure that Prerequisite Programs are carefully designed and implemented to ensure consistency across the entire facility.

**Note**: While other categories focus mainly on inspection, this category largely involves evaluation of Program documentation. However, the observations made and documents reviewed in the first four categories will directly affect how the inspector will assess the facility in the Adequacy category. Findings on the floor are a direct reflection of how well Programs have been implemented.

#### How to Read the Standards





#### **Critical Requirements**

These are the critical requirements against which a facility is scored. In many regulations, critical requirements are described as SHALLS. Critical requirement observations are assessed as Improvement Needed, Serious, or Unsatisfactory unless there is an alternate program in place that meets the intent of the requirements. A 4-place number with a 3rd place value of "1" identifies Critical Requirements.



#### **Minor Requirements**

These are the minor requirements against which a facility is scored. In many regulations, the minor requirements are described as SHOULDS. Minor requirement observations are assessed as Minor Issues Noted. A 4-place number with a 3rd place value of "2" identifies Minor Requirements.

# O Indicates Standards not applicable to Retail Facilities

**Note:** The Consolidated Standards for Inspection for Retail Facilities is a targeted version of the more general AIB International Consolidated Standards for Inspection of Prerequisite and Food Safety Programs. The numbering convention from the Prerequisite and Food Safety Programs Standard is preserved in the Retail Facilities Standard in order to keep numbering consistent. However, any Standards or requirements from the Prerequisite and Food Safety Programs Standards that are not applicable to the retail industry are not included in this document. A symbol, Θ, signifies that missing numbers in the series of Standards or requirements are intentional.

# **Scoring**

The scoring of the facility occurs in five steps:

- 1. The Inspection
- 2. Determining Risk and Assigning Category Scores
- 3. Evaluating the Adequacy of the Food Safety Program
- 4. Total Score
- 5. Recognition

# The Inspection

<mark>Li</mark>ke a chain, the strength of a Food Safety Program depends on its weakest link.

To assess the food safety risks in a facility, an AIB Inspector conducts a thorough and fair physical inspection and concludes with a review of written programs. The Inspector notes observations based on the five categories of The AIB International Consolidated Standards for Inspection:

- 1. Operational Methods and Personnel Practices
- 2. Maintenance for Food Safety
- 3. Cleaning Practices
- 4. Integrated Pest Management
- 5. Adequacy of Prerequisite and Food Safety Programs

# **Determining Risk and Assigning Category Scores**

The AIB Inspector will then assign a level of risk and a Category score to the five categories shown above. Use Table 1 as a guide.

Table 1—Risk Assessment

Risk Assessment	Description	Category Score Range
No Issues Observed	No identified risk	200
Minor Issues Noted	No potential for contamination	180-195
Improvement Needed	A potential hazard, partial program omission, or food safety finding that is inconsistent with the standards. If this hazard, omission, or finding is not corrected, it could lead to a program failure	160-175
Serious	A significant food safety risk or risk of program failure	140-155
Unsatisfactory	An imminent food safety hazard, program failure, or departure from the Good Manufacturing Practices	≤135

The Inspector uses a three-step process to assess risk. The inspector:

- 1. Determines the most significant observation(s) in a category and assigns a score range.
- 2. Determines the severity of the most significant observation(s) and decides whether the initial score should be at the top or bottom of the score range assigned.
- 3. Lowers the initial score in 5 point increments for each additional observation if the assigned score is at the top of the score range.

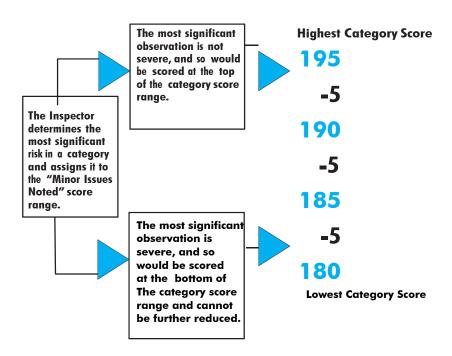


Figure 1—Example of Risk and Category Score Determination in the Minor Issues Noted Range

Here are some scoring guidelines:

- The initial score for a category is always either at the top or the bottom of the range.
- A category score can be adjusted from the top of the range, but will never go below the bottom of the range.
- All critical or minor findings associated with a single Standard of a category would be grouped together as a single observation. For example, any findings (single or multiple) noted under the following Standard and related requirements would only be counted as one observation:
  - 1.6 Pallets
    - 1.6.1.1
    - 1.6.1.2
    - 1.6.2.1
    - 1.6.2.2
- Findings assigned to several Standards within a category would be considered distinct and separate observations. For example, any findings (single or multiple) noted for each of the following Standards would be counted as 2 observations:
  - 1.1 Rejection of Shipments/Receipt of Dry Goods
  - 1.3 Storage Practices
- A single observation in a category may be severe enough to require the category to be scored at the bottom of the score range. Severity can be due to a single significant observation, or it can be due to multiple findings establishing a pattern within a single observation.
- Observations of Minor Requirements are always assessed in the Minor Issues Noted score range.
- If the initial score is at the top of the assigned score range, each additional observation lowers the scores in 5 point increments. Possible scores are listed in Table 2.

Table 2—Lowering an Initial Category Score for Multiple Observations

# of Observations	Category Scores for All Risk Assessments			
	Minor Issues Noted	Improvement Needed	Serious	Unsatisfactory
1	195	175	155	135
2	190	170	150	130
3	185	165	145	125
4	180	160	140	120
5+	180	160	140	115*

<sup>\*</sup> Will be lowered an additional 5 points for additional observations.

# **Evaluating the Adequacy of the Food Safety Program**

Evaluation of the written programs is not limited to determining if a written program and its records are in place and current. What the AIB Inspector sees in the facility determines whether or not the written Food Safety Programs actually work. A facility cannot have perfect programs if food safety observations are noted during the inspection.

The Inspector reviews the observations in the facility against the written programs to determine where the gaps in the program exist and what should be done to alleviate these conditions.

The score for the Adequacy Category is determined using the same method that is used for calculating the other four category scores. The Adequacy Score, however, is also guided by four additional rules.

## **Rules to Determine the Adequacy Score**

**Rule 1**—The Adequacy Score cannot be the highest score. How can the programs that manage outcomes in the other categories be scored higher than the categories themselves?

**Rule 2**—The Adequacy Score can be no more than one Risk Assessment Category higher than the category with the worst observation. In other words, if the worst Risk Assessment is Serious, how could the Adequacy section be said to have only minor issues with its operation? Again, this relates to how well the program functions in a facility. See Table 3.

Table 3—Maximum Adequacy Score Range Based on Rule 2

Worst Risk Assessment	Related Score Range for Worst Risk Assessment	Maximum Adequacy Score Range
Minor Issues Noted	180-195	195*
Improvement Needed	160-175	180-195
Serious	140-155	160-175
Unsatisfactory	≤135	140-155**

<sup>\*</sup> Rule 4 applies

**Rule 3**—If the worst score is at the bottom of the score range, the Adequacy Score can be no higher than the bottom category score, one level above. If observations require the score to be at the bottom of the category score range, this indicates that the related program is not effective.

<sup>\*\*</sup> Rule 3 applies

Table 4—Maximum Adequacy Score Based on Rule 3

Worst Risk Assessment	Score of Worst Risk Assessment at Lowest Number in the Score Range	Maximum Adequacy Score
Minor Issues Noted	180	195*
Improvement Needed	160	180
Serious	140	160
Unsatisfactory	≤ 135	140

<sup>\*</sup> Cannot be the highest category score

Note: This rule does not apply if scoring a category where the worst risk assessment is "Minor Issues Noted".

**Rule 4**—A 200 may only be assigned for Adequacy if the other four category scores are all assigned a 200; e.g., the only way it can be said that the programs are working perfectly is if there are no observations to indicate otherwise.

# Total Score

The Total Score is the sum of the points assigned to each category: Operational Methods and Personnel Practices, Maintenance for Food Safety, Cleaning Practices, and Integrated Pest Management, but is not complete until aligned with the Adequacy of Prerequisite and Food Safety Programs because written programs drive the results from the other four categories.

# Recognition

Recognition is based on the Total Score assigned to the facility. A recognition document will be awarded to the facility when:

- The inspection is based solely on the AIB International Consolidated Standards for Inspection (not customer-defined interpretations or guidelines)
- There is:
  - ♦ No category score less than or equal to 135
  - ♦ There are no unsatisfactory findings (even if the Total Score is at or above 700)

The AIB International Recognition Document:

- Recognizes that on the day of the inspection, the facility achieved a certain score according to the AIB International Consolidated Standards for Inspection
- Is not a certificate of compliance (like an ISO certificate)
- Does not have a specific expiration date
- · Is labeled as announced, unannounced, or announced to corporate
- Defines which areas of the facility were included in the inspection

## **Sample Scoring with Explanations**

Category Score Range	180-195	160-175	140-155	≤135		
Category	# Minor Issues Noted Observations	# Improvement Needed Observations	# Serious Observations	# Unsatisfactory Observations	Category Score	
Operational Methods and	6	0	0	0	180	
Personnel Practices					100	
Maintenance for Food Safety	8	3	0	0	165	► E
Cleaning Practices	8	1	0	0	160	<b>O</b>
Integrated Pest Man- agement	2	4	3	0	145	
Adequacy of Prerequisite and Food Safety Programs	0	3	0	0	165	
				Total Score	815	
			D		E	

# **Sample Scoring with Explanations**

- The Inspector noted six observations at the lowest risk of severity, but the category score does not go lower than the lowest possible score for the Minor Issues Noted Category (180).
- Three observations are documented. There were actually five findings, but three of the findings were related to the same requirement in the Standard and were therefore grouped together as a single observation.
- The severity of the single observation was significant so the score at the bottom of the score range (160) is assigned.
- The Serious observations that posed the most potential for contamination were at the lowest severity of risk, so the category score begins with the first observation at 155. There were two additional observations, so the score was lowered by five points for each to 145.
- The Adequacy Score is determined using the most constraining rules that apply:
  - The observation with the most significant risk is in the Improvement Needed category so the score should fall in the 160-175 range.
  - The most significant observation is not severe, so the initial score is 175.
  - There are three separate observations, so five points are deducted for each additional observation beyond the first (175 to 170 to 165).
  - Rule 1: The highest score in the other four categories is 180, but that is outside the 160-175 range so Rule 1 does not apply.
  - Rule 2: The lowest score in the other four categories is 145, so the Adequacy Score can be no higher than the 160-175 range.
  - Rule 3: The lowest category score (145) is not at the bottom of the range, so Rule 3 does not apply.
  - Rule 4: The other four categories are not assigned a 200, so Rule 4 does not apply.

#### **Automatic Assessment of Unsatisfactory**

The following list includes examples of a few commonly found conditions that require an assessment of "unsatisfactory." This list *only represents examples* of unsatisfactory conditions, and is not complete. Similar conditions not specifically stated will be assessed by the inspector.

- 1. Operational Methods and Personnel Practices
  - a. Holding temperatures (refrigerators or coolers) in excess of 40°F or 4°C for microbiologically sensitive ingredients or products (**Note**: the exact temperature limit may vary depending on country regulation)
  - b. Open sores or boils on personnel who have direct contact with product, ingredients, or product zones
  - c. Ingredients that are infested
  - d. Using or preparing foods that are adulterated or otherwise unfit for human consumption
  - e. Using, serving, or presenting for sale food that may have been contaminated by any person(s) affected by a disease or condition as specified in these standards
- 2. Maintenance for Food Safety
  - a. Flaking paint, rust, or other materials in product zone where product contamination is likely
  - b. Maintenance activity or equipment condition resulting in oil, metal, or other foreign material in or over a product zone
- Cleaning Practices
  - a. The presence of extensive amounts of mold either on or near product zones
  - b. Widespread infestation above sensitive or exposed ingredients, above product zones, or in equipment
- 4. Integrated Pest Management
  - a. Insects
    - i. Houseflies or fruit flies in excessive numbers with little control provided
    - ii. Any cockroach activity on or in a product zone
  - b Rodents
    - i. Visual presence of live rodent(s)
    - ii. Evidence of rodent excreta or gnaw marks on raw materials or finished product
    - iii. Decomposed rodent
  - c. Birds
    - i. Birds residing in processing areas or warehouses
    - ii. Bird excreta on product zones, raw materials, or finished product
  - d. Pesticides used inconsistently with label directions
- 5. Adequacy of the Prerequisite and Food Safety Programs
  - a. Non-compliance with written Programs
    - i. Failure to comply with HACCP Critical Limits or monitoring requirements
  - b. Poorly-defined written Prerequisite Programs
  - c. Inadequate or ineffective implementation of a Prerequisite Program resulting in actual or likely product contamination

# Consolidated Standards for Inspection

## 1. Operational Methods and Personnel Practices

The receipt, storage, monitoring, handling, and processing of raw materials to manufacture and distribute safe final product.

#### 1.1 Rejection of Shipments/Receipt of Dry Goods

A facility can safeguard its food products by identifying and barring entry or shipment of potentially contaminated raw materials or finished products.

#### **Critical Requirements**

- 1.1.1.1 Damaged, infested, or **dirty transports/containers** are rejected.
- 1.1.1.2 Materials shipped in damaged, infested, or **dirty vehicles** are rejected.
- 1.1.1.3 The facility maintains **documentation of rejected shipments** that includes the reasons for rejection.

#### 1.2 Rejection of Shipments/Receipt of Perishables

A facility can safeguard its food products by identifying and barring entry or shipment of potentially contaminated raw materials or finished products.

#### **Critical Requirements**

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- 1.2.1.2 Materials shipped in damaged, infested, or **dirty vehicles** are rejected.
- 1.2.1.3 Perishable or frozen materials **meet specific minimum temperature requirements** at points of shipment, transportation, and receipt.

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1.2.1.5 The facility maintains **documentation of rejected shipments** that includes the reasons for rejection.

#### 1.3 Storage Practices

Raw materials and finished foods are stored in a way to meet Program requirements for safe storage of materials.

#### **Critical Requirements**

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- 1.3.1.4 Raw materials are stored at least **18 in. or 45 cm** away from walls and ceilings.
- 1.3.1.5 Adequate **space is maintained between rows** of stored raw materials to allow cleaning and inspection. Procedures are followed to guarantee the proper cleaning, inspection, and monitoring for pest activity in storage areas, where an 18 in. or 45 cm inspection perimeter cannot be provided.

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- 1.3.1.7 Food is not **stored on the floor** or in direct contact with shelves or racks of cold storage boxes or other contaminated surfaces.
- 1.3.1.8 If open dishes or pans of food are **stacked**, protection is provided.
- 1.3.1.9 Foods other than raw vegetables that will be cooked are **covered** when not being prepared or served.

#### Minor Requirements

- 1.3.2.1 Receiving dates are on a **permanent** part of the raw material packaging (i.e., not on stretch-wrap).
- 1.3.2.2 There are at least **14 in. or 35 cm** of space between pallet rows.
- 1.3.2.3 **Storage slots** and traffic lanes are provided for items stored at floor level.
- 1.3.2.4 If an 18 in. or 45 cm clearance from walls is impossible due to aisle widths and forklift turning space, a **rack system** can be installed against the wall. In this case, a bottom rail is installed 18 in. or 45 cm off the floor so that no pallets are stored on the floor.

#### 1.5 Raw Material Inventory

Raw material inventories are maintained at reasonable volumes to avoid excessive age and insect infestation.

#### **Critical Requirements**

- 1.5.1.1 Ingredients, packaging supplies, and other materials are rotated on a **First-In**, **First-Out** (**FIFO**) **basis** or other verifiable method (such as First Expired, First Out [FEFO]) to ensure stock rotation.
- 1.5.1.2 **Insect-susceptible** materials in storage longer than four weeks are regularly inspected.

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#### 1.16 Waste Material Disposal

Waste materials and their removal are managed to avoid contamination.

#### **Critical Requirements**

- 1.16.1.1 Trash or inedible waste is **stored** in properly covered, labeled containers.
- 1.16.1.2 Waste containers are **emptied** at least daily.

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#### 1.22 **Temperature-Sensitive Materials**

*Temperature controls prevent the growth of pathogens in susceptible materials.* 

#### **Critical Requirements**

- 1.22.1.1 Raw materials, work-in-process, and finished product capable of supporting the rapid growth of pathogenic microorganisms are **properly stored**.
- 1.22.1.2 Temperature-sensitive materials are stored to maintain appropriate internal temperatures:
  - 40°F or 4°C or below
  - 140°F or 60°C or above
  - Or in accordance with country-specific regulation

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1.22.1.5 An **air temperature thermometer** accurate to +/- 3°F or 2°C is provided in all refrigerators and freezers.

#### 1.23 Cross Contamination Prevention

Incompatible or hazardous materials require separate handling to prevent contamination.

#### **Critical Requirements**

- 1.23.1.1 **Incompatible materials** (such as raw and cooked products) **are stored** under conditions that prevent cross contamination.
- 1.23.1.2 Measures are taken to prevent cross contamination by **hazardous ingredients**, such as allergens.
- 1.23.1.3 **Systems** are set up to reduce any potential physical, chemical, or microbiological contamination risks.
- 1.23.1.7 Measures are taken to prevent cross contamination that can cause **customer complaints**, such as meat in vegetarian products, or non-organic ingredients in organic foods.

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- 1.23.1.15 All **unwrapped or unenclosed** food or drink on display is protected from public handling or contamination by effectively shielding direct contact.
- 1.23.1.16 Food enclosed in multi-shelf cases is **wrapped or covered** to prevent contamination.
- 1.23.1.17 Food **transported to a restaurant** is rejected unless it is wrapped, covered, or otherwise protected.
- 1.23.1.18 **Condiment containers** are covered when not in use.
- 1.23.1.19 Food that has been served to a customer **cannot be served again** or left for the next customer.
- 1.23.1.20 Packaged food that is not potentially hazardous and has not been unwrapped may be re-served.

#### 1.24 Containers and Utensils

If not managed, any food contact containers or utensils have the potential to create food safety hazards.

#### **Critical Requirements**

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- 1.24.1.2 Containers are **only used for their designated purposes.**
- 1.24.1.3 Containers are **legibly labeled with contents.**

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- 1.24.1.7 Utensils, tables, sinks, cabinets, hoods, shelves, equipment, fixtures, and other items used to eat, drink, or prepare food are **clean and in good repair**.
- 1.24.1.8 **Single-use containers** such as formed buckets, bread wrappers, aluminum pie plates, and cans are only used once. Containers made of plastic, glass, or other foodgrade materials that have smooth sides and can be easily cleaned may be reused if they are cleaned, sanitized, and properly labeled.
- 1.24.1.9 All **multiple-use utensils** used to store, prepare, cook, or serve food or drink are cleaned and rinsed immediately after the daily production is complete, after each use or after each meal.
- 1.24.1.10 All **multiple-use eating and drinking utensils** are thoroughly washed, rinsed, and subjected to a bactericidal treatment after each use. A sufficient amount of these utensils is needed to allow washing, rinsing, sanitizing, and air drying before reuse.
- 1.24.1.11 **Food preparation surfaces** that come in contact with potentially hazardous foods and are not subjected to heat during routine cooking operations are cleaned and sanitized after each use.

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#### 1.27 Hand Washing Facilities

Personnel are provided the equipment to effectively remove contamination from their hands.

#### **Critical Requirements**

- 1.27.1.1 Suitable and properly maintained hand washing facilities are **located** at the entrance to production areas and in restrooms.
- 1.27.1.2 **Single-use towels or air dryers** are provided at hand washing stations.
- 1.27.1.3 **Hand sanitizing stations** are provided, where appropriate.
- 1.27.1.4 Hand sanitizers are regularly monitored for **proper concentration** to ensure effectiveness.
- 1.27.1.5 "Wash hands" signs appear above sinks and entries to food preparation areas, where appropriate.

#### **Minor Requirements**

1.27.2.1 Dispensers for **disposable paper towels** are covered.

#### 1.28 Washrooms, Showers, and Locker Rooms

Cleanliness diminishes chances of contamination being spread from personnel areas.

#### **Critical Requirements**

- 1.28.1.1 Washrooms are maintained in a **sanitary** condition. If provided, showers and locker rooms are maintained in a sanitary manner.
- 1.28.1.2 **No pests or mold** are present.
- 1.28.1.3 There are **no open food or drinks** in lockers or locker rooms, where lockers are provided.
- 1.28.1.4 "Wash hands" signs are displayed in all restrooms, lunchrooms, and smoking areas.

#### **Minor Requirements**

1.28.2.1 Company-owned **personnel lockers are inspected** on a defined frequency.

#### 1.29 **Personal Hygiene**

Personnel conform to hygiene practices to avoid becoming a source of contamination.

- 1.29.1.1 **Trained supervisors** are responsible for ensuring that all personnel are complying with facility policies regarding personnel practices.
- 1.29.1.2 **Personnel wash hands** before beginning work, and after eating, drinking, smoking, using the restroom, or otherwise soiling hands.
- 1.29.1.3 Personnel are encouraged to practice **good personal hygiene** at all times.

#### 1.30 Work Clothes, Changing Facilities, and Personnel Areas

Clothing may contaminate food products if the clothing is dirty or made of unsuitable material. Changing facilities are provided to allow personnel to keep work clothes clean.

#### **Critical Requirements**

1.30.1.1 Personnel wear suitable, **clean outer garments or uniforms.** 

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1.30.1.4 If worn, **gloves** are adequately controlled to avoid product contamination.

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- 1.30.1.6 **Changing facilities are provided** for all employees, visitors, and contractors to allow personnel to change clothes before entering food-processing areas, if necessary.
- 1.30.1.7 **Work clothes are stored** separately from outdoor clothing and personal items in changing facilities.

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1.30.1.9 Personnel preparing or handling food or food contact surfaces **wear effective hair restraints**. Hair restraints may include head, beard, or moustache covers.

#### **Minor Requirements**

- 1.30.2.1 There are **no pockets above the waist** on outer garments.
- 1.30.2.2 Suitable **break rooms and dining facilities** are provided for all personnel.
- 1.30.2.3 Employees, such as hosts, hostesses, servers, and counter staff who only serve beverages and wrapped or packaged foods, **wear hairnets if they present a risk** of contaminating exposed food.

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#### 1.32 Personal Items and Jewelry Control

Personal items and jewelry present product contamination risks if not controlled.

#### **Critical Requirements**

- 1.32.1.1 Personnel in contact with food preparation areas **remove jewelry and cosmetic items** including, but not limited to:
  - Visible or exposed piercings and body jewelry
  - Watches
  - Earrings
  - Necklaces
  - Bracelets
  - Rings with settings
  - False fingernails (unless covered by intact gloves that are clean and in good condition)
  - False eyelashes
  - Fingernail polish (unless covered by intact gloves that are clean and in good condition)

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- 1.32.1.3 Personnel eat, drink, chew gum, and use tobacco products **away from preparation or service areas**.
- 1.32.1.4 **Personal food and belongings** are not brought into food preparation or storage areas.
- 1.32.1.5 All **personal property is stored** in a designated area.

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1.32.1.9 Personnel **do not use tobacco** in any form while washing, preparing, handling or serving food or utensils.

#### **Minor Requirements**

1.32.2.1 Personnel in contact with food products avoid wearing **perfume and aftershave**.

#### 1 33 Health Conditions

Facility policies are in place and enforced to prevent disease, illness, or infection from contaminating product.

#### **Critical Requirements**

1.33.1.1 No person with boils, sores, infected wounds, or any other **infections or communicable disease** or any person who is a carrier of organisms that cause such a disease or a disease with sudden onset of severe symptoms including nasal discharge is permitted to work in a food service establishment in any capacity where there is a likelihood of contaminating food or food contact surfaces or transmitting the illness to other persons.

- 1.33.1.3 All **personnel health cards** are current and properly posted if required by local regulations.
- 1.33.1.4 The facility follows procedures requiring personnel, including temporary workers, to notify supervisory personnel of any relevant infectious disease or conditions to which they may have been exposed.
- 1.33.1.5 A written policy specifies the procedures for handling/disposition of food or food contact surfaces that have come into contact with blood or other bodily fluids.

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- 1.33.1.9 Disease **prevention and control policies** address at a minimum:
  - Vomiting
  - Diarrhea
  - Jaundice
  - Sore throat or fever
  - Norovirus
  - Hepatitis A virus
  - Shigella spp.
  - Enterohemorrhagic or Shiga toxin producing E. coli
  - Salmonella typhi
  - Escherichia coli O157:H7

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#### **Food Sourcing** 1.50

Food and ingredients must be obtained from sources that meet regulatory and food labeling requirements and handled in a way to ensure wholesomeness of products prepared with these materials.

#### **Critical Requirements**

- 1.50.1.1 Foods and ingredients are obtained from manufacturers that comply with regulatory and food labeling
- 1 50 1 2 Food and ingredients are provided in hermetically sealed containers from a regulated food processing establishment.
- 1.50.1.3 Food and ingredients are clean, wholesome, free from adulteration and spoilage, and safe for human consumption.
- 1.50.1.4 Food and ingredients are handled, served, or transported to prevent contamination, adulteration, and spoilage.
- 1.50.1.5 Foods that are **spoiled or unfit** for human consumption are disposed of immediately.
- 1.50.1.6 Foods that are to be **returned** to manufacturers or other sources are marked for return and stored to prevent contamination of other foods.

#### 1.51 Food Preparation, Thawing, and Refrigeration

Proper refrigeration, thawing, and preparation of foods prevents spoilage, contamination, and the growth of pathogenic microorganisms.

- 1 51 1 1 All **potentially hazardous foods** are kept at or below temperatures defined by the applicable country food code.
- **Temperature documentation** is on file and current and meets all defined requirements. 1.51.1.2
- 1.51.1.3 **Thawing of foods** must meet one of the following conditions:
  - In a refrigeration unit that does not exceed 40°F or 4°C
  - Under potable running water maintained at a temperature of 70°F or 21°C with sufficient flow velocity to remove loose food particles into the overflow

  - As part of the conventional cooking process
    In a microwave oven where the food is immediately transferred to conventional cooking equipment as part of the continuous cooking process
  - In a microwave oven where the entire uninterrupted cooking process takes place
- 1.51.1.4 Cooking of potentially hazardous foods ensures heating all parts of the food to a temperature of at least 140°F or 60°C with the following exceptions:
  - Poultry, ratites, poultry stuffing, stuffed meats (including game meats), stuffed fish, stuffed pasta, and stuffing containing meat are cooked to heat all parts of the food to at least 165°F or 74°C for 15 seconds
  - Rare roast beef is cooked to an internal temperature of 130°F or 54°C unless otherwise ordered by the immediate consumer
  - Rare beefsteak is cooked to a temperature of 145°F or 63°C and a cooked color change is achieved on all external surfaces
  - Meat, poultry, and fish cooked solely in a microwave oven are heated to an internal temperature of 165°F or 74°C or above
  - Raw eggs are cooked to a temperature of 165°F or 74°C or above for 15 seconds

- Ratites, meats, injected meats, fish, and game animals are cooked to a minimum temperature of 155 °F or 68 °C for 15 seconds
- 1.51.1.5 **Uncooked** frozen, liquid, or dry eggs and egg products are only used for cooking and baking purposes.
- 1.51.1.6 Only **pasteurized egg products** are used for products that are not to be cooked, such as meringues.
- 1.51.1.7 **Reheating** of foods complies with the following guidelines:
  - Potentially hazardous foods that have been cooked and then refrigerated are reheated rapidly to 165°F or 74°C or higher throughout before being served or placed in a hot food storage container
  - All potentially hazardous foods, except rare roast beef, are stored at temperatures of 140°F or 60°C or above or 40°F or 4°C or below except during preparation and serving Rare roast beef is stored at 130°F or 54°C or above and/or 40°F or 4°C or below

  - Time, rather than the defined temperature requirements, may be used as a reheating control for potentially hazardous foods that are displayed or held for immediate consumption if the following requirements are met:
    - The food is labeled with the time of completion of the cooking process or when the food was otherwise removed from temperature control
    - The food is served to the public within two hours of the completion of the cooking process or when the food was removed from the required temperature control
- 1.51.1.8 All potentially hazardous food is maintained at the temperatures defined above during transport.

#### 1.52 **Cooling of Hazardous Food**

Proper and prompt cooling of potentially hazardous foods ensures the safety of these products by inhibiting the growth of pathogenic microorganisms.

#### Critical Requirements

- 1.52.1.1 Cooked potentially hazardous foods are cooled from 140°F or 60°C or below within 2 hours and then from 70°F or 21°C to 40°F or 4°C or below within 4 hours.
- Potentially hazardous foods that have been prepared from ingredients at ambient temperatures are cooled to 1.52.1.2 40°F or 4°C or below within 4 hours.
- 1.52.1.3 The **cooling process** uses one of the following methods based on the type of food being cooled:
  - Placing food in shallow pans
  - Separating food into smaller or thinner portions
  - Using rapid cooling equipment
  - Stirring the food in a container placed in an ice water bath
  - Using containers to facilitate heat transfer
  - Adding ice as an ingredient

#### 1.53 Shellfish

To meet food codes, protocols must be in place and followed to ensure proper handling of shellfish in order to prevent foodborne illness and to ensure that customers are aware of the risks of consumption.

#### **Critical Requirements**

- 1.53.1.1 Retail establishments that prepare, serve, or sell raw shellfish post a consumer advisory statement in a noticeable place to alert customers of potential hazards related to consumption of shellfish.
- 1.53.1.2 Shucked shellfish or cooked crustacean meat is **stored in the original container**.
- 1.53.1.3 Each container of shellfish is clearly identified with the name and address of the packer or repacker and the abbreviated name of the state or territory.
- 1.53.1.4 A **uniform tag** is used to record the following:
  - Name and address of the shipper
  - The certificate number issued by the state or territory regulatory authority
  - Waters from which the shellfish is taken
  - The kind and quantity of the shellstock in the container
  - The name and address of the consignee
- Once the container of shellstock is empty, the stub or tag is removed and kept for no less than 90 days. 1.53.1.5

#### 1.54 **Game and Exotic Animals**

Game animals received for sale or preparation must meet food safety and regulatory requirements.

- 1.54.1.1 Meat from animals that are **commercially raised** for food may be received for sale or preparation.
- 1.54.1.2 Meat is purchased from a source where the animal is raised, slaughtered, and processed under a voluntary inspection program with animal health jurisdiction or under a routine inspection program carried out by an appropriate regulatory agency.

#### 1.55 Wild Mushrooms

Mushroom species picked in the wild for sale or used in food preparation are obtained from sources that are inspected and found to be safe.

#### **Critical Requirements**

1.55.1.1 **Mushroom species picked in the wild** are obtained from sources where each mushroom is individually inspected and determined to be safe by an approved mushroom identification expert.

#### 1.56 Pasteurized Juice, Milk, and Milk Products

Proper use, storage, and maintenance of milk dispensers ensures food safe use and consumption of milk and milk products.

- 1.56.1.1 Only **Grade "A" or the highest grade** available pasteurized milk and milk products are used.
- 1.56.1.2 **Mixing cream and milk** or pouring either into jars, bottles, or other containers is not allowed.
- 1.56.1.3 **Bulk milk dispensers** are properly sealed and the following information is provided:
  - Label with the name and grade of the product
  - Distributor identification
- 1.56.1.4 The **outlet seal** on bulk milk dispenser containers is only broken after being installed in the retail facility.
- 1.56.1.5 Milk and milk products are stored in a sanitary manner and **kept refrigerated**, except when being served.
- 1.56.1.6 Milk containers are not **completely submerged** in water.
- 1.56.1.7 Juice should be **pre-pasteurized or otherwise treated** to attain a 5-log reduction of the most resistant microorganisms of public health concern.

# 2. Maintenance for Food Safety

The design, upkeep, and management of equipment, buildings, and grounds to provide a sanitary, efficient, and reliable manufacturing environment.

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#### 2.2 **Outside Grounds**

The facility grounds are maintained in a way that prevents food adulteration.

#### **Critical Requirements**

- 2.2.1.1 **Equipment stored outside** is placed to prevent pest harborage, to make the inspection process easier, and to protect equipment from deterioration and contamination.
- 2.2.1.2 **Litter and waste** are removed from the property.
- 2.2.1.3 **Weeds and tall grass** are not near the building.
- 2.2.1.4 **Roads, yards, and parking areas** are maintained to be free of dust, standing water, and other potential contaminants.
- 2.2.1.5 **Adequate drainage** is provided for grounds, roofs, and other areas.
- 2.2.1.6 Outside wet and dry **waste or scrap compactors, modules, and containers** are installed in a way that prevents product contamination. Containers are maintained to minimize and contain leakage, and are removable so that the area can be cleaned.
- 2.2.1.7 Waste containers and compactors are **closed or covered**, and located on a concrete pad or in a manner to minimize pest attraction and harborage.

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#### 2.4 Layout

Spacious layout and placement of equipment, materials, and structures facilitates inspection, cleaning, and maintenance activities.

#### **Critical Requirements**

- 2.4.1.1 Space is maintained **between** equipment and structures to enable cleaning and maintenance.
- 2.4.1.2 There is adequate space **to place** equipment and raw materials.

#### 2.5 Floors

The floors of the facility are designed and maintained to provide structural integrity, facilitate cleaning, prevent contamination, and eliminate pest harborage or entry.

#### **Critical Requirements**

2.5.1.1 Floors are made of **materials** that are easily cleaned and kept in good repair.

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- 2.5.1.3 **Holes, cracks, and crevices** in floor surfaces are repaired to prevent debris from lodging and to avoid pest or microbial harborage.
- 2.5.1.4 **Floors are designed** to meet the demands of facility operations and withstand cleaning materials and methods.
- 2.5.1.5 Floors are **impervious**.
- 2.5.1.6 **Floors are sloped** to direct the flow of water or effluent toward drains.

#### 26 **Drains**

The drains in the facility are designed and maintained to provide structural integrity, facilitate cleaning, prevent contamination, and eliminate pest harborage or entry.

- 2.6.1.1 Drains are made of **materials** that are easily cleaned and kept in good repair.
- 2.6.1.2 **Floor drains** with grates are installed, maintained, and operational in all wet processing or wash areas.
- 2.6.1.3 Floor drain grates are **easily removable** for cleaning and inspection.
- 2.6.1.4 **Drainage** is designed and maintained to minimize the risk of product contamination.

#### **Minor Requirements**

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2.6.2.2 **Floor drains** can be easily accessed for cleaning and inspection.

#### 2.7 Walls

The walls of the facility are designed and maintained to provide structural integrity, facilitate cleaning, prevent contamination, and eliminate pest harborage or entry.

#### **Critical Requirements**

- 2.7.1.1 Walls are made of **materials** that are easily cleaned and kept in good repair.
- 2.7.1.2 **Holes, cracks, and crevices** in wall surfaces are repaired to prevent debris from lodging and to avoid pest or microbial harborage.
- 2.7.1.3 Walls are **designed**, **constructed**, **finished**, **and maintained** to:
  - Prevent dirt accumulation
  - · Reduce condensation and mold growth
  - Facilitate cleaning

#### 2.8 Ceilings and Overhead Structures

Structural elements such as ceilings, beams, supports, fixtures, ducts, pipes, or equipment do not threaten food product with leaking, loose, chipping, flaking, or peeling material.

#### **Critical Requirements**

- 2.8.1.1 Ceilings are made of **materials** that are easily cleaned and kept in good repair.
- 2.8.1.2 Access to the void in **hollow or suspended** ceilings is provided to facilitate cleaning, maintenance, and inspection activities.
- 2.8.1.3 Ceilings and overheads are **designed**, **constructed**, **finished**, and maintained to:
  - Prevent dirt accumulation
  - · Reduce condensation and mold growth
  - Facilitate cleaning
- 2.8.1.4 **Roof leaks** are promptly identified, controlled, and repaired.
- 2.8.1.5 Fixtures, ducts, pipes, and overhead structures are installed and maintained so that **drips and condensation do not contaminate** foods, raw materials, or food contact surfaces.
- 2.8.1.6 Drips and condensation are **controlled to prevent** establishment of an environment suitable for microbial growth.
- 2.8.1.7 There is no **flaking paint or rust** on equipment or overhead structures. Only normal mild oxidation on nonfood contact surfaces is acceptable.
- 2.8.1.8 **Other materials** (such as loose insulation) do not threaten food products or food contact surfaces.

#### 2.9 Glass, Brittle Plastics, and Ceramics Control

The Glass, Brittle Plastics, and Ceramics Program manages not only lighting to ensure that it is adequate for the safe production of food products, but the Program also takes into consideration breakable materials that are used for other purposes within the facility.

#### **Critical Requirements**

- 2.9.1.1 **Adequate lighting** is provided in all areas.
- 2.9.1.2 Light bulbs, fixtures, windows, mirrors, skylights, and other glass suspended over product zones, product areas, ingredients, or packaging supplies are of the **safety type**, or are otherwise protected to prevent breakage.
- 2.9.1.3 **Light fittings and glass** are replaced in a way that minimizes the potential for product contamination.
- 2.9.1.4 Glass that cannot be fully protected is addressed in the Glass, Brittle Plastics, and Ceramics Program.
- 2.9.1.5 Only **essential glass** is present in the facility. If glass must be used, it is addressed by the Glass, Brittle Plastics, and Ceramics Program.

#### 2.10 Air Makeup Units

Air used in the facility is filtered or screened, and filters and screens are maintained to prevent product contamination.

- 2.10.1.1 Air makeup units are fitted with **clean filters** and are free of mold and algae.
- 2.10.1.2 Air return ducts for HVAC systems and air makeup units are fitted with **cleaning and inspection hatches**.

- 2.10.1.3 **Fans, blowers, filters, cabinets, and plenums** are on the Preventive Maintenance Schedule to prevent mold, the development of microbes, insect activity, and foreign material collection.
- 2.10.1.4 **Air blowing equipment** is located, cleaned, and operated in a way that does not contaminate raw materials, work-in-process, packaging materials, food contact surfaces, and finished products.
- 2.10.1.5 Filters are capable of removing particles of **50 microns** (Minimum Efficiency Reporting Value [MERV] 4) or larger.

#### **Minor Requirements**

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2.10.2.2 **Ventilation** is provided in product storage and preparation areas to minimize odors, fumes, and vapors.

#### 2.11 **Pest Prevention**

The materials, structure, and maintenance of the building and equipment support the Integrated Pest Management Program.

#### **Critical Requirements**

- 2.11.1.1 The building has **barriers** in place to protect against birds, rodents, insects, and other pests.
- 2.11.1.2 **External doors, windows, or other openings** are close-fitting or otherwise **pest-proofed** to less than ½ in. or 6 mm.
- 2.11.1.3 **Windows, doors, and skylights** that must be kept open for ventilation are screened to prevent pest entry.

#### 2.12 Leaks and Lubrication

Leaks, oil, and lubrication are managed so they do not contaminate food products.

#### **Critical Requirements**

- 2.12.1.1 The facility **prevents, identifies, and eliminates** leaks (oil and lubricants) and excessive lubrication.
- 2.12.1.2 **Catch pans** or deflector plates are installed in areas where drive motors and gearboxes are mounted over product zones, and where conveyors cross or run parallel at different levels.
- 2.12.1.3 There are no grease smears or excess lubricant on equipment.

#### 2.13 Lubricants

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Lubricants that are essential for effective equipment operation are managed to ensure they do not get into food products.

#### **Critical Requirements**

2.13.1.1 Only **food-grade** lubricants are used on food processing and packaging equipment, or on any other equipment where incidental food contact may occur.

#### 2.14 Cross Contamination Prevention

Different steps in the production of food products can negatively impact processing in other areas. Segregation of operations minimizes opportunities for food hazards to arise.

#### **Critical Requirements**

- 2.14.1.1 **Operations are separated** based on process flow, material types, equipment, personnel, airflow, air quality, and services needed.
- 2.14.1.3 Areas for **washing and cleaning** are located away from production activities, where appropriate.
- 2.14.1.4 **Toilet rooms** are provided with functional exhaust fans that exhaust to the outdoors or do not open directly into production, packaging, or raw material storage areas.
- 2.14.1.5 **Cleaning and production areas are segregated** with air curtains, partitions, doors, or other exclusionary systems.
- 2.14.1.6 Water installations and equipment are constructed and maintained to prevent back siphonage and backflow.
- 2.14.1.7 The **sewage disposal system** is adequate for the process and maintained to prevent direct or indirect product contamination.

#### 2.15 **Equipment and Utensil Construction**

Equipment and utensils designed for easy maintenance ensure compliance with Prerequisite and Food Safety Programs. Surfaces that deteriorate, or cannot be cleaned or maintained, may present product contamination hazards.

- 2.15.1.1 All **equipment and utensils** are designed and made of materials that are **easily cleaned and maintained**.
- 2.15.1.3 Food contact surfaces are **corrosion-free**, **durable**, and made of **non-toxic** materials.
- 2.15.1.4 Seams on food contact **surfaces are smooth** and free of spot or tack welds.

#### 2.16 **Temporary Repair Materials**

Temporary repairs are sometimes needed or unavoidable. Procedures to ensure that they do not become a contamination hazard are defined.

#### **Critical Requirements**

- 2.16.1.1 **Tape, wire, string, cardboard, plastic, and other temporary materials are not used** for permanent repairs. If used for emergency repairs, they are dated and replaced with a permanent repair as soon as possible.
- 2.16.1.2 Any temporary repairs on food contact surfaces are constructed of **food-grade material**.
- 2.16.1.3 The facility maintains a **record of work orders** or repair requests.
- 2.16.1.4 The facility follows **temporary repair procedures**.

#### **Minor Requirements**

2.16.2.1 Temporary repair issues are **resolved as soon as possible** and practical.

#### 2.17 **Temperature Measuring Devices**

Processes that require temperature controls need measuring devices that are functioning and accurate.

#### **Critical Requirements**

- 2.17.1.1 **Temperature measuring devices**, including thermometers, regulating controls, and recording controls, are installed on any equipment that prevents pathogenic microorganism growth. These devices are routinely calibrated.
- 2.17.1.2 If used in a process critical to food safety, temperature measuring devices are **calibrated** to a national standard
- 2.17.1.3 Temperature measuring devices are **monitored** on a frequent basis.
- 2.17.1.4 The facility uses **monitoring systems** that trigger alarms when temperatures exceed set limits.
- 2.17.1.5 **Thermometers are located** inside coolers, freezers, and other temperature-controlled storage areas.

#### **Minor Requirements**

2.17.2.1 Temperature measuring devices used in processes **not critical to food safety** are calibrated using established calibration methods.

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#### 2.20 Parts Storage

Improperly maintained or dirty repair parts may pose a risk of product contamination from improper storage or cleaning.

#### **Critical Requirements**

2.20.1.1 All food contact parts are stored in a clean environment off the floor.

#### 2.21 Hand Washing Facilities Design

Personnel are provided the equipment to effectively remove contaminants from their hands.

#### **Critical Requirements**

- 2.21.1.1 **Hot and cold running water** is provided in all washrooms and hand sinks.
- 2.21.1.2 **Hand washing facilities** have an adequate water supply.
- 2.21.1.3 Hand washing facilities are **labeled and separated** from utensil washing facilities.
- 2.21.1.4 **Hands-free** hand washing equipment is provided in production areas where essential to product safety.

#### **Minor Requirements**

2.21.2.1 **Mix valves** are provided so that water temperatures can be adjusted.

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#### 2.24 Wastewater Treatment and Sewage Disposal

Wastewater treatment and sewage disposal are conducted in a way that does not present contamination or pest management issues that impact the facility, ingredients, or products.

#### **Critical Requirements**

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- 2.24.1.2 Sewage disposal systems are **adequate and appropriate** for the process.
- 2.24.1.3 Sewage disposal systems are maintained to **prevent direct or indirect product contamination.**

# 3. Cleaning Practices

The cleaning and sanitizing of equipment, utensils, and buildings to provide a wholesome and safe processing environment.

#### 3.1 Cleaning

Cleaning is more than making the facility look good. Cleaning methods and scheduling take food safety into account.

#### **Critical Requirements**

- 3.1.1.1 Cleaning is done in a way that prevents **contamination** of raw materials, products, and equipment.
- 3.1.1.2 Cleaning and sanitizing operations are performed in **accordance with the appropriate code or regulatory** requirements for equipment, utensils, or structures at each retail establishment.

#### 3.2 Food Contact Cleaning Compounds and Sanitizers

Cleaning compounds and sanitizers are considered chemicals under the Chemical Control Program.

#### **Critical Requirements**

- 3.2.1.1 All cleaning compounds and sanitizers used to clean food contact surfaces **have food contact approval documentation.**
- 3.2.1.2 **Sanitizer concentrations** are tested to make sure they are consistent with the product label.
- 3.2.1.3 All cleaning chemicals are **properly labeled**.
- 3.2.1.4 All cleaning chemicals **are stored** in a secure compartment away from production and food storage areas when chemicals are not in use.
- 3.2.1.5 The facility follows **verification procedures** and maintains records of chemical concentration testing, retesting, and Corrective Actions.

#### 3.3 **Equipment and Tools**

Cleaning equipment and tools may have a negative impact on food safety if not managed properly.

#### **Critical Requirements**

- 3.3.1.1 Cleaning equipment and tools are available for use.
- 3.3.1.2 Cleaning equipment is **maintained and stored** in a way that does not contaminate foods or preparation equipment.
- 3.3.1.3 **Separate and distinct utensils** are used to clean food contact surfaces (product zones) and structures (product areas)
- 3.3.1.4 Utensils used to **clean restrooms or floor drains** are never used for any other cleaning purpose.
- 3.3.1.5 All cleaning utensils are **cleaned and properly stored** after use. Proper storage includes segregation to ensure that cross contamination does not occur.
- 3.3.1.6 A **color-code** or other type of classification is in place to identify and separate cleaning utensils based on their intended usage.

#### 3.4 Daily (Housekeeping) Cleaning

Daily cleaning focuses on keeping the facility consistently neat and clean.

- 3.4.1.1 Daily cleaning tasks are completed in a way that **prevents contamination**.
- 3.4.1.2 Daily cleaning tasks **are assigned** to the appropriate department.
- 3.4.1.3 Daily cleaning tasks ensure that **work and support areas remain clean** during working hours.
- 3.4.1.4 **Water** used for daily cleaning in wet preparation areas is restricted and used in a way that does not contaminate food, preparation equipment, or utensils.

#### 3.5 **Product Zone Cleaning**

Cleaning addresses structures and equipment interiors that may only be cleaned during times when the area is not in production. This requires personnel who have been trained, and often demands the assistance of maintenance or production personnel to properly disassemble equipment to provide effective cleaning of the product zone and prevent product contamination.

#### **Critical Requirements**

- 3.5.1.1 Periodic cleaning tasks **comply with applicable equipment cleaning procedures**.
- 3.5.1.2 Periodic cleaning tasks **are scheduled** on a Master Cleaning Schedule, or equivalent.
- 3.5.1.3 Periodic cleaning tasks **are assigned**.
- 3.5.1.4 **Equipment guards, trims, and panels** are removed and replaced to inspect and clean the interior of all equipment.
- 3.5.1.5 **Equipment and structural overheads** (including lights, pipes, beams, and vent grids) are scheduled for periodic cleaning on the Master Cleaning Schedule.
- 3.5.1.6 Food contact surfaces, product zones, and equipment that require sanitizing are **cleaned and sanitized**.
- 3.5.1.7 Equipment and utensils that do not require sanitizing are cleaned on a **predetermined schedule**.
- 3.5.1.8 **Utensils and containers** are washed and dried between uses, or as appropriate, and stored in an inverted position off the floor.
- 3.5.1.9 **Product handling equipment and product zones** are cleaned often enough to prevent residue from being transferred to products.
- 3.5.1.10 **Sanitary trays and dollies** are cleaned and maintained in a way that prevents product adulteration.
- 3.5.1.11 Maintenance cleaning tasks are completed in a way that does not compromise product safety. This includes, but is not limited to, **removal of debris**, such as nuts, bolts, washers, wire pieces, tape, welding rods, and other small items that could contaminate product, and accounting for these materials.
- 3.5.1.12 Equipment or other ice **contact** surfaces used for product contact or consumption are cleaned and sanitized on a predetermined schedule.

#### 3.6 Non-Product Zone and Support Area Cleaning

Cleaning of non-product zones and support areas eliminates product residues that may allow insect development, mold, or other contaminants that could affect the product or impact production.

#### **Critical Requirements**

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- 3.6.1.2 **Equipment guards, trims, and panels** are removed and replaced to inspect and clean the interior of all equipment that is not in direct contact with product zones.
- 3.6.1.3 **Support areas** that may impact equipment, preparation areas, or storage of raw materials or prepared foods (e.g., washrooms, dishwashing areas, etc.) are cleaned to prevent product contamination or insect development.
- 3.6.1.4 Non-production areas **used for the storage** of equipment, raw materials, finished products, or product contact utensils are cleaned and maintained to prevent contamination of product, raw materials, or equipment.

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- 3.6.1.6 **Racks and storage shelves** are cleaned frequently enough to prevent excessive accumulation of debris, product spillage, or other materials.
- 3.6.1.7 **Recoup and salvage areas** are cleaned on a frequency to control spillage and damaged product to prevent development of sanitation issues that could lead to product contamination or pest activity.
- 3.6.1.8 **Refrigeration equipment** (e.g., condensers, fans, etc.) are cleaned on a defined frequency to prevent microbial and dirt accumulation.
- 3.6.1.9 **Drains** are **routinely cleaned and sanitized** to prevent microbial and pest development.

#### **Minor Requirements**

3.6.2.1 **Nonfood contact surfaces** are cleaned regularly and as needed.

#### 3.9 Dish, Container, and Utensil Washing

Proper and thorough cleaning of multiple-use utensils, containers, and dishware used in food preparation areas and for dining removes food residue and contaminants and prevents the survival, growth, and transfer of microorganisms.

- 3.9.1.1 An approved three-compartment sink of sufficient size and depth to submerge, wash, rinse, and sanitize is used when **hand washing containers**, **dishes**, **and utensils**.
- 3.9.1.2 The **minimum wash temperature** for manual systems is not less than 110°F or 43°C.
- 3.9.1.3 Three-compartment sinks used for hand washing containers, dishes, and utensils **have splash back protection and drain boards** that are an integral part of and continuous with the sink.
- 3.9.1.4 Drain boards, overhead, or wall mounted shelves, portable or stationary racks, or cross stacking may be used to **air dry** containers, dishes, and utensils.
- 3.9.1.5 Hand washed utensils are **immersed for at least one minute** in the third compartment of the sink in clean water at a temperature of 170°F or 77°C. The thermometer used to measure this temperature must be accurate to +/- 3°F or 2°C.
- 3.9.1.6 If hot water is used as a bactericidal treatment, a **booster heater** capable of maintaining a water temperature of 170°F or 77°C is provided.
- 3.9.1.7 If chemicals are used as a bactericidal treatment, the following requirements must be met:
  - Immersion for two minutes in the third compartment of the sink in a chemical bactericide of a strength approved by the regulatory or country code, as applicable
    - o Chlorine products meet the following requirements for time, temperature, and pH

Minimum	Minimum Temperature	
Concentration		
MG/L	pH 10 or less F/°C	pH 8 or less °F/°C
25	120°F or 49°C	120°F or 49°C
50	100°F or 38°C	75°F or 24°C
100	55°F or 13°C	55°F or 13°C

- o Idophor products: A solution containing at least 12.5 MG/L of available iodine and no more than 25 MG/L and having a pH of 5 or less with a temperature of at least 75°F or 24°C
- O Quaternary Ammonium products: A solution containing at least 200 ppm of quaternary ammonium compound unless otherwise indicated in the manufacturer's directions for use with a temperature of at least 75°F or 24°C; these compounds may only be used in water with 500 MG/L hardness or less
- Approved chemicals other than chlorine, iodine, or a quaternary ammonium compound must be used in accordance with the manufacturer's directions for use included on the label
- Testing methods or equipment is available, convenient, and used on a defined frequency to test the chemical sanitizers to ensure that minimal chemical strengths are met; documentation of testing is provided and indicates that testing frequencies are met and Corrective Actions are taken when sanitizer testing does not meet minimum guidelines
- 3.9.1.8 When **dishwashing machines** are used, the machines are approved and provided with drain boards with ample capacity on each side. If an approval or authorization system is not available for dishwashing machines, then the machines selected for use must be widely recognized as being suitable for this purpose.
- 3.9.1.9 The minimum wash temperature in spray type dishwashing machines that use chemicals to sanitize is no less than 120°F or 49°C.
- 3.9.1.10 **Thermometers** that indicate the wash and rinse water temperatures are provided for dishwashing machines and are functional and in good repair.
- 3.9.1.11 Equipment and utensil washing facilities are **installed and operated** in accordance with regulatory or country requirements.
- 3.9.1.12 Wash temperatures for **dishwashing machines** that use hot water to sanitize are in compliance with the following requirements:
  - For a stationary rack, single-temperature machine, a minimum of 165°F or 74°C is attained
  - For a stationary rack, dual-temperature machine, a minimum of 150°F or 66°C is attained
  - For a single tank, conveyor, dual-temperature machine, a minimum of 160°F or 71°C is attained
  - For a multi-tank, conveyor, multi-temperature machine, a minimum of 150°F or 66°C is attained

# 4. Integrated Pest Management

The assessment, monitoring, and management of pest activity to identify, prevent, and eliminate conditions that could promote or sustain a pest population.

#### 4.1 Integrated Pest Management (IPM) Program

A written IPM Program ensures the facility has effective controls and processes in place to minimize pest activity.

#### **Critical Requirements**

- 4.1.1.1 The facility has a **written** Integrated Pest Management Program.
- 4.1.1.2 The IPM Program **incorporates the requirements** of the facility's other written Prerequisite and Food Safety Programs.
- 4.1.1.3 The IPM Program is written and implemented by trained in-house personnel, or by registered, trained, or licensed contractors.

#### **Minor Requirements**

4.1.2.1 If the IPM Program development and implementation is outsourced to contractors, the Program includes responsibilities for **both in-house personnel and contractors.** 

#### 4.2 Facility Assessment

An annual assessment of the facility provides an evaluation of the IPM Program to ensure that it is effective.

#### **Critical Requirements**

- 4.2.1.1 Personnel conduct **an annual assessment** of the facility.
- 4.2.1.2 The assessment evaluates all areas **inside and outside** the facility.
- 4.2.1.3 Assessment **results and Corrective Actions** are documented and used to develop and update the IPM Program.
- 4.2.1.4 Assessments are conducted by internal or external **trained IPM personnel**.

#### 4.3 Other Guidelines

Facilities that use alternative guidelines (such as organic, green, or sustainable) are also held accountable for having IPM Programs.

#### **Critical Requirements**

4.3.1.1 IPM Programs established under **alternative guidelines** (such as organic, green, or sustainable) demonstrate effective pest management through the lack of evidence of pest management issues, and by meeting the criteria in the IPM section of this Standard.

#### 4.4 **Signed Contracts**

A signed contract between the facility and external IPM providers holds both the provider and the facility accountable for effective pest management activities.

- 4.4.1.1 The facility has a signed contract that includes:
  - Facility name
  - Facility contact person
  - Frequency of services
  - Description of contracted services and how they will be completed
  - Term of the contract
  - Equipment and material storage specifications, where applicable
  - List of approved chemicals, prior to use
  - Emergency call procedures (when, why, whom to call)
  - Service records to be maintained
  - Requirement to notify facility of any changes in service or materials used

#### 4.5 Credentials and Competencies

The facility protects its food products by verifying that IPM service providers, whether in-house or contractors, are qualified.

#### **Critical Requirements**

- 4.5.1.1 The facility keeps a copy of the **certification or registration document** for each person who performs pest management services in the facility, as required by regulation.
- 4.5.1.2 If regulation does not require certification or registration, **IPM service providers are trained** in the proper and safe use of pest management materials by attending a recognized seminar or some other documented training. Evidence of training is on file or available electronically.
- 4.5.1.3 Applicators provide verification of GMP training.
- 4.5.1.4 IPM service providers are **supervised** by a licensed applicator, if required or allowed by regulation.
- 4.5.1.5 The facility maintains a current copy of the **pest management company license** issued by the appropriate government body, if required.
- 4.5.1.6 The facility maintains a current copy of the **certificate of insurance** that specifies the liability coverage, where available.

#### **Minor Requirements**

4.5.2.1 IPM service providers maintain **evidence of competency** by exam from a recognized organization.

#### 4.6 Pesticide Documentation

The facility maintains current pesticide label and Chemical Safety Data Sheet information to ensure proper usage of pesticide chemicals.

#### **Critical Requirements**

- 4.6.1.1 **Chemical Safety Data Sheets** or equivalent are on file for all pesticides used in the facility by in-house personnel or contractors. Documentation is available for review on request as hard copy or electronic files.
- 4.6.1.2 **Pesticide Specimen Labels** are on file for all pesticides used in the facility. Documentation is available for review on request as hard copy or electronic files.

#### **Minor Requirements**

4.6.2.1 The **language** of the country is taken into consideration when providing Chemical Safety Data Sheets and labels.

#### 4.7 **Pesticide Application Documentation**

The facility maintains records to identify, verify, and document compliance to regulatory and IPM requirements.

#### **Critical Requirements**

- 4.7.1.1 Documented **pesticide application activities** include:
  - Product name of materials applied
  - The EPA, PMRA, or product registration number as required by law
  - Target pest
  - Rate of application or percent of concentration
  - Specific location of application
  - Method of application
  - Amount of pesticide used at the application site
  - Date and time of application
  - Signature of applicator

#### **Minor Requirements**

4.7.2.1 The facility keeps a **record of additional information** that may be required by regulation, including lot number of product used and the applicator's certification or registration number.

#### 4.8 **Pesticide Control**

Pesticides are managed as part of the Chemical Control Program.

#### **Critical Requirements**

- 4.8.1.1 **Pesticides are stored** in a limited access, locked area. Storage areas are adequate in size and construction, and are properly ventilated.
- 4.8.1.2 **Pesticides are stored** according to label directions.
- 4.8.1.3 Pesticide **containers and application equipment** are labeled to identify contents. Application equipment is not used across multiple pesticides.
- 4.8.1.4 **Pesticide containers are disposed of** according to label directions and regulatory requirements.
- 4.8.1.5 **Warning signs** are posted at the entrance of each pesticide storage area.
- 4.8.1.6 The facility maintains a complete **inventory of pesticides**.
- 4.8.1.7 **Spill control** materials and procedures are available.

#### 4.9 **Trend Analysis**

Documentation of pest sightings and activity are reviewed and used to identify and eliminate areas where pest activity is observed, and to document Corrective Actions taken.

#### **Critical Requirements**

- 4.9.1.1 Accurate and complete **service records** describe current levels of pest activity and recommendations for additional Corrective Actions.
- 4.9.1.2 The **pest-sighting log** provides information about the response taken by pest management personnel.
- 4.9.1.3 All records pertaining to pest management activities are **available as hard copy or electronic files** for review on request.
- 4.9.1.4 The **pest-sighting log** has a designated location.
- 4.9.1.5 The pest-sighting log includes:
  - Date
  - Time
  - Type of pests observed
  - Actions taken
  - Names of reporting personnel
- 4.9.1.6 Pest management personnel **review the log each quarter** to identify trends in pest activity. A report of findings is submitted to designated facility personnel.
- 4.9.1.7 **Corrective Actions** are documented for identified issues.

#### 4.10 Monitoring Device Documentation

Monitoring device documentation is maintained to ensure that devices are properly placed and inspected, and to allow trend analysis of activity.

#### **Critical Requirements**

- 4.10.1.1 A **detailed survey** of the entire facility is completed, and the results are documented and used to determine **placement of monitoring devices**.
- 4.10.1.2 A current and accurate **site map** that lists the locations of all pest-monitoring devices used in rodent and insect control is on file.
- 4.10.1.3 **Temporary placement** of any pest monitoring devices for short-term monitoring is mapped separately. Findings are documented according to the frequency defined by the IPM Program.
- 4.10.1.4 The facility **records all services** performed on all pest-monitoring devices.
- 4.10.1.5 Services for monitoring devices are **documented with recording mechanisms**, such as punch cards, bar codes, or ledgers, and may be maintained in hard copy or electronic format.
- 4.10.1.6 Service records in monitoring devices **match documentation** on file in the facility.

#### 4.11 Exterior Rodent Monitoring Devices

Management of exterior rodent monitoring devices deters rodents from entering the facility.

- 4.11.1.1 Based on the detailed facility survey, exterior monitoring devices are placed along the **foundation walls** on the exterior of the facility.
- 4.11.1.2 All exterior monitoring devices are inspected **at least monthly**. These devices are checked more often when activity levels increase.

- 4.11.1.3 Exterior **bait stations** that contain rodenticides **are locked** with single-use plastic ties, padlocks, or devices provided by the manufacturer, such as key systems.
- 4.11.1.4 Exterior bait stations are **tamper resistant** and are positioned, anchored in place, locked, and labeled.
- 4.11.1.5 Only **baits that are approved** by the regulatory body with authority for IPM (e.g., EPA in the United States) or that are labeled for use in a food facility are used in exterior bait stations.
- 4.11.1.6 **Baits are secured** inside bait stations, in **good condition**, and **replaced** as needed based on the label directions or manufacturer recommendation to avoid deterioration.

#### **Minor Requirements**

4.11.2.1 Monitoring devices are placed at **intervals of 50-100 ft. or 15-30 m.** Areas of high rodent activity should have a higher concentration of devices.

#### 4.12 Interior Rodent Monitoring Devices

Interior rodent monitoring devices identify and capture rodents that gain access to the facility.

#### **Critical Requirements**

- 4.12.1.1 Toxic and non-toxic commercial baits (blocks, liquids, etc.) are not used for interior monitoring.
- 4.12.1.2 Based on the detailed facility survey, interior monitoring devices are placed in **sensitive areas** specific to the rodent species, and other areas of pest activity, including:
  - Incoming materials warehouses or primary storage areas for raw materials
  - Maintenance areas with exterior access
  - Staging areas where materials are placed after delivery from the warehouse
  - Finished product warehouse areas
  - Areas with the potential for rodent access due to traffic patterns or activities that take place
  - Overhead areas when roof rat activity is evident or likely
  - High traffic areas
  - Both sides of doors that open to the exterior of the facility
- 4.12.1.3 Interior monitoring devices are placed along **perimeter walls**. Spacing and number of traps are based on activity levels.
- 4.12.1.4 Interior monitoring devices are positioned, cleaned, and **inspected weekly**.
- 4.12.1.5 Unless prohibited by regulation, **interior monitoring devices include:** 
  - Mechanical traps
  - Extended trigger traps
  - Glue boards
- 4.12.1.6 Facilities in countries that prohibit the use of mechanical traps may consider the use of **alternative devices** on a case-by-case basis. These devices may include:
  - Gassing (e.g., CO<sub>2</sub>) traps
  - Live catch traps
  - See-saw tubes
  - Electrocution traps
  - Extended trigger traps that send alert e-mails or text messages

#### **Minor Requirements**

4.12.2.1 Monitoring devices are placed at **intervals of 20-40 ft. or 6-12 m** along exterior walls, and are strategically placed in sensitive areas toward the interior of the facility.

#### 4.13 Insect Light Traps

When used, insect light traps assist in the identification and monitoring of flying insects.

- 4.13.1.1 Insect light traps are installed farther than **10 ft. or 3 m from food contact surfaces**, exposed products, packaging, and raw materials in processing or storage areas.
- 4.13.1.2 Insect light traps are installed in a way that does **not attract insects** to the facility.
- 4.13.1.3 **Service checks** are performed on all units on a weekly basis during the active season and a monthly basis during colder seasons or as dictated by climate. These checks include:
  - Emptying collection devices
  - Cleaning the units
  - Repairs
  - Checks for tube breakage
- 4.13.1.4 **Shatter-resistant lights** are used in all units or otherwise explained in the facility's Glass, Brittle Plastics, and Ceramics Program.

- 4.13.1.5 All services provided to light traps are documented. **Service records** are kept in the device and on file with the pest management documentation.
- 4.13.1.6 Insect light traps are used to **monitor flying insect activity** at locations that are likely to allow access to the facility.
- 4.13.1.7 The facility **documents the types and quantities of insects** found in the light traps, and uses the information to identify and eliminate the source of activity. This can include, but is not limited to identifying insect types (e.g., night-flying insects, flies, stored product insects, etc.) and quantities captured (specific or relative numbers [i.e., high, medium, low]) to evaluate the risks and determine appropriate control measures to be taken.

#### **Minor Requirements**

4.13.2.1 Insect light trap tubes are changed at least annually at the beginning of the active season.

#### 4.14 **Pheromone Monitoring Devices**

When used, pheromone monitoring devices assist in the identification of stored product insect pests in areas prone to this type of infestation (e.g., grains, cereals, spices, or herbs).

#### **Critical Requirements**

- 4.14.1.1 Pheromone monitoring devices are **installed** according to label requirements.
- 4.14.1.2 Pheromone monitoring devices **are inspected** on a defined frequency.
- 4.14.1.3 The facility **documents the types and quantities of insects** found during device inspections and uses the information to identify and eliminate the source of activity.

#### 4.15 **Bird Control**

Bird control is addressed as part of the IPM Program to prevent contamination of food products.

#### **Critical Requirements**

- 4.15.1.1 Birds are **controlled by exclusion** with:
  - Nets
  - Traps
  - Appropriate structural modifications
  - Other approved legal methods
- 4.15.1.2 Avicides are only **used if legal**.
- 4.15.1.3 Avicides are used according to label directions and local regulations.

#### 4.16 Wildlife Control

In addition to rodents, insects, and birds, other animals can become pests if left unmanaged.

#### **Critical Requirements**

4.16.1.1 **Wildlife** establishing habitat on the facility grounds or in the facility **are removed** in accordance with regulations and local ordinances. Wildlife can include dogs, cats, or other domestic animals.

#### **Minor Requirements**

- 4.16.2.1 **Wildlife control measures** are considered, where appropriate. Optional devices include:
  - Wire
  - Netting
  - Distracting devices
  - Repellents
  - Materials that prevent entry

#### 4.17 **Pest Habitat**

Attractive habitat in or around a facility increases the chances of pest problems.

- 4.17.1.1 The facility **addresses and eliminates** any rodent burrows, rodent runs, and conditions that provide harborage or may attract rodents or other pests to the facility or outside grounds.
- 4.17.1.2 Implementation of an effective pest management program is **demonstrated through the lack of identified pest activity**. Specifically, pest activity whose identification and control is managed as part of the IPM Program.

# 5. Adequacy of Prerequisite and Food Safety Programs

The coordination of management support, cross-functional teams, documentation, education, training, and monitoring systems to ensure all departments of the facility work together effectively to deliver a wholesome and safe final product.

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#### 5.2 **Accountability**

Management authorizes and supports a qualified, supervisory-level person to ensure facility compliance to Programs, law, and regulation.

#### **Critical Requirements**

5.2.1.1 Supervisory personnel **monitor the effectiveness of the implementation** of the Prerequisite and Food Safety Programs.

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5.2.1.4 The supervisory level person(s) assigned responsibility for compliance to regulatory laws and guidelines is able to **demonstrate knowledge** of food safety principles and requirements of the applicable regulatory food code.

#### 5.3 Support

Management supplies human and financial resources to support the Prerequisite and Food Safety Programs.

#### **Critical Requirements**

All departments directly involved in implementing Prerequisite and Food Safety Programs have **budget and labor support** to maintain the proper and timely acquisition of appropriate tools, materials, equipment, monitoring devices, chemicals, or other support.

#### 5.4 Written Procedures

All Prerequisites in the facility have written Programs that include procedures. Procedures are critical to food safety because they specify owners, actions, and timelines.

#### **Critical Requirements**

- 5.4.1.1 **Procedures define**:
  - Job Descriptions that identify responsibilities related to Prerequisite and Food Safety Programs
  - Alternates/Deputies that are designated to cover for the absence of key personnel
- 5.4.1.2 The written procedures are **readily available** to facility personnel.

#### 5.5 Training and Education

Regularly scheduled and tracked training and education ensure that the facility appropriately implements Prerequisite and Food Safety Programs. Training and education is for all personnel, from entry level workers to management.

- 5.5.1.1 There are **written procedures** for developing and delivering Prerequisite and Food Safety training and education to all personnel.
- 5.5.1.2 **Training and education records** for all personnel are maintained.
- 5.5.1.3 The training includes **established means for verification** of competency of the information presented (e.g., testing, supervisor verification, verbal responses, etc.).
- 5.5.1.4 Prior to beginning work, **new employees, temporary personnel, and contractors** are trained and educated on Food Safety Programs. These personnel are then supervised for compliance.
- 5.5.1.5 **Refresher training and education** are done at a minimum of annually or more often as needed.
- 5.5.1.6 **Training, as required by the regulatory authority**, is documented and available.

#### 5.6 **Self-Inspections**

Responsible personnel regularly assess how well the facility implements and monitors Prerequisite and Food Safety Programs.

#### **Critical Requirements**

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- 5.6.1.2 Self-inspections of the entire facility and outside grounds at least **monthly**.
- 5.6.1.3 Documentation of the **results** of the self-inspection includes:
  - Identified observations
  - Corrective Actions
  - Specific assignments
  - Actual accomplishments
- Results of the self-inspection are brought to the **attention of the personnel responsible** for the activity inspected.
- 5.6.1.5 Responsible key personnel set **deadlines** for Corrective Action implementation.
- 5.6.1.6 The results of Corrective Actions are **verified** to ensure satisfactory completion.
- 5.6.1.7 Documented **daily pre-operational inspections** are completed to identify any potential food safety risks.
- 5.6.1.8 **Monthly inspections** include documentation and program review to ensure continued effectiveness.

#### **Minor Requirements**

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5.6.2.2 **Follow-up inspections** ensure that observations are corrected.

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#### 5.8 **Customer Complaint Program**

A written Program for evaluating customer complaints allows the facility to respond to customer concerns. Complaints involving food safety issues, such as adulteration, require an immediate response.

#### **Critical Requirements**

5.8.1.1 The facility has a **written** Customer Complaint Program.

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- 5.8.1.3 **Actions** appropriate to the seriousness and frequency of the complaint are carried out promptly and effectively.
- 5.8.1.4 Complaint information is used to **implement ongoing improvements** to avoid issue recurrence, and to ensure product safety.

#### 5.9 **Chemical Control Program**

A written Program for managing all chemicals in the facility provides a centralized approach to identifying and controlling purchase and use of nonfood chemicals.

- 5.9.1.1 The facility has a **written** Chemical Control Program that addresses all chemicals used in the facility (e.g., chemicals for Integrated Pest Management, Maintenance, Sanitation, Hygiene, and Laboratories).
- 5.9.1.2 **Procedures address, as applicable:** 
  - · Chemical approval
  - Purchase authority
  - Controlled and segregated storage
  - Handling
  - Labels/Labeling
  - Identification of where and how the chemicals are to be used
  - Concentration verification
  - Training and education
  - Actual usage
  - Inventory control
  - Chemical disposal
  - Container disposal
  - Spill containment and control
  - Chemical Safety Data Sheet archiving
  - Contractor chemicals

#### 5.11 Allergen Control Program

The Allergen Control Program controls known allergens throughout the preparation process from receiving to serving or sale.

#### **Critical Requirements**

- 5.11.1.1 The facility has a written Allergen Control Program that addresses allergens specific to country regulations.
- 5.11.1.2 **Procedures address**:
  - Identification and segregation of allergens during storage and handling
  - Prevention of cross contact or contamination during preparation and handling
  - Equipment and utensils management during preparation and handling
  - Recipe reviews and control
  - Personnel awareness training and education
  - Verification of cleaning procedures for food contact equipment
  - Approved Supplier Program for ingredients and labels
- 5.11.1.3 The Program is **updated** when there are changes in:
  - Ingredients
  - Ingredient suppliers
  - Products
  - Preparation
- 5.11.1.4 **Records** demonstrating Program conformance and effective Corrective Actions are maintained.

#### 5.12 Glass, Brittle Plastics, and Ceramics Program

A Program supports proactive steps to prevent contamination from glass, brittle plastics, and ceramics.

#### **Critical Requirements**

- 5.12.1.1 The facility has a **written** Glass, Brittle Plastics, and Ceramics Program.
- 5.12.1.2 The written Glass, Brittle Plastics, and Ceramics Program includes the following **policy statements**:
  - No glass, brittle plastics, or ceramics are to be used in the facility, except where absolutely necessary or where removal is not immediately feasible
  - No glass, brittle plastics, or ceramics will be brought in with personal belongings
- 5.12.1.3 **Procedures address**:
  - Handling breakage (including stored glass, brittle plastics, or ceramics)
  - A register/list of essential glass, brittle plastics, and ceramics
  - Scheduled inspections of essential glass, brittle plastics, and ceramics to check for accidental breakage or damage

#### 5.13 **Cleaning Program**

A Cleaning Program with schedules and procedures for accomplishing tasks is critical for maintaining a wholesome and safe food preparation environment.

- 5.13.1.1 The facility has a **written** Cleaning Program.
- 5.13.1.2 The written Cleaning Program includes the following **schedules:** 
  - A Master Cleaning Schedule (MCS) for periodic cleaning assignments
  - A Housekeeping Schedule for daily cleaning assignments
- 5.13.1.3 The **Master Cleaning Schedule** addresses all equipment, structures, and grounds that impact food products. The MCS is current and accurate, and includes the following:
  - Frequency of activities
  - Personnel responsible
  - Post-cleaning evaluation techniques, which could include:
    - Visual inspections
    - o Allergen testing
    - o Preoperative inspections
    - o Adenosine triphosphate (ATP) testing
    - o Equipment swabs
  - Documented Corrective Actions

- 5.13.1.4 The facility has **written cleaning procedures** for all equipment, structures, and grounds that impact the storage, and preparation of food products.
- 5.13.1.5 Equipment cleaning procedures address:
  - Chemicals
  - Chemical concentrations
  - Tools
  - Disassembly instructions

#### **Minor Requirements**

- 5.13.2.1 The cleaning **tasks are divided** into three general areas and are included on the appropriate schedule:
  - Daily (Housekeeping Schedule)
  - Periodic (Master Cleaning Schedule)
  - Maintenance (Master Cleaning Schedule)

#### 5.14 Maintenance Program

The Maintenance Program addresses building, utensil, and equipment maintenance to ensure a safe food preparation environment.

#### **Critical Requirements**

5.14.1.1 The facility has a **written** Maintenance Program that identifies and tracks repair of structural, equipment, or utensil maintenance problems that could cause food adulteration.

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5.14.1.3 **Records** indicating compliance are maintained.

#### 5.15 **Receiving Program**

The Receiving Program ensures that raw materials are reviewed and received to prevent product contamination.

#### **Critical Requirements**

- 5.15.1.1 The facility has a **written** Receiving Program.
- 5.15.1.2 Trained personnel, using appropriate equipment, **inspect** all incoming ingredients, packaging, and vehicles.
- 5.15.1.3 The facility has **written procedures** for inspecting incoming raw materials.
- 5.15.1.4 Procedures for tractor trailer, lorry, or rail deliveries include steps for evaluation of:
  - Raw material condition
  - Presence of pest evidence
  - Presence of other objectionable materials
  - Trailer or rail car condition

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- 5.15.1.6 Incoming vehicle procedures include handling **Less Than Load (LTL) vehicles**.
- 5.15.1.7 The results of inspections are **documented**.
- 5.15.1.8 **Documented results** of inspections include:
  - Date of receipt
  - Carrier
  - Lot number
  - Temperatures (if required)
  - Amount
  - Intact and verified seal numbers (if used)
  - Product condition
  - Trailer, lorry, or transport condition

#### 5.16 Regulatory Affairs and Inspections Program

The Regulatory Affairs and Inspections Program prepares the facility to handle regulatory, third-party, and customer inspections.

#### **Minor Requirements**

- 5.16.2.1 The facility has a **written** Regulatory Affairs and Inspections Program that includes:
  - A list of personnel delegated to accompany all inspectors
  - A policy regarding recording devices and cameras
  - A policy regarding record and sample taking

#### 5.25 **HACCP Program**

The HACCP Program evaluates the biological, chemical, and physical hazards associated with the products prepared and sold by the retail facility. The HACCP Program includes a Hazard Analysis which typically assesses risk by determining the severity of a hazard and its likelihood of occurrence. The goal of HACCP is to prevent, eliminate, or reduce hazards to an acceptable level.

#### **Critical Requirements**

- 5.25.1.1 Specific **Prerequisite Programs** are in place and functioning:
  - Personnel Practices
  - Customer Complaint
  - Chemical Control
  - Cleaning
  - Maintenance
  - Transportation and Storage
  - Integrated Pest Management
  - Receiving
  - Allergen Control
- 5.25.1.2 The facility has a **written** HACCP Program that has been signed by senior management.
- 5.25.1.3 If possible the facility has a **HACCP team** with members from multiple functions of the facility. The team has the following characteristics:
  - The team members have been trained
  - The HACCP coordinator has documented HACCP training

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- 5.25.1.5 The facility has a **Process Flow Diagram** for each product type produced.
- 5.25.1.6 The facility follows the **Seven Principles of HACCP**:
  - 1. The facility has **conducted and documented a Hazard Analysis** for each raw material and process step.
  - 2. Based on the Hazard Analysis, the **Critical Control Points** (CCPs) are identified, and the procedures for controlling the hazards are described.
  - 3. The **Critical Limits** for the CCPs are scientifically established and recorded.
  - 4. The facility has established procedures for **Monitoring** the HACCP Program that include identification of frequency of activities and responsible person(s).
  - 5. The facility has established procedures for **Deviation** from the HACCP Program that include identification of short-term and long-term Corrective Actions.
  - 6. The facility has established procedures for **Verification** of the HACCP Program that include identification of frequency of activities and responsible person(s).
  - 7. The facility has legible **documented records** of monitoring, deviation, and verification activities.
- 5.25.1.7 The facility conducts and documents **training** on the HACCP Program. The training targets:
  - · Responsibility for management
  - Awareness for non-management personnel
  - Job-specific procedures for personnel working at a designated Critical Control Point (CCP)
- 5.25.1.8 The Critical Control Points (CCPs) identified are **controlled and monitored** within the HACCP Master Plan.
- 5.25.1.9 The facility conducts a **review** of the HACCP Program annually or as changes (e.g., products or process) occur:
  - Records are available
  - Records are kept one year or two times the shelf life of the product, whichever is longer or as defined by regulatory requirement
- 5.25.1.10 Facilities that must comply with **regulatory HACCP** meet the defined requirements.

#### 5.28 **Design Standards**

Structural and equipment design standards offer a consistent approach to designs, repairs, modifications, and purchases, and take into account Prerequisite and Food Safety Programs.

#### **Critical Requirements**

5.28.1.1 The facility has **design standards** that apply to all structural and equipment designs, repairs, modifications, or purchases to reduce the potential for contamination and pest infestations and make cleaning easier.

#### 5.29 Water Quality

Water, water sources, and water management strategies provide clean water that is safe for food contact activities.

- 5.29.1.1 The facility's water supply **complies with regulatory requirements.**
- 5.29.1.2 The facility has a safe and/or **potable water supply** from an approved source.
- 5.29.1.3 **Documentation** of the results of water testing is on file.
- 5.29.1.4 **Water, steam, and ice** that contacts food and food contact surfaces are regularly monitored to ensure there is no risk to product safety.
- 5.29.1.5 **Routine checks** verify that back siphonage and backflow prevention units are functioning properly. Results are documented.
- 5.29.1.6 **Water treatment chemicals** used in steam or water that comes into direct or indirect contact with food are approved for food contact.
- 5.29.1.7 Water treatment chemicals are used according to **label directions**. Results of concentration testing and verification procedures are documented.
- 5.29.1.8 **Back siphonage and backflow prevention units** are identified in the Maintenance Program.
- 5.29.1.9 Regular **water samples** are taken from underground well water supplies and surface water sites according to local health department codes and government requirements.
- 5.29.1.10 **Plumbing is adequate** in size and meets national and local codes.

# **Appendix A—Documents to Have Ready for an Inspection**

The following is a list of documentation that an inspector may ask to review during an inspection. Documentation is listed by Standard. Many facilities find it convenient to gather these documents ahead of time and have them printed in a binder, or collected electronically in one central location.

#### 1. Operational Methods and Personnel Practices

#### 1.1 Rejection of Shipments/Receipt of Dry Goods

• Rejected shipment records

#### 1.2 Rejection of Shipments/Receipt of Perishables

- Temperature check records
- · Rejected shipment records

#### 1.5 Raw Material Inventory

• Inspection documentation for insect-susceptible materials in storage for longer than four weeks

#### 1.22 Temperature-Sensitive Materials

Records of temperature monitoring

#### 1.27 Hand Washing Facilities

· Records of hand sanitizer concentration monitoring

#### 1.32 Personal Items and Jewelry Control

- Personnel Practices Program
- Exceptions to Personnel Practices Program

#### 1.33 Health Conditions

- Personnel health cards
- Blood/Bodily fluid policy/procedures
- Disease prevention and control policies

#### 1.51 Food Preparation, Thawing, and Refrigeration

• Temperature documentation is on file and current

#### 1.53 Shellfish

• Uniform tags for shellstock

#### 2. Maintenance for Food Safety

#### 2.9 Glass, Brittle Plastics, and Ceramics Control

• Glass, Brittle Plastics, and Ceramics Program

#### 2.10 Air Makeup Units

- Preventive Maintenance Schedule for fans, blowers, filters, cabinets, and plenums
- Filter size documentation 50 microns/MERV 4 or larger

#### 2.13 Lubricants

• Evidence that lubricants are food-grade

#### 2.16 Temporary Repair Materials

- Temporary repair procedures
- Work orders and repair requests

#### 2.17 Temperature Measuring Devices

- Records of temperature monitoring activities
- Records of temperature measuring device calibration traceable to a national standard

#### 3. Cleaning Practices

#### 3.2 Food Contact Cleaning Compounds and Sanitizers

- Food contact approval documentation for cleaning compounds and sanitizers
- Records of testing of cleaning chemical concentrations
- Verification procedures for testing chemical concentrations

#### 3.3 Equipment and Tools

• Documentation of color-code or other classifications

#### 3.4 Daily (Housekeeping) Cleaning

Documentation of daily cleaning task assignments and schedules

#### 3.5 Product Zone Cleaning

Documentation of periodic cleaning task assignments and schedules

#### 3.9 Dish, Container, and Utensil Washing

• Chemical concentration testing and Corrective Actions

#### 4. Integrated Pest Management

#### 4.1 Integrated Pest Management (IPM) Program

- IPM Program
- Written responsibilities for trained in-house or outside contractors

#### 4.2 Facility Assessment

- Documentation of the annual assessment of the facility
- Documentation of Corrective Actions

#### 4.3 Other Guidelines

• Certificate or demonstration of alternative guideline

#### 4.4 Signed Contracts

• A signed contract that addresses the requirements listed in 4.4.1.1 of the AIB International Consolidated Standards

#### 4.5 Credentials and Competencies

- A copy of the certification or registration document for each person who performs pest management activities
- A copy of the pest management company license
- A current copy of the certificate of insurance
- Records to prove that applicators have had training in:
  - ♦ The GMPs
  - ♦ IPM in food facilities
  - ♦ Evidence of competency by exam from a recognized organization

#### 4.6 Pesticide Documentation

• Records of pesticide Chemical Safety Data Sheets and labels

#### 4.7 Pesticide Application Documentation

- Pesticide application records that address the requirements listed in 4.7.1.1 of the AIB International Consolidated Standards
- Records of the lot number of the pesticide used, or applicator's certificate or registration number, as applicable

#### 4.8 Pesticide Control

Inventory of pesticides

#### 4.9 Trend Analysis

- Records pertaining to pest management activities
- Service records describing current levels of pest activity
- Pest-sighting logs
- Written reports of quarterly reviews of pest-sighting logs
- Documented Corrective Actions

#### 4.10 Monitoring Device Documentation

- Facility survey for use in determining placement of monitoring devices
- Site map that lists the locations of all pest-monitoring devices used in rodent and insect control
- Separate site map that lists temporary placements of pest-monitoring devices
- Records of services performed on all pest-monitoring devices

#### 4.13 Insect Light Traps

- Records of services performed on light traps
- Documentation of the types of insects captured in the light traps

#### 4.14 Pheromone Monitoring Devices

• Documentation of the types of insects captured in the pheromone monitoring devices

#### 5. Adequacy of the Food Safety and Prerequisite Programs

#### 5.4 Written Procedures

- Job descriptions
- Alternates/Deputies assignments

#### 5.5 Training and Education

- Written procedures for developing and delivering Prerequisite and Food Safety training
- Training records for all personnel
- Training criteria for competency requirements to confirm understanding of the information presented

#### 5.6 Self-Inspections

• Results of the self-inspections and Corrective Actions

#### 5.8 Customer Complaint Program

- Customer Complaint Program
- Procedure for quick distribution of complaint information

#### 5.9 Chemical Control Program

- Chemical Control Program
- Procedures that address the requirements listed in 5.9.1.2 of the AIB International Consolidated Standards

#### 5.11 Allergen Control Program

- Allergen Control Program
- Procedures that address the requirements listed in 5.11.1.2 of the AIB International Consolidated Standards
- Records of Program updates
- Records demonstrating conformance and Corrective Actions

#### 5.12 Glass, Brittle Plastics, and Ceramics Program

- Glass, Brittle Plastics, and Ceramics Program
- Statements that address essential glass, brittle plastics, and ceramics as they relate to personal belongings
- Procedures that address handling of glass, brittle plastics, and ceramics breakage
- A list of essential glass, brittle plastics, and ceramics
- Scheduled inspections list

#### **5.13 Cleaning Program**

- Cleaning Program
- The Master Cleaning Schedule
- The Housekeeping Schedule
- The cleaning procedures for equipment, structures, and grounds

#### 5.14 Maintenance Program

- Maintenance Program
- Records of compliance

#### 5.15 Receiving Program

- Receiving Program
- Procedures for tractor trailer, lorry, and rail deliveries
- Procedures for the handling of LTL vehicles
- Documented inspection results

#### 5.16 Regulatory Affairs and Inspections Program

Regulatory Affairs and Inspections Program

#### 5.25 HACCP Program

- Written Programs for HACCP-required Prerequisites
- A signed HACCP Program
- Process Flow Diagram
- Hazard Analysis
- Records of CCP monitoring
- HACCP Master Plan
- Training records
- Records of the annual review of the HACCP Program

#### **5.28 Design Standards**

Design standards for structural repairs or modifications

#### 5.29 Water Quality

- Records of routine checks of backflow prevention devices
- Results of water sample testing or documents proving potability
- Evidence that boiler chemicals are approved for food contact
- Preventive Maintenance Schedule for back siphonage and backflow prevention units

## **Appendix B—Conflict Resolution Process**

If there is a concern about an inspection experience or scoring:

1. Contact an AIB International support staff member:

North America + 1-785-537-4750 or 1-800-633-5137 Latin America + 52-442-135-0912

Japan + 81-03-5659-5081

Europe + 44 1372 360-553

- 2. The AIB International staff member will begin a Customer Complaint Tracking Form.
- 3. The inspection report, if applicable, will be put on hold.
- 4. The Form will be e-mailed, along with a copy of the inspection report in question (if applicable), to the responsible Regional Director or Manager.
- 5. The Regional Director or Manager will contact the customer for further details:
  - These details will be used to investigate the issue.
  - The inspector or staff member involved in the complaint will be contacted for his or her information.
- 6. If the complaint concerns an inspection report, it may be sent out for a blind review:
  - The Category Scores, the Total Score, and the name of the Inspector will be removed from the initial inspection report.
  - Five independent parties will review the report impartially, and with no outside influences.
  - A consensus of opinion will be gathered by the Director or Manager.
- 7. The Director or Manager will contact the facility to discuss the final results of the review:
  - If the scoring is changed, the Director or Manager will:
    - ♦ Advise AIB International administration of the change.
    - ♦ Issue an apology letter to the customer.
    - ♦ Follow up with the appropriate inspector to prevent recurrence of the scoring discrepancies.
    - ♦ Reissue the inspection report.
  - If the scoring remains unchanged, the Director or Manager will:
    - ♦ Follow up with the customer and explain why the scoring is justified in accordance with the AIB International Consolidated Standards.

# **Appendix C—Glossary**

21 CFR 110—U.S.A. Code of Federal Regulations; Chapter 21, Part 110. Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food. The 21CFR 110 is the U.S.A.'s core food safety regulation under the authority of the Federal Food Drug and Cosmetic Act.

**Adulteration**—To make imperfect by adding extraneous, improper, or inferior ingredients.

**Air Makeup Unit**—Equipment that tempers outside air, and introduces it into a building to eliminate negative pressure, and provide positive operating pressure within a facility.

**Air Return Duct**—Ductwork that takes air from inside the facility and returns it to the main air handling or makeup unit.

**Audit**—A systematic evaluation of food facility documentation to determine if programs and related activities achieve planned expectations.

Auditor—A person who conducts an audit.

Avicide—A pesticide that targets birds.

**Back Siphonage**—The flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel into the pipe which feeds it; caused by reduced pressure in the pipe.

**Body Jewelry**—Adornments to the face or body that are seemingly suspended on the skin with no visible piercings or other attachment point. These are typically suspended on the body or face through the implantation of a magnet below the skin to hold the jewelry in place.

**Brittle Plastics**—Non polycarbonate-based plastics such as acrylic or Plexiglas.

**Catch Pan**—A shallow or open container placed under a gearbox to collect any leakage to prevent product contamination.

Category—The AIB International Consolidated Standards for Inspection are divided into five categories: Operational Methods and Personnel Practices, Maintenance for Food Safety, Cleaning Practices, Integrated Pest Management, and Adequacy of Prerequisite and Food Safety Programs.

Category Score—The numerical score for each of the following categories: Operational Methods and Personnel Practices, Maintenance for Food Safety, Cleaning Practices, Integrated Pest Management, and Adequacy of Prerequisite and Food Safety Programs.

Category Score Range—The numerical range within which a category will be scored. The five category score ranges align with the five risk assessment categories: No Issues Observed (200), Minor Issues Noted (180-195), Improvement Needed (160-175), Serious (140-155), or Unsatisfactory (≤135).

#### Cleaning Types—

- Deep—Cleaning that typically requires skilled personnel, and involves the disassembly of equipment or entry into equipment housings for safe removal of food residues to eliminate the potential for cross contamination and prevent mold, microbiological, or insect development.
- Housekeeping—Cleaning of exterior surface areas to keep a facility neat and clean.
- Maintenance—Cleaning that requires specialized assistance from skilled maintenance personnel to remove food residues, maintenance chemicals, foreign material, or contamination resulting from maintenance activities.
- Personnel Areas—Cleaning of bathrooms, locker rooms, break areas, or other similar areas.

**Certificate of Analysis (COA)**—A document containing test results that are provided to the customer by the supplier to demonstrate that product meets the defined test parameters, and complies with the ingredient specifications.

Chemical Safety Data Sheet (CSDS)—A document designed to provide workers and emergency personnel with the proper procedures for working with or handling a chemical substance. The CSDS provides information such as physical and chemical data, toxicity, health effects, emergency and first aid procedures, storage, disposal, protective equipment requirements, routes of exposure, control measures, precautions for safe handling and use, and spill/leak procedures.

Competency—A range of skill, knowledge, or ability.

**Contamination**—The act or process of making something harmful or unsuitable. The presence of extraneous, especially infectious, material that renders a substance or preparation impure or harmful.

**Corrective Action**—A change implemented to address an identified weakness.

**Critical Control Points (CCPs)**—A point, step, or procedure at which controls can be applied, and a food safety hazard can be prevented, eliminated, or reduced to an acceptable level.

**Deflector Plate**—An angled piece of metal or plastic with a lip on either side that is placed under a bearing or gearbox to divert lubrication or other leakage away from the product or food contact surface to prevent contamination.

- **Environmental Protection Agency (EPA)**—This is the US government agency that is tasked with developing and enforcing regulations that implement environmental laws enacted by Congress. This includes, but is not limited to, regulations such as: pesticide laws and registration, The Clean Water Act, and drinking water requirements.
- **Essential Glass**—Glass in a facility that is unavoidable or that cannot be replaced with another material.
- **Findings**—Notes made by an inspector that are indexed to a Standard or related requirement. There may be multiple findings in an observation.
- **Floor/Wall Junction**—The point at which the floor and wall meet.
- **Food Grade**—A material or product that will not transfer nonfood chemicals into the food and contains no chemicals that would be hazardous to human health.
- Good Manufacturing Practice (GMP)—A food manufacturing practice that, when followed, protects food from contamination. Examples are defined in the U.S. 21 CFR 110. Sometimes a "c" is placed in front of the abbreviation, GMP, to indicate that the practice is current.
- Hazard Analysis Critical Control Point Program (HACCP)—The 7 step process used to identify, eliminate, or reduce to an acceptable level any physical, chemical or microbial hazards identified in the ingredients, process or product being manufactured. HACCP is based on risk assessment, and identifies the points within the process where controls may be put in place and monitored to control the identified hazards.
- Heating, Ventilation, and Air Conditioning (HVAC).
- **Imminent**—Likely to occur at any moment.
- **Infestation**—The presence of live or dead life cycle stages of insects in a host product, the evidence of insect presence, or the establishment of an active breeding population.
- **Initial Category Score**—This is the first score assigned based on severity. The total number of single and separate observations may bring the initial category score down.
- **Inspection**—A thorough physical review of a food facility to assess what is actually happening in a facility at a moment in time.
- Inspector—A person who conducts the inspection.
- Integrated Pest Management (IPM)—An effective and environmentally-sensitive approach to pest management that relies on a combination of common sense practices. The information in combination with available pest control methods is used to manage pest damage by the most economical means and with the least possible hazard to the people, property, and the environment.
- **Intermediate Containers**—Containers used to transfer a raw material or food product.

- **Kill Step**—The relationship of temperature (e.g., cooked product), temperature and time (e.g., pasteurization), or temperature, pressure, and time (e.g., canning) that effectively destroys pathogens within a cooked food product. The temperature, and/or pressure, and/or time requirements for processing are science-based.
- **Less Than Load (LTL)**—A shipment that contains materials that will be delivered to multiple sites.
- Minimum Efficiency Reporting Value (MERV)—The measurement scale developed by the American Society of Heating, Refrigerating, and Air- Conditioning Engineers (ASHRAE) to rate the effectiveness of air filters.
- Multiple Observations—Findings (single or multiple) noted under more than one Standard and related requirements. For example: All findings noted in 1.1 Rejection of Shipments/ Receipt of Dry Goods and 1.3 Storage Practices will be counted as two observations. An observation will be counted for each Standard involved.
- **Nontoxic**—Not toxic; a nontoxic substance is not considered a food, but would not cause injury or death if consumed.
- **Organoleptic**—Any sensory properties of a product to include taste, color, texture, odor, or feel. Organoleptic testing is the process of evaluation of product through visual examination, feeling, and smelling of products.
- **Pathogen**—An agent that causes disease, especially a living microorganism such as a bacterium or a fungus.
- **Pest Harborage**—Any condition or structural defect that provides a place for pests to live and reproduce.
- Pesticide—A chemical used to kill harmful animals or plants. Pesticides are used especially in agriculture and around areas where humans live. Some are harmful to humans, either from direct contact or as residue on food, or are harmful to the environment because of their high toxicity, such as DDT (which is now banned in many countries). Pesticides include fungicides, herbicides, insecticides, and rodenticides.

#### Pest Management Regulatory Agency (PMRA) (Canada).

- **pH**—The numerical measure of acidity or alkalinity of a solution. Numbers decrease for acidity and increase for alkalinity. A neutral solution has a pH measure of 7.
- **Pheromone**—A chemical secreted by an animal, especially an insect, that influences the behavior or development of others of the same species, and often functions as an attractant of the opposite sex.
- **Pheromone Trap**—A trap that uses a pheromone to attract insects to a glue board so that the insects are captured. Pheromone traps are used to determine the presence and quantity of insects in order to identify activity or infestation in a facility.

**Plenums**—A space usually above a ceiling or below a floor that can serve as a receiving chamber for heated or cooled air to be distributed to inhabited areas.

**Policy**—Statements that reflect decisions made by management. Policies are frequently strategic statements from facility leadership that demonstrate the direction of the organization, and prove senior management support.

**Potable**—Fit to drink. In food safety, this usually refers to water.

**Practices**—Physical evidence that a Program is being followed in a facility. For example, if an inspector sees that a facility keeps chemicals segregated and secure, this is proof that a facility is implementing a Chemical Control Program through practice.

**Prerequisite Programs**—Food facility Programs that lay the foundation for food safety and HACCP and create the environment required for producing clean and safe food.

Preventive Control—Risk based, reasonably appropriate procedures, practices, and processes that a person knowledgeable about the safe manufacturing, processing, packing, or holding of food would employ to significantly minimize or prevent the hazards identified in the hazard analysis. They are consistent with scientific understanding of safe food manufacturing, processing, packing, or holding at the time of the analysis.

**Preventive Maintenance Program**—A schedule of planned maintenance activities.

**Procedures**—Step-by-step instructions on how to execute on a task in a Program. For example, in a facility's Chemical Control Program, there may be a procedure on how to clean up a chemical spill.

**Product Area**—The area close enough to the Product Zone that if an issue were found there, would impact the safety of the Product Zone.

**Product Zone**—All food contact surfaces, and all unprotected areas directly above food contact surfaces. The Product Zone includes areas directly above exposed raw materials, work-in-process, or finished product.

Program—A collection of documentation related to the management of an element in a facility that impacts food safety. For example, a Chemical Control Program documents everything related to the control of chemicals in a food facility. This might include procedures, policies, personnel responsible, lists of approved chemicals, storage requirements, documentation requirements, or other documents. All Prerequisites in a facility have a documented Program.

**Purity**—The condition or quality of being pure: freedom from anything that debases, contaminates, pollutes, etc.

**Recall**—The voluntary removal of a product from the marketplace when the product is either in violation of regulations, or regulatory agencies could take legal action against the product.

**Rejection**—To refuse to accept nonconforming product.

**Risk Assessment**—The categorization of observations in a facility into one of five categories: No Issues Observed, Minor Issues Noted, Improvement Needed, Serious, or Unsatisfactory.

**Security Seal**—A closure to prove no tampering of contents has occurred.

**Sensitive**—Readily affected or vulnerable. In this document, sensitive is used to describe foods that are affected by temperature, and areas of a facility that are vulnerable to pests or contamination.

**Severity**—The level of risk within a risk assessment category (e.g., how severe is an observation within the risk category of Improvement Needed?).

**Single Observation**—Findings (single or multiple) noted under a single Standard and related requirements. Example: All findings noted in Standard 1.6 Pallets or in any of its requirements (1.6.1.1, 1.6.1.2, 1.6.2.1, 1.6.2.2) will be evaluated as one observation.

**Single-Service Container**—A container that is designed to be used once and discarded.

**Total Score**—The total of all category scores.

**Toxic**—Capable of causing injury or death, especially by chemical means; poisonous.

**Traceability**—The identification of any suspect ingredient or finished product and its initial shipment location. While related to recall, traceability is a separate program.

Validation—To establish whether a Program or procedure is correct or not.

**Verification**—To establish whether a Program or procedure is being followed or not.

Water Activity (a)—This is the amount of water that is not bound chemically to other chemicals within the product. This water may also be referred to as "free, active, or unbound" water and because it is not chemically bound, it is available to allow microbiological growth or other undesirable chemical changes in the product.