

Chapter 5

DEVELOPING A TRANSPORTATION AND STORAGE PROGRAM

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A good transportation and storage program ensures that food safety is always maintained. This means making sure that all ingredients, packaging, incoming chemicals and finished products are received, handled, stored and shipped with safety in mind.

The transportation and storage program is a facility's first and last defense against product contamination. Food products and ingredients need to be protected from many hazards including:

- Temperature
- Humidity
- Dust
- Moisture
- Foreign odours
- Pests (rodents, birds and insects)

A good transportation and storage program makes important links in the food chain with suppliers, manufacturers and consumers.

Supplier  **Manufacturer**  **Consumers**

The Transportation and Storage Program requires that:

- Manufacturers prove that their carriers know how to handle food transportation;
- Carriers are inspected by manufacturers before shipping and receiving;
- Ingredients or products that need refrigeration are shipped at a standardized, safe temperature;
- Frozen ingredients or products are transported at a temperature that won't allow thawing;
- Incoming materials and finished products are handled in a 'first in, first out' (FIFO) basis; and
- Non-food chemicals are controlled and stored separately to prevent cross-contamination hazards.

Only trained and experienced employees should be responsible for receiving incoming materials.

1.0 RECEIVING

Receiving is the entry point for all product coming into the facility. If incoming ingredients and other materials don't meet food safety standards they can bring contamination. If these ingredients and materials aren't handled properly they can contaminate the finished product. Contamination is prevented by controlling items allowed into the facility.



Develop controls to make sure of the safety of all incoming materials. Include the following:

- Approved supplier lists (Form B.2: Approved Suppliers List);
- Incoming material specification sheets (Form H.5: Sample Product Specification – Black Pepper);
- Check the safety of the supplier (Form H.7: Supplier Approval Questionnaire);
- Inspect carrier procedures (Form B.10: Incoming or Outgoing Goods Carrier Inspection Report);
- Inspect incoming material (Form B.8: Goods Receiving Record Option 1); and
- Fill out receiving records (Form B.9: Goods Receiving Record Option 2, Form B.4: Bulk Receiving Record).



The first three controls mentioned are covered in the Supplier Food Safety Assurance Program (see Chapter 12: Supplier Food Safety Assurance).

Good communication with suppliers can increase confidence in the quality and safety of products being brought into the facility. But supplier controls are only the first step in controlling incoming materials.

Depending on the risks involved with each product, the incoming material procedures might also include:

-  Certificate of Analysis from the supplier (Form H.1: Certificate of Analysis);
- A visual inspection when received; and
- Analytical laboratory testing.

1.1 Receiving Facilities

To ensure the safety of incoming materials, make sure that the receiving area has good lighting. Also be sure that the area and equipment are clean and dry.

Receiving staff must have easy access to the following:

- Labels
- Tape
- Permanent markers
- Thermometers
- Detergents
- Sanitizers
- Blank document forms

If a bulk dump tank is used for incoming materials, it is recommended to install a fixed wall with a pass-through. This is a safer way of moving product from outside to inside the facility and reduces the chances of water moisture, or aerosols in the air, from contaminating the processing area.

1.2 Carrier Inspection

The first step in receiving incoming raw materials, products and chemicals is to inspect the carrier (trailer, boxcar, container or other means of transport).



See *Form B.10: Incoming or Outgoing Goods Carrier Inspection*.

Take photographs of all rejected carriers to support the report. These photos can also be used as a training resource for staff.

Inspect the carrier carefully *before* unloading any materials. Look for cleanliness, the condition of the vehicle, and signs of recent damage. Any of these signs could mean there are problems with the materials.

After inspecting the carrier, check the condition of the entire load inside the carrier. If any materials are damaged, badly soiled, infested, or shipped with non-food grade chemicals, do not accept your portion of the load. Record the defects and reasons for rejection. Inform all parties involved.

Record the temperature of both the carrier and the received products. Be sure that materials meet minimum temperature requirements agreed on with the supplier. Check transporter records to make sure that the container temperature stayed in the acceptable range for the entire trip.

Make sure that staff members are trained in all these points.

What is a 'pallet of mixed product'?

To make good use of space, some suppliers ship products by creating 'a pallet of mixed product.' This means that two or more different products are transported on one pallet (e.g. three different kinds of spice blends, flavouring jugs, bags of starch and boxes of fruit). This increases the chances of cross-contamination between the different products. If the suppliers ship the raw materials this way, make sure there is some form of physical barrier (e.g. plastic wrap, cardboard sheets, etc.) between the different items.

1.3 Incoming Material Inspection

After inspecting both the outside and inside of the carrier, check the incoming materials



See Form B.8 & B.9: Goods Receiving Records.

Develop safety procedures with all suppliers. Make sure that these inspection procedures are then used when receiving product at the facility.

Many facilities use tamper-evident tags or seals on trucks or bulk tanks. This helps to make sure that tampering is noticed right away.

All hatch seals must be examined to make sure they are intact. Record all seal numbers.

Encourage the staff to watch for signs of tampering or unusual appearance. Make sure staff know the procedure for alerting managers or quality assurance staff about issues.

For incoming materials with low risk for food safety hazards, only periodic spot-checks of these materials is necessary. This is also true for products where hazards will be reduced to safe levels during further processing. High risk products, or products that are not controlled later in processing, must be checked carefully.

Follow these key steps during incoming material inspection:

- Make sure that all incoming products, packaging, chemicals and manufacturing aids have clear lot codes on all containers;
- Get the seal number from the supplier before unloading sealed shipments, then verify the number on the receipt;
- Do not accept shipments if seals have been removed or damaged;
- Supervise unloading of incoming materials (including off-hour deliveries) to make sure materials are not damaged in the process;
- Make sure the product and the amount received agrees with the product and amount
 - Ordered;
 - Listed on the invoice; and
 - Listed on shipping documents.
- Record the temperature of all refrigerated and frozen products; and
- Reject questionable food. When in doubt, throw it out. Have the receiving staff hold all suspect food and notify Quality Assurance (QA) immediately.

Stamps are a great way for receiving staff to record the necessary inspection information directly onto the bill of lading.

Some products may need testing for chemical, biological or physical contaminants. Note that allergens, impurities or preservatives are also physical contaminants. Testing may be done in-house or at an approved lab. Remember that your customers may have special requirements when it comes to lab approval.



For more information about product testing, see Chapter 12: Supplier Food Safety Assurance Program.

1.4 Thermometers

Use a calibrated thermometer to take the temperature of temperature-controlled products when received. Remember that an unprotected and unsanitized thermometer is a food safety hazard.

If using a probe thermometer, clean and sanitize it in the following instances:

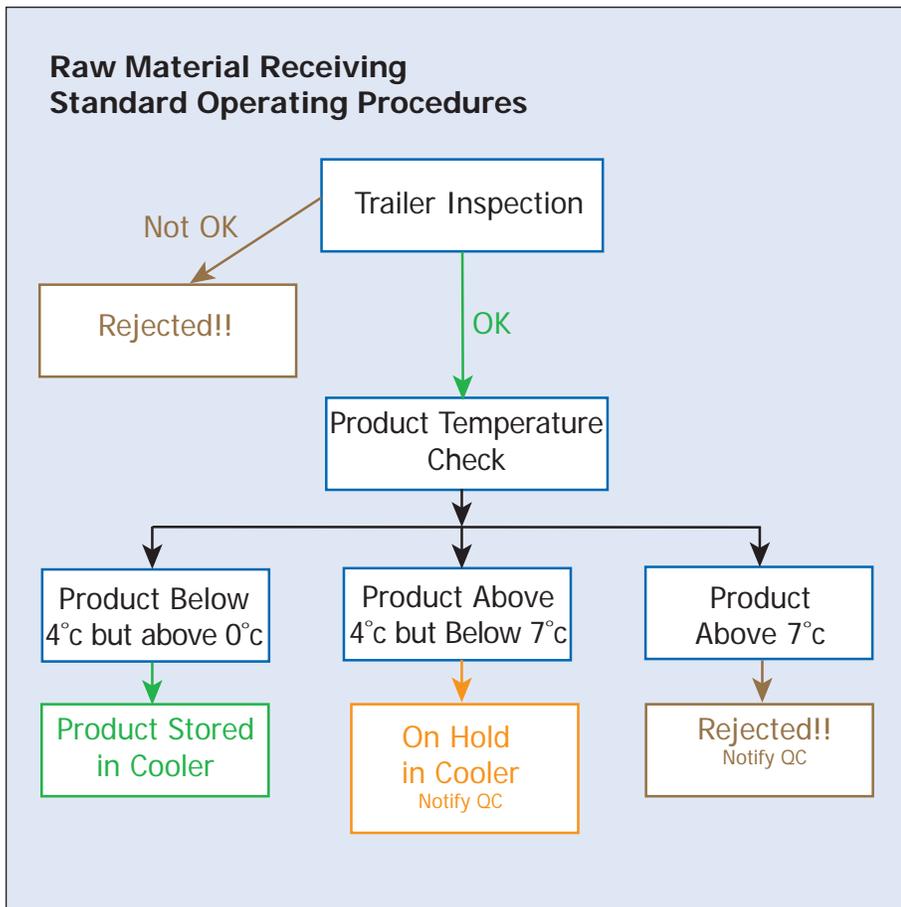
- Before taking any temperatures;
- When changing from raw ingredients to finished products;
- When changing from allergenic to non-allergenic products;
- When changing between different food products (including lot codes, best before dates, etc.); and
- Whenever the thermometer has been handled, set down or otherwise contaminated.

Always have food-contact surface approved detergents and sanitizers within easy reach in the receiving department to make maintenance of the receiving thermometers easier.

1.5 Receiving Flow Charts

Flow charts are a useful way to outline the procedures for receiving incoming materials. Figure 1 is an example for receiving refrigerated, frozen, or temperature-sensitive materials.

Figure 1: Example of a raw material receiving procedure.



Charts should be posted in the receiving area for ongoing, easy reference.

1.6 Defective, Suspect or Returned Product

Developing a Hold/Release Policy is important for a transportation and storage program. Like all other incoming materials, returned, defective or suspect products should display clear lot codes on all containers.

A policy for returned, defective or suspect product should include:

- A process to label all related pallets and products clearly with 'Hold' stickers;
- The date of receipt and the receiver's initials on labels;
- For suspect or defective products, the labels should include the date product was placed on hold, and the initials of the person responsible;
- A way to document the reason for the product being placed on hold;
- A process to decide on how to fix the issue (e.g. rework, reconditioning, animal feed, or destroy and dispose);
- Written unloading procedures that make sure handling of these materials doesn't damage or contaminate other incoming materials;
- Documents for noting and recording the shipping requirements for returned, defective or suspect materials;
- Controls should make sure they are the correct materials, labelled accurately, packaged appropriately, undamaged and free from contamination (unless otherwise noted on any documentation); and
- Controls and documentation must make sure that temperature-sensitive returned, defective or suspect materials are shipped, received and stored at the right temperatures. Temperatures must be monitored.



See Form F.7: Defective, Suspect and Recalled Product Receiving Form

Be sure to identify clearly any returned, defective or suspect products. Set them aside in a designated area for disposal.

Store rejected frozen products in a marked, separate area of the freezer. Similarly, store returned refrigerated products in a marked, separate area of the cooler. Ensure these items are stored under safe conditions to reduce the chances of cross-contaminating other raw materials or finished products. Maintain correct temperatures to ensure that if further testing is necessary, storage conditions will not affect the results. Record the temperature of any returned refrigerated or frozen products.

2.0 STORAGE

A variety of items are stored in a food processing facility including:

- Raw materials (including ingredients and processing aids)
- Cleaning and sanitizing chemicals
- Pesticides
- Maintenance supplies
- Finished product

To prevent cross-contamination among products, provide dedicated areas to store food and non-food items separately.

Areas should be constructed to:

- Protect food from contamination;
- Reduce deterioration of food as much as possible;
- Permit proper maintenance and cleaning; and
- Avoid pest access and places where pests can live.

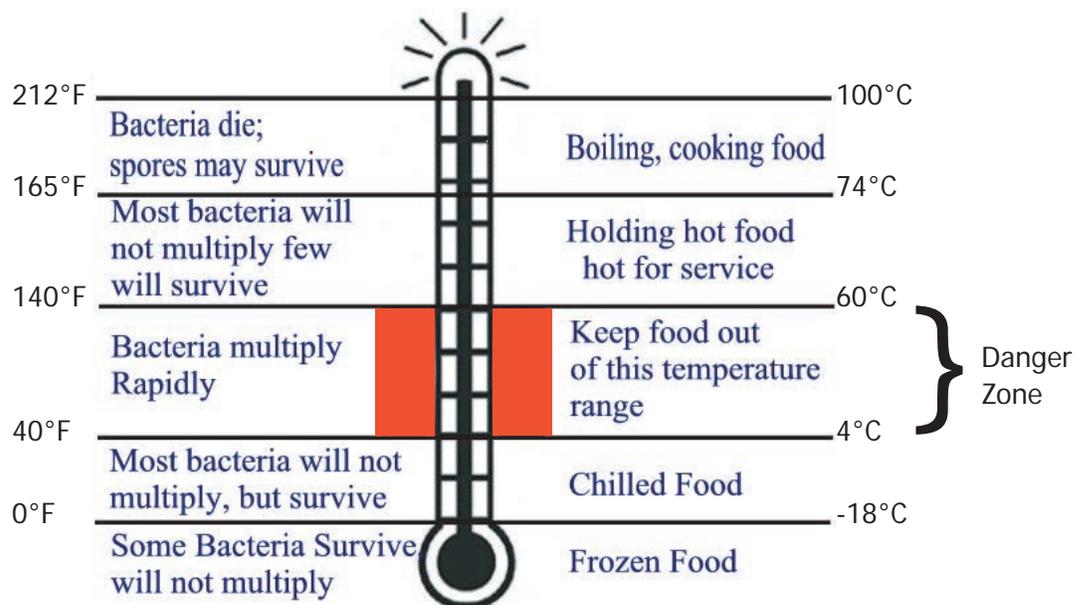
2.1 The Danger Zone

Keep hot foods hot and cold foods cold.

The most important thing to remember when storing temperature-sensitive food products is to keep them out of the 'Danger Zone' (between 4°C and 60°C). The Danger Zone is the temperature range in which bacteria and organisms grow quickly.

Bacteria, yeast and moulds need time, food and moisture to grow. However, they are not able to grow efficiently when the temperature of the food is colder than 4°C or hotter than 60°C. When food is in the Danger Zone, bacteria can grow quickly and can cause illness or injury to consumers.

Figure 2 – The Danger Zone



Courtesy of Marketing Food Safety – Farm Direct Advantage Manual developed in a partnership with Alberta Agriculture and Rural Development and the Alberta Farmers' Market Association.

Protect high-risk foods from extensive exposure to the Danger Zone. These foods include:

- Meat, seafood, fish or poultry and foods that contain those items as ingredients such as casseroles, deli meats, salads and sandwiches;
- Eggs and other protein-rich foods like soybean products and foods that contain these items;
- Dairy products and foods containing dairy products;
- Fresh cut or peeled fruit or vegetables;
- Cooked vegetables, beans, rice and pasta dishes;
- Sauces, gravy, and other low acid food products; and
- Sprouts, such as alfalfa and bean sprouts.

Appearance and touch are not reliable ways to check for safe temperatures. The only way to make sure food is not in the Danger Zone is to take the temperature using a calibrated food thermometer.

2.2 Storing Incoming Materials

Storing Food Products

Always follow the suppliers' storage instructions on incoming materials. Make sure that food is stored:

- In the right place;
- At the right temperature; and
- For the right amount of time.

Storing the raw materials under the safest conditions extends their shelf life. It also reduces the chance that they become a hazard to the product.

Key items to remember when developing the food storage policies are:

- Label and date all incoming materials using the 'first in, first out' (FIFO) system for storage and usage policies;
- Set the maximum time allowed for moving product from the receiving area to the appropriate storage areas;
- Store food at least 15 cm (6") off the floor on approved shelving or racks;
- Ensure dry storage is in a cool, dry area away from direct light; and
- Keep dry storage temperatures below 21°C;

Store raw materials promptly after they are received and inspected. Put them in an approved, clean and sanitary area. This will help to protect them from possible contamination.

- Place received items that need refrigeration or freezing immediately into coolers or freezers. This prevents the growth of bacteria and/or thawing;
- Maintain freezer temperature at -18°C or less;
- Maintain temperatures of refrigerators or coolers between 4°C and 1°C;
- Do not restrict airflow when loading refrigerators or freezers;
- Store all opened bulk food packages in approved containers. Use tight fitting lids, with a contents and date label. Show the date stored, and other important information such as lot codes, on the label;
- Do not reuse chemical containers or single service containers;
- Cover all ingredients, packaging and finished products to avoid contamination from the above; and
- Keep racking away from walls in storage areas to allow space for cleaning and sanitation.



See Form B.12: Storage Unit Temperature Log

First In, First Out: Effective Food Rotation

Food rotation is a very important part of a food safety system. The First-In, First-Out (FIFO) food rotation method helps to make sure ingredients and materials are safe. FIFO can also decrease waste due to spoiled food.

Ask suppliers to use FIFO procedures. The main steps in the FIFO process are:

1. Label incoming product with the date received or the 'use by' date. Stickers attached to the bottom layer of material will help ensure that pallet remains labeled even when the product is being used. Each label should include date received and, where applicable, the 'best before' date.
2. Store incoming product to ensure older or first stock is used first. Keeping food organized in coolers and freezers may also help save energy by allowing quicker access to the food. The longer the cooler or freezer is open, the more likely the temperature will change to unacceptable limits.

3. Make all production, shipping and receiving staff aware of the in-plant FIFO procedures and their purposes.
4. The last step to FIFO is appropriate use of materials. Make sure that raw materials with the earliest 'use by' date are used first. Generally these dates coincide with the earliest date received. If not, notify management and make sure these products are used in the right order. FIFO is meant to help improve the shelf life and safety of the raw materials.

'Durable Life' is the period that a food product will retain its wholesomeness, good taste and nutritional value in storage. It is not a guarantee of food safety. Durable life begins on the day a product is packaged for retail sale. It is generally expressed in number of days. Food processors are responsible for determining the durable life of food products.

A 'best before' date is a different way of showing the durable life of a product. It states the date until the unopened product will retain its durable life. It must be shown along with correct storage instructions.

A 'packaged on' date states when they are packaged at the retail store, and must be shown with durable life information.

A Durable Life is required on prepackaged foods with a durable life of 90 days or less, with the following exceptions:

- Prepackaged fresh fruits and vegetables;
- Prepackaged individual portions of food served by restaurants, airlines, etc.;
- Prepackaged individual servings of food prepared by a commissary and sold in automatic vending machines or mobile canteens; and
- Prepackaged donuts.



For more information on requirements for Durable Life or Best Before dates, visit the Canadian Food Inspection Agency website at <http://www.inspection.gc.ca/food/information-for-consumers/fact-sheets/labelling-food-packaging-and-storage/eng/1331871971167/1331872104067>

Freezers

To maintain the best food quality, and to minimize deterioration because of microbe growth, keep the temperature of the freezer at -18°C or colder. Freezing causes bacteria to enter a dormant or non-active stage. However, freezing can't kill or destroy bacteria already in or on the product. Once thawed, these bacteria will become active. They can then multiply to levels that may become harmful.

Follow these rules for storing food in a freezer:

- Keep similar items together. For example, store allergens in one area, frozen flavours in another and frozen vegetables in yet another; and
- Mark all pallets using labels that will not fall off at cold temperatures.

It is important to follow FIFO procedures for all materials, even those stored in freezers. Research has shown evidence of increased chance of illness resulting from frozen food that has been stored for long periods and has freezer burn.

Coolers or Refrigerators

Maintain a target temperature of 4°C or less in refrigerators or coolers. In contrast to freezer storage, certain bacteria are still able to multiply in these cool temperatures but at a slower rate. This means that perishable food will gradually spoil in this environment.

Tips for storing food in a cooler are:

- Keep similar items together. For example, store all meat together in one section, liquids in another and allergens in another;
- Store partially used ingredients in clearly labeled, transparent containers so that food can be identified without opening the containers;
- Organize items to create more storage space and easier access to food; and
- Inspect coolers regularly and remove food that is spoiled or has passed the suggested storage time.

If the refrigerator or cooler is not working properly, the temperature of the food in it may reach the Danger Zone. Before moving the food, check the cooler temperature. If the cooler is above the target temperature (e.g. 4°C) , move the food quickly to another cooler or refrigerator.

Take the temperature of the food. If the temperature of the food items is warmer than the target temperature , decide what to do and write down the decision and reasons on the Storage Unit Temperature Log (see Form B.12).

Thawing Frozen Product Safely

Frozen food should be thawed in a refrigerator or cooler, not at room temperature or in warm water. Thawing at room temperature or in a warm, wet environment allows harmful bacteria to grow.

Faster thawing must be done as rapidly as possible. The temperature of the product must be controlled to minimize the time that it is above 4°C. Acceptable active thawing methods include using:

- Forced air; and
- Continuously circulating, temperature controlled water.

Each of these methods must be operated under Good Manufacturing Practices with correct documentation of temperatures and controls.

During thawing, the temperature of the product must be controlled to ensure that it does not go above 4°C.

To improve air circulation, remove all packaging before thawing the food. This prevents the product from becoming insulated by the packing material. Monitor thawing to know when all parts of the product are no longer frozen (e.g. they have reached a temperature of 0°C or warmer). Once the product is completely thawed, process it immediately or store it at a temperature of 4°C or colder.

Place a drip container under thawing product to catch the juices. This prevents contamination of products or materials that may be stored underneath.

Never use food from cans or jars that are damaged, bloated or overflowing. These could indicate microbial growth.

Policies should state: 'Food shall not be consumed, stored or processed in any room or area where hazardous materials, such as cleaning chemicals or pesticides, are stored or handled.'

Dry Storage

Dry foods, canned goods and high-acid items generally have a low risk of bacteria growth. However, even dried foods have limited storage time.

Dry storage rooms should be cool, dry, clean, well lit and ventilated. Store food at least 15 cm (6") off the ground. Keep food in original packages or containers to avoid damage and keep pests away. Place racks far enough from the wall to allow for cleaning and inspection.

Humidity can affect the safety and quality of food products. High humidity levels can allow mould and fungus to develop. Very low humidity levels can dry meat, some fruits and vegetables. It can also lead to loss of flavour and texture. Humidity can be controlled through airflow.

Some processing materials (e.g. nitrite) can become toxic when used improperly. Like other chemicals, store them separately from spice, seasoning or other ingredients.

2.3 Segregation – Chemicals and Allergens

Ensure employee and customer safety by protecting against accidental swallowing of chemicals or other hazardous materials. Reduce the possibility of cross-contamination by separating areas where hazardous materials are stored or used, from those where food is kept. Use a separate, ventilated room for storing hazardous substances such as chemical cleaners and pesticides.



See Form B.6: Chemical Spill Incident Report.

Allergens or ingredients containing allergens may require separate storage in a facility. These proteins can easily cross-contaminate non-allergen food items. The easiest way to separate allergens is to set aside specific shelving, racks or storage areas. Colour-coded stickers and equipment will help to identify separate areas.



For more information on allergen control, see Chapter 11: Allergen Control Program.

2.4 Storing Finished Products

Like incoming products, finished products have specific storage requirements. The purpose of this is to:

- Prevent contamination;
- Prevent damage or destruction of the product; and
- Rotate stock so that older products get shipped before newer ones.

To prevent the possibility of cross-contamination between raw materials and finished products, designate separate storage areas for each.

3.0 SHIPPING

To ensure the continued safety of outgoing materials, keep the shipping area well lit. Make sure the area and equipment are clean and dry.

Shipping staff need easy access to materials including labels, tape, permanent markers, thermometers and blank documentation forms. To lower the chances for contamination, the shipping area should be separate from the production floor.

Additional airflow barriers, such as air curtains, may help to separate shipping areas that may be open to the outside environment or production floor.

3.1 Carriers

Shipping is a facility's final control point for finished product. All food must be protected during transportation. The type of carriers to be used depends on the type of food product and transportation requirements.

Choose food carriers that are designed and built so that they:

- Can be thoroughly cleaned and disinfected;
- Permit separation of different foods and from non-food items during transport;
- Protect product from contamination (e.g. dust and fumes);

- Maintain the required temperature, humidity, atmosphere, and other conditions to protect food from harmful or undesirable microbiological growth and other damage; and
- Allow any necessary conditions (e.g. temperature, humidity, etc.) to be checked easily.



See Form B.3: Bulk Loading Report Form, and B.11: Shipping Record.

In certain situations, especially in bulk transport, make sure that the carriers are use only for food. Transport food products that absorb residual flavours or odours in carriers that transport only that particular product.

If the same carrier has been used for transporting different foods or non-food items, ask for the records from the shipping company. Companies that ship food product should maintain records of their most recent cargo. They should also maintain records of the cleaning method used in the carrier they are providing.

3.2 Proper Loading of Food Carriers

There are many ways food can be damaged during transit. Effective loading procedures can minimize damage or cross-contamination of products during shipping.

Follow these guidelines for loading food carriers:

- Avoid overloading refrigerated or frozen carriers to make sure of appropriate airflow;
- Avoid condensation build-up on staged product waiting to be loaded;
- Stack lighter, weaker cases or pallets on top of heavier cases or pallets;
- Load each carrier as quickly as possible; and
- Consider the use of secondary controls (e.g. load locks) to help secure pallets or product, especially when the carrier is not completely full.

When products containing allergens are shipped with products that do not contain allergens, always use some form of physical barrier. Examples include plastic wrap or cardboard dividers used between the products. To further reduce the chance of cross-contamination, never use damaged containers or pallets.

3.3 The Cold Chain

Management of the food supply chain includes consistent and accurate checking of temperature. Maintain safe refrigeration or freezer temperatures during transportation. This is often called the 'cold chain.'

It is important to maintain the cold chain during each step, from placing product on a pallet to unloading carriers. Set up temperature and performance standards for each step. Keep records to make sure that food safety controls are maintained.

4.0 INCOMING CHEMICAL PROGRAM

Any chemical used in a food processing facility can contaminate food ingredients, packaging materials, food contact surfaces and staff.

Before ordering non-food chemicals for the facility, make sure they are listed in the Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemicals Products, published by the Canadian Food Inspection Agency (CFIA).



[online at http://www.inspection.gc.ca/food/safe-food-production-systems/technical-references/reference-listing/eng/1375038742229/1375038784748](http://www.inspection.gc.ca/food/safe-food-production-systems/technical-references/reference-listing/eng/1375038742229/1375038784748)

Chemicals must be listed formally by CFIA as not posing a health risk to consumers. If a chemical is not on this list, a 'Letter of No Objection' must be obtained from Health Canada to bring the chemical into a facility.

To control the storage and use of poisonous and toxic chemicals (e.g. cleaning and sanitizing agents, pesticides) use the following procedures.

1. Minimize poisonous and toxic chemicals in the facility:

- Keep only those chemicals that are required for the operation and maintenance of the facility; and
- Dispose of all chemicals no longer in use.

2. Control the use and storage of chemicals:

- Store all poisonous and toxic chemicals separately from food handling and storage areas;
- For poisonous and toxic chemical storage areas, limit access and secure area;
- Lock all storage areas, including outside storage, when unattended; and
- Make sure that poisonous and toxic chemicals are stored properly and are labeled clearly.

3. Maintain appropriate labeling:

- Keep chemicals and supplies in their original packaging whenever possible; and
- Remove and dispose unlabeled chemicals (according to bylaws).

4. Regularly inspect and monitor chemical usage:

- Create a list of all poisonous and toxic chemicals on premises;
- Inspect chemical storage, processing and packaging areas daily before production begins;
- Move chemicals stored improperly to the correct storage area;
- Investigate any incidents of missing stock or other unusual situations; and
- Develop corrective actions when appropriate.

Separate chemicals for storage based on their chemical properties (e.g. acid and bases) to prevent chemicals from becoming mixed accidentally. Certain chemical reactions can cause deadly fumes, fire or explosion.



Courtesy the Marketing Food Safety - Farm Direct Advantage Manual developed in a partnership with Alberta Agriculture and Food and the Alberta Farmers' Market Association.



See Form B.1: Approved Chemical List, and Form B.5: Chemical Inventory Record.

5.0 DOCUMENTATION

5.1 Incoming Material Records



Incoming material records may include packaging, ingredients (including water or ice), and chemicals. For all incoming materials these documents will include:

- *Cooler and freezer temperature records (See Forms B.12: Storage Unit Temperature Log); and*
- *Receiving records (see B.4: Bulk Receiving Record, and Forms B.8 and B.9: Goods Receiving Records, and).*



Inventory tracking records are also an important part of the documentation. These are covered in Chapter 10: Development of a Recall Plan.

When receiving chemicals into a facility, make sure the products and amounts received agree with the product and amount ordered and the invoice and shipping documents.

5.2 Shipping Records

The correct exchange of documentation between a facility and the shipping company is important. Documentation may include:

1. Food transportation unit number;
2. Information on previous loads;
3. Time/temperature records; and
4. Cleaning certificates.



See Form B.3: Bulk Loading Record, and Form B.11: Shipping Record.

6.0 TRANSPORTATION, STORAGE AND RECALL

An effective transportation and storage program strengthens the recall program. The manufacturing team's main responsibility is traceability. However, important parts of traceability depend upon the staff responsible for transportation and storage.

- Receiving staff must make sure that traceability information is collected before materials enter production.
- Shipping staff must understand the importance of recording production dates for all materials shipped. These staff members are responsible for creating the link between product information and customers.

Many documents used in the transportation and storage program are also used in the inventory tracking and distribution systems.



For further information regarding traceability in a facility, see Chapter 10: Development of a Recall Plan.

7.0 STAFF TRAINING

Training of shipping and receiving staff should include:

- How to document information;
- How to inspect and ensure that carriers are cleaned thoroughly;
- How to evaluate the received products;
- How temperature can affect the bacterial growth in food products; and
- The importance of controlling pests.

All employees working in shipping and receiving must understand the importance of handling food cargo safely.



For further information regarding personnel training, see Chapter 7: Developing A Personnel Training Program.

8.0 TRANSPORTATION AND STORAGE FORM TEMPLATES

- B.1 Approved Chemical List
- B.2 Approved Suppliers List
- B.3 Bulk Loading Record
- B.4 Bulk Receiving Record
- B.5 Chemical Inventory Record
- B.6 Chemical Spill Incident Report
- B.7 Defective, Suspect or Returned Product
- B.8 Goods Receiving Record (Option 1)
- B.9 Goods Receiving Record (Option 2)
- B.10 Incoming or Outgoing Goods Carrier Inspection
- B.11 Shipping Record
- B.12 Storage Unit Temperature Log

9.0 SOURCES OF INFORMATION

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