

Page K. Inspection of Process Cheese Operations. (Form DA - 151 - 8)

Even though plants may have a USDA approved status, much of the equipment used in the manufacture of process cheese has not been subjected to detailed design review and acceptance procedures. Many contacts with equipment manufacturers have resulted in modification and improvements to equipment designs. However, a great deal remains to be done, so it is important that any additional new or unreviewed equipment is documented on the survey report so that the progress can continue. Some equipment is covered by a grandfather exemption. Exemptions should be verified with the National Field Office.

Storage & Tempering

Item K1—Room Construction (58.126, 58.154).

See the guidelines for Item B50—Room Construction - Tempering and Item B51—Room Construction - Cooler(s).

Cheese tempering shall be done in an area that is clean and properly maintained. If the area is dirty or otherwise unfit for use as a tempering room, recommend the area be cleaned or the tempering be moved to an appropriate area.

Item K2—Lighting & Ventilation (58.412).

See the guidelines for Item B54—Lighting & Ventilation.

Item K3—Storage Temperature (58.126d, e, 58.412).

See the guidelines for Item B55—Temperature Control.

Bulk cheese coolers should be maintained at a temperature of 45° F or less. If the cooler is at a higher temperature recommend it be kept at or below 45° F, also show the current temperature on the survey report. The temperature of rooms used for tempering or for the forced curing of cheese is at the discretion of the management.

Item K4—Pallets & Floor Racks (58.154).

For cheese in metal barrels and 640 pound containers with legs, it is not necessary to use pallets provided the cheese is removed from the cooler or tempering room regularly and the floor is maintained in a clean condition. All other cheese shall be stored off the floor such as on pallets, floor racks, etc. The pallets or racks are to be maintained in good condition to prevent damage to the product or containers and the storage area is to be kept clean.

Item K5—Housekeeping (58.126d, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Clear space around the perimeter of the cooler or tempering room is not required. Usually bulk cheese is kept in storage for only a limited time. This affords an opportunity for access for cleaning, maintenance, and pest control activities. After a cooler bay has been cleared, it shall be inspected by the plant, and cleaned if necessary, before reuse.

Inspect the condition of the cheese containers in the cooler. All the containers shall be properly closed and sealed. If an excessive number of containers are damaged or exposed product is present, make the following recommendations: 1) Segregate the damaged containers, and 2) Dispose of any unwholesome product.

Do not criticize the storage practices if only a limited number of containers are damaged. Such damage (from fork lift tines, etc.) is common, but recommend prompt disposal of the damaged containers. Also, do not criticize surface mold on cheese if it can be thoroughly cleaned off before processing. Product with imbedded packaging material or mold throughout (especially trim from a natural cheese cutting operation or rework from the slice department) shall be considered unwholesome. The presence of improperly stored or handled products in the plant can be a serious deficiency but should be assigned to category D if the unwholesome product is disposed of promptly (also see the guidelines for Item K19—Adequacy of Cheese Cleaning).

Optional Ingredient Handling

Item K7—Room Construction (58.126, 58.154).

See the guidelines for Item A1—Room Construction.

Item K8—Lighting & Ventilation (58.412).

See the guidelines for Item A2—Lighting & Ventilation.

Item K9—Pumps, Pipelines, & Valves (58.128, 58.146a).

See the guidelines for Item A3—Pumps, Pipelines, & Valves.

Item K10—Dairy products tanks (58.128d, 58.146).

See the guidelines for Item A29—Storage Tanks - Horizontal.

If concentrated milkfat, anhydrous milkfat, plastic cream, frozen cream, etc. is melted by the direct injection of steam, see the guidelines for Item A36—Culinary Steam. Also, the steam injectors shall comply with *3-A Sanitary Standards for Steam Injection Heaters for Milk and Milk Products, Number 61- .*

Item K11—Reconstituting Equipment (58.128, 58.146).

It is a satisfactory practice to dump a small quantity (50 pounds or less) of dry ingredients directly into the blenders, provided this is done in a sanitary manner. If a dump hopper is used, check the product handling practices and sanitation of the equipment involved using the guidelines for Item G3—Dump Hopper & Screen. Also, check the following items.

1. When dry ingredients are reconstituted, the process shall be done in a processing area or its equivalent.
2. The outer ply of the bags shall be stripped off before being dumped. If laminated bags are used, they shall be vacuumed or brushed clean before being dumped.
3. Only potable water or milk shall be used as the reconstituting liquid.
4. Pasteurization and cooling of reconstituted products is required if it is stored for more than two hours even though the cheese is later pasteurized.
5. Waste material shall be disposed of promptly and properly.

If reconstitution equipment is used, pay particular attention to the pump and valve below the funnel. Check for pitting on the impeller or pump housing, unclean backplate, seals, gaskets,

etc. If a butterfly valve is used below the funnel check it for sanitation and fabrication. If it is found unclean recommend it be replaced with a valve that meets the criteria in the 3-A Sanitary Standards.

Item K12—Storage of Other Ingredients (58.126e, 58.210, 58.241d2, 58.311).

All ingredients shall be stored on pallets, racks, or in bins and kept in a clean and orderly manner. All open bags shall be effectively closed or sealed and protected from contamination while being stored.

Clear space around the perimeter of the storage area is not required (see the guidelines for Item K5—Housekeeping).

Item K13—Operating Procedures (58.101r).

Do not criticize the normal industry practice of keeping a quantity of ingredients near the point of use. However, check to see that these ingredients are protected from contamination and are kept off the floor on pallets, racks, or in bins, etc.

All optional ingredients shall be handled in a sanitary manner and cleaned of any mold or other inedible portion before being added to the blender, melt tank or cooker. If any excessively moldy or dirty containers are noted assign the deficiency to category C. If unwholesome products are processed, assign the deficiency to category A.

Cleaning & Grinding

Item K15—Room Construction (58.126).

See the guidelines for Item A1—Room Construction.

Encourage plant management to have the boxes stripped in a different room or area from where the cheese is cleaned. For bulk cheese, this may not be practical. In such cases, recommend that the air flow be from the cleaning and processing areas toward the stripping area.

To facilitate cleaning, there shall be an annular opening of at least 2-inches of clear space around hoppers, transfer chutes, etc. that pass through the floor. In addition, there shall be at least a 4-inch high curb or kick plate all the way around the opening.

Item K16—Lighting & Ventilation (58.126d, e).

See the guidelines for Item A2—Lighting & Ventilation.

Light protectors and at least 50 F/C of light are required where the cheese is cleaned (careful examination of the cheese surfaces is required). 30 F/C of light is required in other areas.

Item K17—Cheese Dumping (58.127e, 58.128a).

If forty pound blocks are being stripped, the cardboard boxes and the plastic liners should be removed by separate employees. The same employee can alternate between the two tasks provided hand wash facilities or a hand dip sanitizer station is readily available, and used.

A hoist is usually used to remove barrel cheese from the shipping container and to put it in a cart or on a conveyor. The plastic liner should be left in place until the cheese is ready to be cleaned (an exception to this is the bottom, which needs to be cleaned before the cheese is placed on the conveyor). The plastic liner should protect the cheese from the unsanitary areas of the motor, gear box, and chain. There shall be a bucket or catch pan under the chain drive to contain the extra chain. The chain and gear box shall be relatively free of oil. If oil is dripping onto the cheese assign the deficiency to category A. Carefully check the fabrication and maintenance of the hoist, chain, rails or tracks, and gear box. The frame and other areas shall be easily cleanable and in good repair.

If air is used to force the cheese from the shipping container (usually barrels), it shall comply with the *3-A Accepted Practices for Supplying Air Under Pressure in Contact with Milk, Milk Products and Product Contact Surfaces, Number 604-*, except that the check valve is not required. If the shut off valve is downstream from the filter required by the 3-A Accepted Practice, it shall be a sanitary design. Check the air lance for cleanup and construction. Both the interior and the exterior shall meet product contact surface requirements. The lance shall be stored in a sanitary manner between uses. If the lance is on the floor recommend it be washed and sanitized before reuse, that proper storage be provided, and assign the deficiency

to category C. If this is a repeat recommendation from a previous report assign the deficiency to category B.

Item K18—Tables & Conveyors (58.128a, 58.707).

All belt-type conveyors used as product contact surfaces shall have an endless belt (no metal stitching or lacing). All conveyors with product contact surfaces (belts, whether endless or linked plastic, bucket conveyors, auger conveyors, etc.) shall comply with the applicable 3-A Sanitary Standards or shall be reviewed and accepted by the Dairy Grading Branch (see the guidelines for Item A3—Pumps, Pipelines, & Valves).

If the conveyor discharges into a hopper or vessel or is over exposed product, all unsanitary areas shall be shielded to prevent contamination of the product below.

Product contact surfaces of tables and carts shall be made of stainless steel. Check the general cleanup and construction of the tables, carts, and conveyors. If rough welds, cracks, etc., are noted, recommend repair or replacement. Also, check the nonproduct contact surfaces. These surfaces should not contribute to unsanitary conditions and should be free of mold, crevices, open seams, unsealed holes drilled into hollow frames, etc.

Item K19—Adequacy of Cheese Cleaning (58.725).

See the guidelines for Item A34—Sanitary Practices.

The natural cheese shall be cleaned of all inedible portions. Paraffin and bandages as well as surface rind, mold, soft spots, soiled areas, or any other part which is unwholesome or deteriorated in quality shall be removed. Product with imbedded inedible material or mold throughout (especially trim from a natural cheese cutting operation or rework from the slice department) shall be considered unwholesome. If the cheese is not adequately cleaned before processing, make an appropriate recommendation. If cleaning of the cheese remains inadequate assign this deficiency to category A.

Item K20—Disposition of Scrap (58.127f).

See the guidelines for Item A34—Sanitary Practices.

Item K21—Grinder Feeding Equipment (58.128a, 58.707).

See the guidelines for Item K18—Tables & Conveyors if a conveyor is used.

Include all harps, knives, hydraulic pushers, etc. under this item. The product contact surfaces of these pieces of equipment shall be of sanitary construction, in good repair, and be easily cleaned. Recommend correction of any deficiencies such as cracks, rough welds, exposed threads, improper radii, etc.

Pay close attention to any pneumatic or hydraulic cylinders. To protect the cheese from contamination, any part of the shaft that enters the cylinder and extends over exposed product or a product contact surface shall be provided with sanitary shields or comply with sanitary design requirements. The sanitary shielding can be accomplished with a long drip plate (so that all exposed product and product contact surfaces are shielded when the shaft is fully extended), or any other shield arrangement that protects the surfaces and cheese. Sanitary designs include; double seals (with 1-inch of clear space between them, provided the space between the seals is not in the product zone); doubling the length of the shaft so the part that enters the cylinder never extends over the product zone; and other options. If you have any doubts or questions concerning the design, contact the National Field Office for assistance. This deficiency does not have a grandfather exemption. If the cylinder shaft is clean, assign this deficiency to Category D. If the cylinder shaft is not clean, assign it to Category C.

Steel wires are often used in harps because of breakage problems with stainless steel wires. Such nonstainless steel wires should not be criticized if maintained in a clean and rust free condition (a light coating of mineral oil after cleaning will prevent rust). Dirty or rusty wires are unsatisfactory, recommend cleaning or replacement.

Item K22—Grinders or Extruders (58.128a, 58.708, 58.726).

Even though grinders may be large, heavy pieces of equipment, arrange for dismantling to the extent necessary to determine if it is clean and in good repair. Pay particular attention to rotary knives, augers, extruder plates, and drive seals. Look for cracks, crevices, nicks, or pits in the screen, knives and augers. Grinders with cast iron end plates and bolted screens do not have a grandfather exemption. If this type of grinder is noted, recommend replacement and assign the deficiency to category B.

Item K23—Conveyor for Ground Cheese (58.128a, 58.418b, 58.707).

See the guidelines for Item K18—Tables & Conveyors if a mechanical conveyor is used.

See the guidelines for Item C47—Hooping Equipment if the ground cheese is conveyed pneumatically.

Look carefully at the discharge end of the conveyor. This area is often in a product zone and must meet all the requirements of a product contact surface or be adequately shielded.

Item K24—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Cheese knives, scrapers, etc. should be stored neatly and in a sanitary manner when not in use.

Paper, plastic, cardboard, and other waste shall be picked up and removed regularly. The floor should be relatively clean and free of cheese scrapings during production. When excessive

DA INSTRUCTION NO. 918-PS

buildup of cheese is noted, recommend the floor be cleaned and assign the deficiency to category D.

Blending & Cooking

Item K26—Room Construction (58.126, 58.146d).

See the guidelines for Item A1—Room Construction.

Check areas above exposed product in blenders, conveyors, hoppers, etc. (ceilings, pipelines, service lines, duct work, exhaust fans, etc.) for peeling paint or condensation that might drop or drip into the cheese or on the equipment. If condensate is dripping from ceiling air conditioners or fans recommend that catch pans be provided. If condensate is observed dripping onto product or product contact surfaces assign the deficiency to category A and assign the INELIGIBLE status until the deficiency is corrected.

To facilitate cleaning, there shall be an annular opening of at least 2-inches of clear space around hoppers, transfer chutes, etc. that pass through the floor. In addition, there shall be at least a 4-inch high curb or kick plate all the way around the opening.

Item K27—Lighting & Ventilation (58.126d, e).

See the guidelines for Item A2—Lighting & Ventilation.

Light protectors and at least 30 F/C of light are required.

All openings to the outside shall be screened except that exhaust fans shall have screens or self closing louvers.

Item K28—Ground Cheese Blenders (58.128a, 58.727).

Dismantle and inspect the ribbon shaft seals for cleanup and condition. The seals shall be accessible for cleaning. This will usually require split seals that are removable for hand cleaning. Adequate manual cleaning can sometimes be obtained with seals that are not split by pushing them along the shaft away from the blender to clean them. Seals made of braided material are not acceptable (category C).

The ribbon flights and blender interior will sometimes rub together which leaves the interior of the blender scored and the ribbons with knurled or wire edges. If this has happened, recommend these areas be polished. Depending on the extent of the damage the deficiency can be assigned to category B, C, or D (use your judgement based on the potential contamination of the product by metal). Also, recommend checking and, if necessary, replacing the bearings.

Blenders are often placed directly above the cooker or a transfer hopper so that when the doors open the cheese flows by gravity out of the blender. If this is the case, the doors and all areas directly above the exposed product areas shall meet product contact requirements (No. 4 finish, no rough welds, threads, or crevices, etc.) or be adequately shielded. Older blenders that have

DA INSTRUCTION NO. 918-PS

a grandfather exemption may require some modifications to meet this requirement. If the deficiencies are related to the obsolete design assign them to category D. However, if the deficiencies are related to a lax sanitation or maintenance routine, or constitute a possible public health hazard, assign them to category A, B, or C as appropriate.

Item K29—Conveyor - Blender to Cooker (58.128a, 58.707).

See the guidelines for Item K18—Tables & Conveyors if a mechanical conveyor is used.

See the guidelines for Item C47—Hooping Equipment if the ground cheese is conveyed pneumatically.

Look carefully at the discharge end of the conveyor. This area is often in a product zone and must meet all the requirements of a product contact surface or be adequately shielded.

Item K30—Positive Cut-off to Cooker (58.728).

Means shall be provided to prevent the entrance of cheese particles or ingredients after the cooker batch of cheese has reached the final heating temperature.

Show N/A for this item if the plant has a continuous cooker.

Item K31—Cheese Cookers (58.128a, 58.709).

Continuous cookers shall meet *3-A Sanitary Standards for Scraped Surface Heat Exchangers, Number 31-*. Other types shall be reviewed and accepted by the Dairy Grading Branch.

Steam that is injected into the product at the cookers shall comply with the *3-A Accepted Practice for a Method of Producing Steam of Culinary Quality, Number 609-*. This requires stainless steel tubing and fittings from the outlet of the last filter to the sanitary check valve and sanitary construction (tri-clamps, no threads) from the sanitary check valve to the processing equipment. This standard does not allow for flexible plastic lines covered with exposed braided stainless steel. If a plant is using this type of flexible connector, recommend they be replaced with acceptable connectors.

Remove and dismantle the steam injectors and check for cleanup, condition, and compliance with *3-A Sanitary Standards for Steam Injection Heaters for Milk and Milk Products, Number 61-*. Most process cheese cookers have steam injectors that are also check valves. Therefore, the steam line can be threaded between the filter and the steam injectors.

Check the auger bushings, auger flights, hanger bushings, seals, and discharge area for cleanup and condition. The auger flights and cooker interior will sometimes rub together which leaves the interior of the cooker scored and the auger with rough or wire edges. If this has happened, follow the guidelines for Item K28 —Ground Cheese Blenders.

If the cooker discharges directly into a hopper, the outlet doors and all other areas over the exposed product shall meet the criteria of product contact surfaces, and there shall be proper shielding for the air cylinders and any other unsanitary area. Follow the guidelines for Item K28—Ground Cheese Blenders.

If the plant has a continuous cooking system, ask that a representative number of the cylinders be opened and pull the rotors (dashers) out. If excessive pitting or scoring of the cylinder walls is noted assign this deficiency to category C. Check the cleanup of the rotor and seals, and that the scraper blades are made of an approved material and are in good repair (use caution when inspecting stainless steel scraper blades as these may be very sharp). Some scraper blades are made of 400 series stainless steel, and will be slightly magnetic.

Item K32—Vapor Exhaust at Cookers (58.126d2).

The hot vapors are sometimes piped to the outside through ducts. Check the cleanup and condition of these ducts. Pay special attention to any areas above exposed product or product contact surfaces. The product contact surface extends from the beginning of the duct to the point where the duct slopes downward, away from the product. The product contact surfaces of the ducts should be designed to be easily cleanable and inspectable.

The discharge end shall have a screen or self-closer. If possible, check the discharge area for unsanitary conditions such as product residues and foul odors.

Item K33—Control of Cheese Cooking (58.728).

See the guidelines for Item B—6 HTST or Vat Pasteurizer.

An indicating thermometer and a recording thermometer are required to ensure the cheese is pasteurized (a digital thermometer is acceptable provided it has a separate well in the cooker). Check current processing charts, 158° F for 30 seconds is required in USDA approved plants. The charts should be marked as outlined for vat pasteurizers in Item B6.

Item K34—Cheese Hoppers (58.128a).

Often the cheese flows by gravity from the cooker into a hopper directly below. The hopper may or may not have a scraper or agitator but it shall have a tight fitting cover. If an agitator is used, it shall have a slinger or other protection for the opening. Also, the opening shall have a 3/8-inches upward flange. Check the connection between the agitator shaft and the scraper blades for sanitary construction (no threads, bolts, cracks, rough welds, etc.) and for cleanup.

Item K35—Cheese Pumps, Pipes, Strainer (58.128, 58.710).

See the guidelines for Item A3—Pumps, Pipelines, & Valves.

DA INSTRUCTION NO. 918-PS

A positive displacement pump is often used to pump the hot cheese from the hopper to the packaging machine. The pump shall comply with the *3-A Sanitary Standards for Centrifugal and Positive Rotary Pumps for Milk and Milk Products, Number 04-*.

Item K36—Misc. Equipment & Utensils (58.128a).

Scrapers, knives, brushes, green pads, etc. shall be clean, in good condition, and shall be stored in a sanitary manner when not in use (steel wool or metal sponges shall not be used in the cleaning of dairy equipment or utensils). If wooden handles are noted, recommend replacement with utensils that have handles made of plastic or other impervious material. Hollow handles shall be sealed at both ends.

Item K37—Hand Washing Facilities (58.127f).

See the guidelines for Item B21—Hand Washing Facilities.

Item K38—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Filling & Packaging

Item K42—Room Construction (58.126).

See the guidelines for Item A1—Room Construction.

Pay particular attention to the ceiling above the slice line (if applicable), the packaging machine hopper, and anywhere there is exposed product. Check for loose paint, condensate, mold, etc.

To facilitate cleaning, there shall be an annular opening of at least 2-inches of clear space around hoppers, transfer chutes, etc. that pass through the floor. In addition, there shall be at least a 4-inch high curb or kick plate all the way around the opening.

Item K43—Lighting & Ventilation (58.126d, e).

See the guidelines for Item A2—Lighting & Ventilation.

Item K44—Fillers & Hoppers (58.128a, 58.710, 58.730).

New or replacement fillers shall comply with the 3-A Sanitary Standards for Equipment for Packaging Viscous Products, Number 23-.

Most fillers require disassembly for hand cleaning. Carefully check the shutoff valve, agitator, piston, and other parts for sanitation and cleanup. Many of these parts may be made of plastic. However, all product contact surfaces, whether they are stainless steel or plastic, shall be as smooth as a No. 4 finish with no cracks or crevices, and with the proper radii.

All the conveyors of the filler and caser shall be easily cleanable. Recommend the use of an endless-type belt to facilitate cleanup of any spills.

Item K45—Wrapper Sealing & Package Coding (58.150, 58.152, 58.731).

Pouches, liners, or containers having product contact surfaces, shall be folded after filling or closed and sealed in a sanitary manner, preferably by mechanical means, so as to protect the product from contamination. Equipment shall be provided for coding the containers with lot or subplot numbers when required.

Item K46—Slice Line Operations (58.128a, 58.730, 58.731).

Look carefully at the header where the cheese flows onto the belt or drum, and at the system used to spray anti-sticking agents on the belt or cheese. These are often in the product zone. Therefore, the exterior must meet the requirements of a product contact surface or be adequately shielded. Because the anti-sticking agents are not dairy ingredients (usually lecithin or mineral oil is used) the interior of the system does not have to meet product contact requirements.

DA INSTRUCTION NO. 918-PS

Also look at the scraper blades, cutters, guide rollers, etc., for sanitation and condition. Make appropriate recommendations. These pieces shall be made of stainless steel or approved plastic. Many slice line machines have a large amount of exposed product as the cheese travels across the top belt. Because of this added risk of contamination check the room (especially the area directly above the slice line) for mold and other unsanitary conditions.

Visually check the cooling media for signs of debris or other contamination. Also, check for areas where the cooling media can drip or drain onto the lower belts.

Clean and sanitary containers, carts, or single service poly liners shall be provided to collect the rework cheese during start-up, shutdown, and breakdown periods (see Item A34—Sanitary Practices and Item N28—Handling of Trim).

Item K47—Handling of Damaged Packages (58.124, 58.730).

Misshapen or leaking packages may be salvaged into sanitary containers or single service poly liners and added back to the cooker. If the rework is not added to the cooker promptly, it shall be covered and placed in refrigerated storage.

If the damaged containers are contaminated with embedded packaging material, extraneous material, or have come into contact with unsanitary surfaces, they shall be disposed of, in clearly marked containers, as waste (see the guidelines for Item A34—Sanitary Practices and Item K5—Housekeeping). Observe the reclaim operations during production if possible to determine if they are carried out in a sanitary manner. Make recommendations as necessary.

Item K48—Hand Washing Facilities (58.127c).

See the guidelines for Item B21—Hand Washing Facilities.

Item K49—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Check that all areas are kept relatively neat and clean with adequate dust control. Do not criticize the practice of having extra pouches, labels, film, etc. in the packaging room if the supplies are kept neat, protected from contamination, and limited to about one days production or less.

Misc. Items

Item K51—Handling of Trim & Rework (58.124, 58.725, 58.730).

In order for cheese trim generated by a USDA approved cheese cutting operation to be used in the manufacture of other approved cheese products, the cutting operation must be listed in Section I of the *Approved Plant Book* with the product code for “Natural Cheese Trim” (see the guidelines for Item N28—Handling of Trim). Alternately, the cheese trim shall be produced under continuous inspection and be covered by a certificate.

Item K52—Barrel Washing & Storage (58.418e).

The washer, if provided, shall be constructed so that it can be satisfactorily cleaned. It shall also be equipped with temperature and pressure controls to insure satisfactory cleaning of the barrels. The washer should be adequately vented to the outside. The wash water should be changed frequently enough to prevent debris from accumulating in the tank.

The empty barrels or 640's (plastic or wood) shall be stored in an enclosed, clean, dry area. When barrels are not properly stored make a recommendation for correction.

Item K53—Condition of Barrels (58.128a, 58.150).

When applicable, check the condition of the barrels or 640's in use.

Some barrels are constructed of steel, are poly lined, contain approximately 500 pounds of cheese, and require cleaning and paraffining after each use to be maintained in good condition. When barrels are rusty, in poor repair, not clean, or in need for reconditioning, make a recommendation for correction. Indicate how many barrels were inspected and how many were found unsatisfactory.

When plastic 640's are noted with cracks, missing legs, etc., recommend they be removed from service.

Item K54—Carton Make-up Equipment (58.729).

Lined containers shall be protected from possible contamination prior to filling. When lined boxes are not used the same day, check that the liners are removed and discarded.

A separate room should be provided for the carton make-up equipment to control contaminants and lint. Equipment outside the processing area does not need to meet the same requirements as equipment in a processing room but it should not contribute to any unsanitary conditions in the plant. The equipment should be clean and in good repair.

Product Storage

Item K56—Room Construction - Coolers (58.126, 58.154, 58.412).

See the guidelines for Item B51—Room Construction - Coolers.

There should be adequate facilities to cool the cheese to less than 100° F within 24 hours. Do not criticize slow cooling practices when the plant is processing slow melt or no melt cheeses.

Item K57—Lighting & Ventilation (58.126d, e, 58.412).

See the guidelines for Items B54—Lighting & Ventilation and C58—Lighting & Ventilation.

Item K58—Temperature Control (58.412, 58,510d).

See the guidelines for Item B55—Temperature Control.

Item K59—Housekeeping (58.126e, 58.127f, 58.146d, 58.154).

See the guidelines for Item C60—Housekeeping.

General Items

See the guidelines for Page A — General Items

DA INSTRUCTION NO. 918-PS