

Sanitary Design Checklist - Summary

The following checklist is an outline of Sanitary Design columns from the past eight issues of Dairy, Food and Environmental Sanitation.

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General

Defining Your Problem Areas

- 1** Has your consumer complaint rate been steadily rising due to foreign materials found in your products?
- 2** Did your last FDA inspection result in a long list of deficiencies on FDA report 483?
- 3** Will your facility require expansion or renovation to meet long-term quality goals and objectives?
- 4** Does your USDA inspector continually request improvements that will require capital expenditures?
- 5** Do you discourage or prohibit plant visitors because you are uncomfortable with the impression the plant would make?
- 6** Has your accident rate increased because of crowded conditions resulting in hard-to-reach areas that require constant cleaning and maintenance?
- 7** Do your quality assurance/quality control sanitation audits continually pinpoint major sanitation deficiencies that can only be corrected by major renovation?
- 8** Are you planning to produce new products that will require a more sophisticated sanitary environment?
- 9** Do you require a new plant or a major renovation conceived, designed and constructed using the best sanitation criteria?

Design-Existing Facilities

Evaluating Your Facilities

- 1** Are critical areas of the plant maintained under positive air pressure to help prevent airborne contaminants, including insects, from entering?
- 2** Are raw materials kept sufficiently isolated from processed products to prevent cross-contamination?
- 3** Is the plant designed to restrict nonessential personnel from passing through processing and packaging areas?
- 4** Are personnel areas and restrooms located so they do not open directly into processing areas?
- 5** Is the ventilation adequate to promptly remove excess steam and odors from the process area?
- 6** Are ceiling areas designed to prevent the accumulation of dirt and debris which could contaminate your food products during processing?
- 7** Is your plant constructed to minimize the entry of insects, birds and rodents and to facilitate the control and elimination of those that do gain entry?
- 8** Is the landscaping designed and laid out to avoid creating harborage and attractions for insects, birds and rodents?
- 9** Is piping exposed over the product stream?
- 10** Do sewer lines run over process areas, raw material, ingredient and finished goods areas?
- 11** Does the roof over the processing areas have a smooth, nongravel surface to permit cleaning?
- 12** Is incoming air filtered to avoid contamination of product stream?
- 13** Are there correctly designed handwashing stations in your process area?
- 14** Have the details of your design been checked against applicable government regulations by a competent engineer?

Walls, Floors, Ceilings

Are They Sanitary?

- 1** Are walls, floors and ceilings made of impervious, easily cleanable, nonpainted, nonpeeling, inert material?
- 2** Are walls free of ledges or, if present, are the ledges slanted at a 60 degree angle?
- 3** Are your walls window-free? If windows are present, are they permanently shut or, if they must be opened, adequately screened?
- 4** Are floor, wall junctions coved with a minimum 1" radius?
- 5** Are dock entries constructed to prevent bird nesting and pest entry?
- 6** Are floors properly sloped to the drains at 1/4" per foot?
- 7** Are the drains constructed for automatic flushing (trench type drains)? Are nontrench drains designed to prevent water retention in or around the drain?
- 8** Are the docks located above grade level to prevent rodent entry?
- 9** Have horizontal surfaces (pipe hangers, beams, duct work) over exposed product areas been eliminated?
- 10** Have drop ceilings been avoided in product processing areas?
- 11** Are ceiling lights adequately protected to prevent glass or other contamination from falling into product due to breakage?
- 12** Is lighting adequate to permit adequate cleanup?
- 13** Are threaded pipe hangers, unistrut, or similar supports prohibited?

Equipment

Is It Designed to be Sanitary and Cleanable?

- 1** Are all food contact surfaces nontoxic, nonabsorbent and corrosion-resistant?
- 2** Are all food contact surfaces approved by the appropriate regulatory agency?
- 3** Are gear boxes, motors, drives or bearings located outside the product zone to avoid product contamination due to leakage?
- 4** Are food-grade lubricants used on food contact equipment?
- 5** Are welded joints continuous-welded, ground smooth and flush in food contact equipment, including pipelines?
- 6** Is all material used for inspection ports, windows and lights made of shatter-resistant material?
- 7** Are all dead ends and cross-connections between processed and unprocessed product eliminated?
- 8** Are sharp corners, cracks, crevices and other hard-to-clean areas eliminated on your food contact equipment?
- 9** Has your organization demanded that equipment vendors provide a system to adequately and easily clean the equipment they provide to your operation?
- 10** Is all product handling equipment located inside buildings or penthouses?
- 11** Is your equipment arranged and located to permit easy access and cleaning, such as at least 6" off the floor, 18" from the ceiling, and 36" from the wall and other equipment?
- 12** Are floor attachments minimized?
- 13** Are off-the-floor racks provided for equipment parts dismantled for cleaning or changeover?
- 14** Are all pipe joints free of fractures?
- 15** Do you have adequate screens, metal detectors or magnetic traps installed to detect foreign materials in your product line?
- 16** Do you fluidize, air convey, or pump to eliminate hard-to-clean screw conveyors, bucket elevators, etc.?
- 17** Do you avoid the use of open grating for catwalks and stairs over processing areas or equipment?
- 18** Is equipment constructed so operators do not have to place their hands in the product zone to adjust the equipment during operation?