Chapter 4
DEVELOPING A PREMISES PROGRAM

The premises are generally known as the interior and exterior building and also include the surrounding areas not directly connected with food production and storage.

Facilities are areas directly involved with the production of food products. This includes processing equipment and storage areas.

In this chapter, the terms 'premises' and 'facilities' are used interchangeably because a premises program should include both these areas.

All food processors need to meet the requirements of the laws and regulations related to their production. This includes both their processing license and the products they produce. This is why it's important to consult the municipal, provincial and federal regulatory agencies when designing or renovating a food processing facility.

Contact Alberta Agriculture and Rural Development, the regional healthy authority or the Canadian Food Inspection Agency to learn more about the necessary legal acts and regulations.

The Alberta Food Regulation states:

> "A person must not construct or make alterations to a food establishment unless plans and specifications for the construction or alterations have been approved by the executive officer of the health region."

This regulation ensures the safety of products both during and after construction or renovation.

When building or renovating a food processing facility, follow municipal building codes and bylaws.

1.0 CONSIDERATIONS

Consider the following elements when designing, constructing and maintaining a food processing facility:

- Receiving
- Raw materials storage
- Processing area
- Finished product storage
- Quality control laboratory
- Mechanical room
- Maintenance/workshop
- Lunchroom
- Washrooms (with shower and lockers where applicable)
- Offices
- Waste disposal
- Construction materials

The food processing facility should always be designed and constructed with food safety in mind.

Facility design determines employee flow, which in turn will determine opportunities for the contamination of food. A good facility design will minimize the chance for contamination.

Elements that can influence maintaining a hygienic and pest-free environment include:

- Sufficient space in production areas for equipment, employees, materials and cleaning;
- An appropriate amount of hand wash/sanitizing and utensil cleaning stations;
- Waste disposal facilities located both inside and outside the facility;
- Appropriate water and waste treatment needs;
- A suitable employee training area; and
- An effective sanitation department and material storage.

A food processing facility should be designed and constructed to produce safe food. It should have enough space to carry out necessary activities while providing good lighting and ventilation. It is important to keep pests out and make sure that dust, dirt, odours, smoke and other contaminants are kept out of food production and storage areas.

2.0 SANITARY FACILITY DESIGN

The objective of sanitary plant design is to control food safety hazards.

Sanitary facility design aims to reduce the risk of contaminating food products by controlling allergenic, chemical, microbiological and physical hazards. Different methods are used to control each of these hazards. For example, a significant difference between allergenic and microbiological hazard control is the use of heat. While microbes can be partially controlled by hot water, heat will not remove or destroy allergens. These proteins must be removed by scrubbing, using detergents, or, in the case of dry cleaning, by an effective vacuum system.

See Form A.2: Change Control Checklist, and Form C.8: Sanitary Design Checklist.

The American Meat Institute's Equipment Design Task Force has developed ten principles of sanitary design for food production facilities. The task force created the list with input from meat and poultry processing facilities, as well as from equipment manufacturers. It also had input from certifying organizations and government officials. Although developed for the meat industry, these principles can be applied to any production environment.

Ten Principles of Sanitary Design

1. **Equipment and premises should be designed so that all components can be cleaned to a microbiological level.** Make sure that equipment, walls, ceilings and floors are designed and built with materials that are durable. Make sure these materials are smooth, cleanable and suitable for production conditions.
2. **Equipment and premises should be designed with compatible materials.**

   Construction materials should match:

   - the product you are producing;
   - the production environment;
   - cleaning and sanitizing chemicals; and
   - cleaning and sanitizing methods.

All materials should be listed in the "Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products," published by the Canadian Food Inspection Agency. To use materials not listed, a 'Letter of No Objection' should be obtained from Health Canada.

3. **Equipment and premises should be designed so that they're easy to access for inspection, maintenance, cleaning and sanitation.** As part of the production and sanitation process make sure that microbial growth locations are designed out or managed. Access should not require tools.
4. **Equipment and premises should prevent product or liquid collection.** The floors should be sloped enough to let liquids drain to trapped outlets. All equipment should be self-draining. This prevents moisture from condensing or pooling into uncontrolled areas of microbial growth.
5. **Hollow areas should be hermetically sealed (watertight, airtight).** The term hermetically sealed is used to describe something that has an airtight and watertight seal. Hermetically sealing all hollows prevents the possible build-up of allergens, microbes or other hazards in hard-to-reach areas. Eliminate or permanently seal these areas wherever possible.
6. **Examine and eliminate any other possible recesses or nooks.** Equipment and premises should be free of recesses such as pits, cracks, corrosion, gaps, ledges and dead ends.
7. **Sanitary Operational Performance.** The facility should always operate without contributing to unsanitary conditions and cross-contamination hazards.
8. **Hygienic design of maintenance boxes/enclosures.** Design and install electrical boxes, equipment interfaces, control boxes, valve handles and other maintenance enclosures in the facility with safety in mind. Make sure the design prevents accumulation of hazards at these points.

9. **All facility systems must be hygienically compatible.** This means that the facility's design must include only compatible systems or systems that work well with each other. In no way should the design contribute to food safety hazards because certain systems are not compatible (e.g. electrical, water, air). The systems also must not interfere with each other.
10. **Validate all the premises controls through cleaning and sanitizing protocols.** Validation and verification procedures for the sanitation program help to assess the facility design and ensure that the manufacturing environment matches the production needs

See Chapter 8: Developing a Sanitation Program.

3-A Sanitary Standards, Inc. (3-A SSI) is another non-profit association that represents equipment manufacturers, processors and public health professionals. Over many years, this group has developed a long list of 3-A Sanitary Standards. It has also developed 3-A Accepted Practices. Both of these are used around the world for food processing equipment and systems.

For more information on 3-A SSI and its standards visit: http://www.3-a.org/.

3.0 EXTERIOR ENVIRONMENT AND BUILDING

To control all food safety hazards, be sure to think about the facility's exterior environment. Make sure that contaminants can't get inside. Consider how to repel insects, rodents, birds, and windborne microbes and dust. Design driveways, landscaping, access doors and ventilation systems to help keep out contaminants.

3.1 Facility Location

Keep in mind possible sources of contamination on and around the site. Be certain to minimize possible maintenance and food safety issues. When thinking about location, make sure that the building isn't close to any environmental contaminants.

Make sure that the land around the building is maintained to control sources of contamination. Remove debris and elements that might attract pests. This means removing things like long grass and other vegetation.

Possible contamination sources include:

- Birds
- Rodents
- Insects
- Paint
- Odours
- Moisture

Try to avoid placing a facility near high-risk neighbours including:

- Oil refineries
- Sanitary landfills
- Chemicals plants
- Coal yards
- Paper and steel mills

Remember that the area around a facility could create potential food safety hazards including smoke, sewage, dust, odours and plants.

Place the building at the highest elevation possible.

Place the building at the site's highest possible elevation. This will allow storm water to drain away from the building as storm water should be efficiently and entirely removed from the site. This is because standing water attracts insects and will then become a place with microbial and mould growth. Airborne spores from this growth can enter the facility.

Once the location for the facility is chosen, make sure that the roadways are well graded, compacted, dust proofed and drained. A minimum 18 inch growth-free zone around the building is recommended. This area should be covered with pea gravel or paved with asphalt or concrete. This controls plant growth and minimizes the amount of insects and animals attracted to the building.

A minimum 18 inch growth-free zone around the entire building is recommended.

It's important to have good site security. This helps to control traffic and safegaurds the activities, materials and equipment on the premises. If equipment must be stored outside, locate it away from walls. Also make sure it's off the ground to prevent forming sites that attract pests. Good storage practices also allow for better site inspection.

3.2 The Building Exterior

Construct and maintain the building exterior to keep any contaminants and pests from entering. This means that the facility should have:

- No unprotected openings;
- Air intakes that are well placed, covered and screened; and
- Well-maintained roof, walls and foundation to prevent leakage.

Design the building to prevent unwanted hazards from entering the facility.

See Form A.4: Exterior Inspection Record – Option 1, or Form A.5: Exterior Inspection Record B – Option 2.

4.0 INTERIOR ENVIRONMENT AND BUILDING

Careful thought should be given to designing the floors, walls, ceilings, equipment and ventilation systems inside the facility. Problems with the design and installation of the interior environment can reduce product safety. Some things to look out for include:

- Exposed fibre glass insulation;
- Unprotected glass (e.g. skylights, light fixtures);
- Flaking paint; and
- Rust that's directly over open production lines.

Any of these could cause contamination by foreign matter.

Examine the inside environment. Look at individual parts, as well as several parts together. This helps to make sure the parts combine to protect food product safety.

See Form A.8: Interior Facility Maintenance Inspection Record.

4.1 Proper Ventilation Systems

Allergens or other hazards that are easily airborne can contaminate nearby lines or other food contact surfaces.

Creating safe ventilation systems is very important in designing food processing facilities. This is because airborne allergens can be easily transferred from one area of a facility to another. If a product or its ingredients contain one or more allergens that are dusty or easily airborne, the escaping dust can contaminate nearby lines. It can also contaminate other food contact surfaces.

Positive air pressure in the processing / packaging departments minimizes the risk of allergen contamination by preventing the transmission of contaminated air. It prevents this in areas from the facility's raw material handling areas to finished product areas.

High filtration of incoming air also minimizes the risk of allergen contamination. Filters that are 95 percent efficient at 5 microns are recommended to maximize food safety. This level of filtration deals with dust particles carrying microbes. It also traps the allergens that can be found in recycled air.

It is important when designing the ventilation systems to consider the possible build up of condensation. Product contamination from too much condensation is a big concern in facilities with humid environments. Make sure to adjust ventilation systems to reduce condensation from forming.

See Form A.1: Air Flow Record, and Form A.13: Ventilation Inspection Record.

4.2 Loading Docks and Receiving Bays

Areas where trucks dock are important to sanitary design. This is because these areas are the frontline of defense in pest control programs. Some modern docks have seals. So when a truck backs up to the door, it creates positive pressure helping to minimize the entry of both pests and dust into the facility.

If seals are not used, it is recommended to use vertical lift dock doors or overhead rollup doors. These doors should have no housing, eliminating nesting places for various insects.

Monitor these doors routinely to check for insects. Keep birds from nesting and roosting in overhead canopies or roofs. Birds can easily enter the facility when dock doors are open and trucks aren't backed against the door, leaving a wide open space.

Birds can easily enter the facility while dock doors are open and no truck is in place.

Dock-leveler plates, which create a bridge between the dock and the truck, also have dead space to the outside. This space can let pests enter the facility. Make sure that the dock-leveler plates line up with brush seals. This discourages rodents from getting into the leveler pit and from entering through the space between the plate and the inside floor.

4.3 Doors

Doors are obvious entry points into the production areas of the facility. Install doors that are durable, washable, smooth and of non-absorbent materials. Avoid wooden doors because they absorb moisture that can allow microbial and mould growth.

4.4 Windows

Windows are another key sanitation and pest control hazard. Broken windows can easily result in glass contamination. They also provide entry points for pests.

If the facility must have windows, make sure that they can't be opened.

If the facility must have windows, make sure they can't be opened. This way, windows can let in light while repelling potential contaminants.

Maintaining window screens is time-consuming and costly, so avoid screened windows if possible. If the facility does have screens, make sure they fit tightly and are well maintained.

4.5 Floors

Floor contaminants can easily be splashed onto the equipment. They can also be tracked through a facility on footwear.

Floors must be able to withstand all kinds of abuse including mechanical stress, chemical spills and heat. In choosing floor materials, consider the equipment used, food production processes and sanitation procedures. Install smooth, non-absorbent and easy-to-clean floor coverings. Where it's needed, cover and seal floor joints. This prevents contamination and allows for easy cleaning.

Pitted floors cause microbial growth and therefore contamination. Tests show that severely damaged floors can be rinsed, foamed, rinsed again, then sanitized and still remain contaminated.

Having to use a lot of sanitizer can create its own hazards. Floor contaminants can easily be splashed onto clean equipment during sanitation. They can also be tracked throughout a facility on footwear.

4.6 Walls

Walls should be smooth and non-absorbent. This prevents microbial growth. It also prevents the absorption of dusty materials from ingredients containing allergens. The finish should reach from floor to ceiling and should be easy to clean.

Items hung on the walls should be included in scheduled maintenance, cleaning and sanitation programs.

4.7 Ceilings and Overhead Structures

Ceilings in production areas should prevent contaminants (e.g. dust, condensation, paint chips, etc.) from falling from the roof supports. Ceilings should also prevent contaminants from the underside of the roof from falling into the food production area or onto product.

False ceilings become great places for insects to live. They are a potential source of contamination.

Avoid false ceilings in a food processing environment. The area above these ceilings becomes a home for insects and can become a source of contamination.

If a facility needs a drop ceiling, consider creating another floor. However, if a drop ceiling is the best solution, make sure the hollow or suspended area allows access for cleaning, maintenance, service and inspection. This area should be included in the sanitation plan.

4.8 Lighting

Good lighting makes for better inspections and sanitation. Include production areas, hallways, storage areas, equipment rooms, bathrooms, etc.

Arrange lighting to reduce eye strain, to maintain or increase efficiency and to prevent errors during food preparation and processing. Inadequate lighting can harm production processes.

Make sure that lighting fixtures don't create a contamination risk. Use fixtures that don't leak, corrode, cause fires or electrical problems. Assume that fixtures may get knocked by accident. Also make sure that broken bulbs, glass and other material won't affect the production area.

See Form A.9: Lux Monitoring Record.

4.9 Glass and Brittle Plastics

Blunt force can break brittle plastics into pieces. This can be a food safety risk.

Have a policy to control contamination from glass and brittle/hard plastics. Things like thermometers, windows, sight glasses, light bulbs, gauge covers and chemical-testing glassware can create a high food safety risk.

An effective glass and brittle plastics control policy should:

- Identify all glass and brittle plastics in the facility and their locations;
- Eliminate these items whenever possible;
- Identify and use protective materials (e.g. light bulb covers);
- Include regular inspection schedules of all glass and brittle plastics (e.g. gauge covers, thermometers, windows, etc.);
- Create a plan to handle situations where breakage might occur (e.g. set up documentation and assign someone to receive and review reports); and
- Keep employees from bringing these materials into the facility.

Store glass and brittle plastics away from raw materials, packaging and production lines. If this isn't possible, make sure that clean-up procedures include checking the area. Make sure that all particles have been removed.

See Form A.6: Glass and Brittle Plastic Incident Report, and Form A.7: Glass and Brittle Plastic Inspection Record.

4.10 Process and Product Flow

Product flow is the way raw materials, ingredients, packaging and finished product move through a facility. Process flow refers to how the product is assembled. Equipment selection and layout design of the facility will depend on both product and process flow.

Poor product and process flow is a problem in older buildings where food safety wasn't considered during design.

To avoid costly mistakes, map both product and process flow. Analyze these maps for possible hazards and improvements. Do this before committing to any construction or renovation.

Segregation, or separation, is a major food safety consideration. Consider this during design and construction. Physical barriers provide the best separation. Design buildings and facilities to maximize hygienic operations. Design them to have a regulated process flow from the arrival of raw material to the shipping of finished product.

4.11 Employee Facilities

To keep employees from causing contamination, the facility should provide:

- ✓ Storage facilities for personal items;
- ✓ Areas for employee breaks and meals;
- ✓ Washrooms with adequate sinks and clothing hangers; and
- ✓ Hand wash sinks and hand dip stations.

Design employee facilities so they don't open right into production areas. This helps to make sure that no one enters production areas without protective clothing. Self-closing doors at entrances lower the risk of doors staying open for long periods.

To minimize contamination, use hand washing or dipping stations only for these purposes.

Make sure there are enough hand wash stations available. Put them in the following locations:

- ✓ At each work area, so that employees can wash whenever they become contaminated. If employees have to move far from their work area to reach a wash station, it increases the risk of cross-contamination.
- ✓ Near any toilets, so that staff can wash their hands immediately after using the restroom.

Hand sanitizer or dip stations shouldn't be used as a substitute for hand washing. However, these stations offer a way to remove microbial contamination from hands when it's not possible to have complete hand wash stations.

At hand dip stations, employees dip their hands into a sanitizing solution. They might also sanitize hands using an alcohol gel. This solution is not rinsed, but allowed to air dry. Always post instructions for the correct methods of hand cleaning and sanitizing.

If the facility uses hand dips or hand sanitizers, keep in mind:

- ALL employees and visitors are to use these stations consistently;
- These stations should be part of the facility's regular cleaning schedule; and
- Chemicals used at these stations must be listed on the Chemical Inventory Record and approved for use in food establishments.

Remember that if employee hands are contaminated with large amounts of solid materials, fat or other food residues, these disinfectant or sanitizing chemicals won't work properly. Using dip stations in these situations can lead to increased, rather than reduced, risk to the products.

4.12 Equipment

Sanitary design principles can help safeguard equipment from becoming a source of contamination.

Employees are less likely to clean and sanitize equipment effectively if it's difficult to clean.

Examples of good design principles are the American Meat Institute's (AMI) *"10 Principles of Sanitary Design,"* and the 3-A Sanitary Standards, Inc.'s comprehensive inventory of sanitary design standards.

To prevent microbial contamination and to help remove allergen residue between production runs, use equipment with food-contact surfaces that are:

- Non-absorbent
- Non-corrosive
- Non-reactive with the product
- Non-contaminating
- Cleanable

Purchase equipment without internal horizontal ledges. Don't purchase equipment that has hidden or hard-to-clean areas and don't use equipment that has recessed fasteners like Allen-head screws on horizontal surfaces.

The design shouldn't limit access to the interior of the equipment. This makes it hard to clean and sanitize.

For further information on setting up the equipment program, see Chapter 6: Developing an Equipment Program.

4.13 Sanitation Facilities

One of the best ways to control hazards in a facility is through sanitation and cleaning of both equipment and premises. Make sure that the facilities are made of corrosion resistant materials that can be cleaned easily.

One of the best ways to control hazards in a food processing facility is through sanitation and cleaning of both equipment and premises.

Also provide potable, or drinkable, water at a temperature suitable for the cleaning method and chemicals used.

Key areas of the in-house sanitation facilities include:

- Chemical storage areas
- Waste collection storage rooms
- Wash-down rooms
- Waste water treatment facilities (if the facility has them)

Make sure that these facilities are separated from food storage, production and packaging areas. Use physical barriers or significant space separation to do this.

Remember that most activities related to cleaning can release airborne particles, which can cause cross-contamination. Fine particles can travel far and also through ventilation systems.

For more information on facility sanitation, see Chapter 8: Developing a Sanitation Program.

5.0 WASTE DISPOSAL

5.1 Interior Waste Disposal

Policies and procedures to remove waste from the production area should be put in place. This reduces the risk of contamination. Also provide dedicated areas and equipment for storing waste and inedible material. Maintain food safety practices as these are removed from the premises.

Maintain all waste disposal areas in clean condition, including storage rooms used for inedible material. Include them in the preventative maintenance program.

Colour coding is an excellent way to identify waste containers.

Colour coding is an excellent way to identify waste containers. These containers should be leak proof and should be cleaned on a preset schedule. Where appropriate, cover them to prevent spills during transport. Avoid locating waste containers near any food product. Be careful of this in preparation, handling or storage areas.

See Form A.4: Waste Disposal Area Inspection Record.

5.2 Exterior Garbage Bins

Do not locate on-site garbage bins close to the production facility. Garbage bins are excellent breeding grounds for insects and can attract pests including rodents and birds.

Garbage bins soiled with food debris will attract pests.

Don't overstuff bins. If the area around the bin gets contaminated by spills or overflow, clean the area immediately. To limit pests getting into the garbage, make sure lids are closed securely. If the garbage bin is in a high-traffic area, keep it locked. This stops people from dropping contaminants in that might later be tracked into the facility.

Include outside garbage bins in the preventative maintenance, cleaning and sanitation programs.

5.3 Drainage and Sewage System

Floors must have sufficient slope to allow liquids to drain toward outlets with approved traps and vents. Standards may be applied differently in some facilities. There are some exceptions, however. For example, bakeries don't use water for cleaning so they don't need to address the risks of standing water on the production floor.

Any site with pooled water is a good location for a drain.

Install and maintain enough trapped drains in all wet processing or wash areas. When locating drains, think about potential discharge or overspill from processing. To minimize cross-contamination risks, make sure that overcharge goes directly into a conveniently located drain. Make sure it doesn't go onto the floor.

Equip each floor drain with a deep seal trap. Make sure it has the plumbing needed to prevent sewer back up and floor flooding. Regular inspection and cleaning of drains is important. Fit all drains with easily removable grates or covers.

Separate production drainage lines from sewage disposal lines. This makes sure that sewage doesn't pass directly over, or through, production areas. Ensure the production facility's plumbing is designed to prevent cross-connection between the sewage system and any other waste disposing system. As with drains, equip the sewage disposal system with backflow prevention devices.

6.0 WATER, ICE AND STEAM

Most food processing operations use a lot of water and it is important to be able to draw enough water and to treat the wastewater.

A reliable, potable water supply and sewage disposal system is very important.

If municipal wastewater handling is limited, a facility may have to treat its wastewater onsite. In some facilities, water must be stored to meet needs during water shortages. Storage and treatment facilities must therefore be designed, constructed and maintained to prevent contamination of water being stored or treated.

All water used in the production process must be potable. This is defined in Health Canada's Guidelines for Canadian Drinking Water Quality. Visit http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum_guide-res_recom/index-eng.php

Any water treatment chemicals used must be listed in the *Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products*, published by the Canadian Food Inspection Agency (CFIA). The facility may need to get a 'Letter of No Objection' from Health Canada for a chemical not listed.

Monitor and control any chemical treatment. Make sure to use the recommended concentration and to prevent contamination.

6.1 Water Testing and Potability

Water, ice and steam are used as raw materials in many production processes. Ice that is used as an ingredient or that comes in direct contact with food must be made from potable water and protected from contamination.

Analyze water frequently to make sure it's potable (safe for human consumption).

Ice used in food processing should be handled as an incoming ingredient. It should be assessed under the incoming material control program. Ice produced on site should also be assessed.

Be sure to analyze water, ice and steam frequently to confirm potability. Some municipalities have regular water testing programs and may provide the plant with the results of the tests performed. This document can be used as a reference on the potability of the water the facility uses.

Processors producing high-risk products may need to test water daily. Those facilities producing a lower-risk product (e.g. bread) may need to test only monthly.

See Form A.15: Water and Ice Potability Testing Record.

Examples of Required Water, Ice and Steam Records

Water Potability Records	Water Treatment Records	Boiler Feedwater Treatment Records
• water source	• method of treatment	• method of treatment
• sample site	• sample site	• analytical results
• analytical results	• analytical results	• analyst
• analyst	• analyst	• date
• date	• date	

If a facility has its own water well and treatment system, develop an in-house program to regularly assess water. Don't forget to make sure it's potable.

All water used in a processing facility (water, ice or steam) must meet Health Canada's Guidelines for Drinking Water Quality.

Water, ice and steam potability records can include:

- Sampling site (specific tap, water source, etc.);
- Results of the tests;
- Individual or company responsible for analyzing the water; and
- Date of the test.

See Form A.3: Chlorine Testing Record, and A.16: Water and Ice Potability Record.

6.2 Recirculated Water Systems

Recirculated water is water that has been previously used, then recycled and treated in a facility. Many facilities use this method to reduce water costs.

Depending on the purpose for the recirculated water, make sure that the facility has an organized, in-house water treatment program. This program must include monitoring and testing to verify water safety.

Recirculated water must have a separate distribution or piping system. Be sure that this system is identified clearly. A separate distribution system reduces the likelihood of cross-contamination with potable water lines.

6.3 Water Storage Facilities

Water storage is used in the food industry to supply water when a regular source can't meet peak demands. Water storage facilities can be made from any material that can hold water, as long as the storage structure won't reduce water quality.

Materials used in water storage facilities should be listed in the *Reference Listing of Accepted Construction Materials*, *Packaging Materials and Non-Food Chemical Products*, published by the CFIA. If the material is not listed in this source, the facility must have a 'Letter of No Objection' from Health Canada.

Be sure to think about the following when either selecting or sizing a water storage facility:

- How long the storage facility is expected to meet demands;
- The total water demand during the period water must be stored; and
- The likelihood of materials used in the storage facility releasing toxic compounds into water.

Glass, metal and plastic are the most common materials used for water storage. Glass is not generally recommended because it can chip and plastic is problematic because it can be permeable (lets gases through).

Water storage tanks made from plastic must be located away from gasoline, pesticides or any other chemicals. These may contaminate the stored water.

If the facility uses stored water for sanitation or production processes, develop an in-house program to check the potability of stored water.

Sanitize or disinfect water being stored for long periods. Use the best quality water possible for storage.

Pre-used or secondhand water storage tanks and equipment are not recommended. However, if used, make sure they held only food products previously. Make sure all new or used water storage tanks and equipment are cleaned and sanitized thoroughly before use. Include water tanks used for long periods in the facility's master sanitation schedule.

7.0 PREVENTATIVE MAINTENANCE

Preventative maintenance refers to equipment maintenance and calibration (checking the equipment is accurate). It also refers to activities that maintain the facility and premises, and that help prevent contamination.

Preventative maintenance activities in the premises program may cover:

- Windows – to keep them in good condition with permanent seals or close fitting screens;
- Doors – to ensure they're self-closing and close fitting;
- Lighting – to make sure there's enough light for activities performed, and to make sure lighting isn't a potential source of contamination;
- Ventilation systems – to prevent steam, condensation or dust from collecting;
- Waste facilities and disposal processes – to make sure they don't become a source of contamination because of leakage, or backflow into potable water systems;
- Water, ice and steam systems – to ensure they're potable and capable of meeting the facility's needs; and
- Water storage or treatment facilities – to make sure they're in good working condition.

Preventative maintenance programs not only help maximize food safety, but they help operations run smoothly.

Preventative maintenance programs are also an excellent source of information. They help in making wise equipment purchases.

Further, documenting that the premises and facilities are well maintained helps the maintenance program to work better.

For more information about preventative maintenance, see Chapter 6: Developing An Equipment Program.

See Form A.10: Maintenance Requests Tracking Record, Form A.11: Preventative Maintenance Log, and Form A.12: Repair/Maintenance Request.

8.0 PREMISES FORM TEMPLATES

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