DEPARTMENT OF AGRICULTURE

Wholesale Manufacturing Facility Guidelines

The information in this guidance was developed to summarize the materials, equipment, and design considerations to help a food processor meet state and federal requirements when constructing or maintaining a facility or food manufacturing equipment.

This guide is limited to facility and equipment guidance for wholesale manufacturing and storage and is not all-inclusive of requirements for license approval or the safe production of food products. The Minnesota Department of Agriculture will review your firm's specific plans to assist you with a successful start-up and smooth licensing process.

Production Areas

- Ensure there is adequate lighting in areas where food is prepared, stored, or washed; where equipment and utensils are stored or washed; and in handwashing and toilet areas.
- Lights above food processing and packaging areas must be shielded, coated, or shatter-resistant.
- Proper ventilation is required to limit dust, odors, condensation, and vapors that may contaminate food or may lead to potential allergen cross-contact.
- Utility lines (electric, air, vacuum, etc.) should be separated or enclosed in smooth, dust-free coverings. These lines should not be run above food-contact surfaces.

Floors

- Floors must be smooth, durable, non-porous, and easy to clean. They must be kept clean and in good condition.
- Floors must be made of appropriate materials for the work being done and the amount of foot traffic in the area. For example:
    - For dry processing areas that are cleaned by sweeping or vacuuming, well-sealed hardwood may be suitable.
    - Wet processing areas need floors with a sealed base that can withstand a wet environment and have adequate drainage.
    - High-traffic areas and areas with heavy equipment require more durable flooring.
    - Grout must be properly sealed and kept in good condition.

Table 1: Guidance for Selecting Appropriate Flooring and Baseboard Materials.

Best Choice	Acceptable	Unacceptable
Floors: Ceramic or quarry tile, poured epoxy.	**Floors:** Sheet or tile vinyl and linoleum; sealed concrete or sealed hardwood if it is in good condition.	**Floors:** Carpet, gravel, dirt, or tar, unsealed wood or concrete, or any other hard-to-clean surfaces.

Best Choice	Acceptable	Unacceptable
Baseboards: Ceramic or quarry tile; poured epoxy.	**Baseboards:** Vinyl, sealed wood if in good condition and adequately adhered to the wall, a well-maintained caulk seal if no baseboard present.	**Baseboards:** loose, not sealed to the wall, gaps that could allow for moisture or pest entry.

Walls/Ceilings

- Walls and ceilings must be smooth, durable, non-porous, and easy-to-clean, and must be kept clean and in good condition.
- Walls and ceilings in areas of heavy use or frequent cleaning may require a more durable surface.
- Walls and ceilings in wet areas, areas subject to splash, or within three feet of work areas and equipment must be smooth, non-corrosive, washable, and must not deteriorate when wet.
- Walls behind a cooking surface (stove, oven, etc.) must be able to withstand higher temperatures.
- Walls behind a hand sink, prep sink, or warewashing sink must be able to withstand wet conditions.

Table 2: Guidance for Selecting Appropriate Materials for Walls and Ceilings.

Best Choice	Acceptable	Unacceptable
Walls: Stainless steel, fiberglass reinforced plastic paneling (FRP).	**Walls:** Galvanized aluminum or tin if in good condition with no rust or flaking paint; Formica; vinyl-covered fiberboard panels; ceramic tile; painted or sealed concrete, block, brick, drywall, or wood if in good condition with no flaking paint, exposed aggregate, etc.	**Walls:** Unsealed concrete, block, brick, or wood; wallpaper; melamine sheets; laminate; carpet; bare wood.
Ceilings: Fiberglass reinforced plastic, or smooth, durable acoustic tile.	**Ceilings:** Painted or sealed concrete, block, brick, drywall or wood; tin; ceramic tile.	**Ceilings:** Any unsealed materials; fissured, unscrubbable acoustic tile that is already heavily soiled.

Equipment and Utensils

Equipment used to control food safety hazards must be reliable and accurate. For example, an oven used to bake food to a specific temperature for safety must be able to maintain that temperature consistently.

Food Contact Surfaces (FCS): Surfaces that come into direct contact with food or food residue, or where food residue could drip, drain, or be drawn into the food.

- Food contact surfaces must be designed to be easy to clean and must be made from materials that are safe for food contact.
- Food contact surfaces must be kept clean and in good condition.

Non-Food Contact Surfaces (NFCS): Surfaces that do not directly contact food, like parts of equipment (legs, framework, supports, housings, etc.).

- Non-food contact surfaces are not required to be commercial grade if they are easy to clean and kept clean and in good condition.

Equipment and Utensils:

- Adequate clearance from the floor is required to allow for cleaning and inspection.
- Accessible and can be disassembled for cleaning and inspection; **OR** if access or disassembly is not possible, the entire unit can be cleaned in place using adequate methods to eliminate product contamination.
- Instruments used for measuring, regulating, or recording the control of a food safety hazard must be accurate, precise, and maintained.
- Hollow areas on equipment, tables, and framework must be hermetically sealed (caps, continuous welds, etc.).

Worktables and Counters: Must have surfaces that are easily cleanable and non-corrosive, and must be kept clean and in good condition. They must withstand repeated cleaning over a long time frame.

Table 3: Guidance for Selecting Appropriate Materials for Equipment and Utensils.

Best Choice	Acceptable	Unacceptable
Food Contact Surfaces: Stainless steel	**Food Contact Surfaces:** Hi-impact, scratch-resistant plastic (Formica, Teflon, and thermal plastic). Metal or finished hardwood made of food-grade materials designed for food production, if in good condition. Aluminum coated with acceptable food-grade materials (PTFE, Teflon, etc.). Laminated tables or countertops, if in good condition. Food grade plastics, rubber, and rubber-like materials (must remain intact through cleaning and sanitation; should be easily removed and replaced as needed). Wear-resistant ceramics. Durable, break-resistant, and heat-resistant glass. Unfinished hardwood tables are ONLY acceptable for bakery make-up tables.	**Food Contact Surfaces:** uncoated aluminum; galvanized iron; unfinished wood. Pitted, corroded, broken, cracked, or roughly welded food contact surfaces. Any surfaces with rust. Damaged seals or gaskets. Items with splintered, cracked, or damaged food contact surfaces. Non-Food Contact Surfaces- no corroded or rusty framework or legs; no unsealed hollow legs.

Warewashing Areas

- Facilities must have equipment to effectively wash, rinse, and sanitize all equipment and utensils used in food production.

Table 4: Guidance for Selecting Appropriate Warewashing Facilities.

Best Choice	Acceptable	Unacceptable
3-compartment sink.	2-compartment sink with additional wash bin. 3 wash bins. Mechanical dishwasher.	Size that does not allow for effective washing, rinsing, or sanitizing. Any equipment that has been modified or re-welded, or is in poor condition.

Handwashing Facilities

Hand-washing facilities must be adequate, convenient, and furnish running water at a suitable temperature to ensure employees' hands are not a source of contamination to food, food-contact surfaces, or food packaging materials.

Table 5: Guidance for Selecting Appropriate Handwashing Facilities.

Acceptable	Unacceptable
At least one hand sink, conveniently located to the processing area and accessible (no doors between the hand sink and the processing area). Hard plumbed to hot and cold running water with a hard-plumbed drain. Additional hand sinks in the processing area as needed to maintain employee sanitation. Stainless steel or ceramic.	No handwash sink, or not conveniently located. Not hard-plumbed. Cracked or broken ceramic or other materials in poor condition.

Non-Production Areas and Dry Storage

- Floors, walls, and ceilings that are smooth, durable, easily cleanable, and in good repair.
- Maintained in a dry and sanitary condition for storage of shelf-stable food, equipment, utensils, packaging materials, and any other non-food equipment (cleaning supplies, towels, etc.).

Table 6: Guidance for Selecting Appropriate Materials for Non-Production and Dry Storage Areas.

Acceptable	Unacceptable
Floors: Quarry/ceramic tile; sheet or tile vinyl/linoleum; concrete; sealed hardwood in very good condition.	**Floors:** Carpet; hardwood in poor condition.

Acceptable	Unacceptable
Walls: Painted concrete, painted drywall, fiberglass reinforced plastic, tin, ceramic tile, painted wood; may have open stud walls if only packaged goods are stored.	**Walls:** Wood or open stud walls if opening bulk bags/boxes or repackaging.
Ceiling: Painted concrete, painted drywall, fiberglass reinforced plastic, tin, ceramic tile, acoustic tile; may have open stud ceiling if only packaged goods are stored.	**Ceiling:** Wood or open stud ceiling if opening bulk bags/boxes and portioning.
Dry goods shelving: Any sealed, scrubbable material acceptable. Must be off the floor with the ability to clean under and around.	**Dry goods shelving:** Unsealed wood.

Walk-In Coolers and Freezers

- Must have at least one temperature-indicating device (thermometer).
- Floor, walls, and ceiling must be smooth, durable, and easily cleanable (e.g. fiberglass reinforced plastic).

Table 7: Guidance for Selecting Proper Materials for Walk-In Coolers and Freezers.

Acceptable	Unacceptable
Walk-in coolers must maintain proper temperatures. Aluminum, galvanized metal, or stainless steel are all acceptable if in good condition. Concrete floors are acceptable if in good condition.	Any unit that does not maintain proper temperatures. Refrigeration units with improper drainage or leaking condensate. Existing units in poor condition (may be upgraded with acceptable materials or replaced).
Walk-in freezers must maintain the product frozen. Sealed/painted wood, fiberglass reinforced plastic covered wood, aluminum, galvanized metal, or stainless steel are all acceptable if they are in good condition. Refrigeration units, door seals, and handles must be easily cleanable and must prevent condensation, frost, or ice build-up.	Does not maintain the product frozen. Any surface in poor condition. Refrigeration units, door seals, and handles that are not easily cleanable and not constructed to prevent condensation, frost, or ice build-up.

Toilet Facilities

- Each plant must provide employees with adequate, readily accessible toilet facilities.
- Toilet facilities must be kept clean and must not be a source of contamination to food, food-contact surfaces, or food-packaging materials.

Table 8: Guidance for Selecting Appropriate Materials for Toilet Facilities.

Acceptable	Unacceptable
A properly installed hand sink with hot and cold running water, maintained in good condition, in or near the restroom. Another hand sink nearby, separate from the food production area hand sink is acceptable. If the facility is for manufacturing and only family members work there, a restroom in the owner's nearby home is okay. Portable toilets can be used in addition to permanent facilities, if there are handwashing facilities available.	No dedicated restroom hand sink, or not properly plumbed. Portable toilet facilities only (when it is the only restroom) .

Throughout Facility

The following applies throughout the facility:

- Enough light to allow for cleaning and provide a safe, well-lit workplace.
- Door and window screens or other protection against pests, including some type of pest control program.
- Approved source of potable water, approved plumbing, approved wastewater disposal system, and proper disposal of rubbish.
- All surfaces are designed to eliminate pooling water.
- Grounds surrounding the building are maintained, with adequate drainage and no stray rubbish or debris.

The information in this document is current as of the date of publication. It is important to check for changes or updates to applicable laws and regulations, as they are subject to change. This document is intended to be a guide only and may not be all-inclusive. The Minnesota Department of Agriculture will determine your specific licensing requirements after reviewing all details about your new food business.