NOT MEASUREMENT SENSITIVE

MIL-STD-3006A
7 June 2002

SUPERSEDING
MIL-STD-3006
20 August 2000

DEPARTMENT OF DEFENSE STANDARD PRACTICE

SANITATION REQUIREMENTS FOR FOOD ESTABLISHMENTS

AMSC N/A FSG 89GP

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

FOREWORD

1. This Military Standard is approved for use by all Departments and Agencies of the Department of Defense (DoD).

2. The DoD is committed to the production and storage of food products in clean, sanitary food establishments in order to prevent the transmission of contaminants and foodborne disease to members of the Armed Forces. The requirements contained herein are based on available national food and drug regulatory requirements, and others from professional societies. These requirement documents are selectively applied herein to ensure that food establishments maintain a minimum set of sanitation standards. This minimum set of standards can be augmented by the requiring activity.

3. In keeping with the DoD policy to use industry practices, the requirements for food establishments contained in this standard are based on industry standards applicable to the product identified in each appendix. While the appendices identify requirements selected from the appropriate industry standards, they do not contain all of the requirements from these standards. While the requirements cited herein are not all-inclusive, verification during an audit may include other requirements from the cited document at the discretion of the auditor.

4. This standard establishes the Current Good Manufacturing Practices (CGMP) requirements, as provided in Code of Federal Regulations (CFR), Title 21, Part 110 as basic sanitation standards for food establishments that supply subsistence. The standard also provides detailed commodity requirements in appendices.

5. This standard is applicable to all establishments supplying subsistence. Detailed standards relating to specific types of food establishments are located in the appendices to this standard. The standard is also applicable to military owned/leased facilities where foods are stored (excluding retail operations), utilizing 21 CFR 110, General Provisions only. The auditing of retail establishments is conducted utilizing the United States Food and Drug Administration (FDA) Food Code.

6. This standard is intended to insure that food establishments supplying subsistence, in both the Continental United States (CONUS) and Outside the Continental United States (OCONUS), are in compliance with CGMPs, thus reducing the risk of transmission of foodborne disease.

7. In OCONUS locations, the Major Command (MACOM) Commander may supplement this document. This standard is not used to determine an establishment's capabilities to comply with product specifications or other purchase requirements. In cases where CGMPs are provided in the CFR for specific subsistence items (e.g. acidified foods), the specific CGMPs for that item will be applied in addition to those found in Part 110. Good Manufacturing Practice (GMP) documents provided by industry and recognized by the FDA, the United States Department of Agriculture (USDA) or the United States Department of Commerce (USDC), may be used in conjunction with 21 CFR 110, with MACOM approval.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Director, DoD Veterinary Service Activity, Office of The Surgeon General/HQDA, 5109 Leesburg Pike, Falls Church, VA 22041-3258, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

CONTENTS

1. SCOPE

1.1 Purpose.

This standard establishes sanitation requirements for establishments which produce, process, or store various types of food products before or after final acceptance by an element of the Department of Defense.

2. APPLICABLE DOCUMENTS

2.1 General.

See applicable appendices. Each appendix to this standard provides a list of the specific documents cited in the appendix.

3. DEFINITIONS

3.1 Sanitation audit.

An in-depth examination of the sanitation system to determine the effectiveness and compliance with predetermined reference standards. The sanitation audit examines and evaluates the sanitation system as it applies to an overall organizational element.

3.2 Critical defect.

Condition, practice, step or procedure which: a) presents a biological, chemical or physical property that causes food to be unsafe for consumption; and/or b) the food safety hazard cannot be prevented, eliminated or reduced by a subsequent practice, step or procedure.

3.3 Major defect.

Condition, practice, step or procedure which: a) is of less food safety concern yet affects the usability of the products; and/or b) due to loss or lack of control, may become a critical defect.

3.4 Observation.

A condition or practice that is not in accordance with the CGMP requirements, but is not a critical or major defect.

3.5 Acceptable.

The rating given to an establishment that complies with the requirements of the sanitary audit.

3.6 Unacceptable.

The rating given to an establishment that does not comply with the requirements of the sanitary audit.

3.7 Hazard Analysis Critical Control Point (HACCP).

A food safety system that identifies hazards, develops control points throughout the flow of the entire food process, establishes critical limits, and monitors the effectiveness of these control measures.

3.8 Corrective Action Request (CAR).
A written request for a management response upon completion of a routine or directed routine sanitation audit resulting in an “Unacceptable” rating.

4. GENERAL REQUIREMENTS

4.1 Listing of plants.
Compliance with this standard is mandatory for listing of plants in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement (see 6.6).

4.2 Appendices.
The general requirements in the appendices contained herein shall apply to the appropriate food establishment.

4.3 Sanitation audit.
Compliance with the requirements of this standard and the applicable appendices shall be verified by an audit of the food establishment (see 6.4). The audit shall consist of an examination of the methods used to receive, handle, and store food. The sanitation audit shall be performed in the presence of management or a designated representative. Results of the audit shall be documented.

4.4 Laboratory testing.
All establishments are subject to laboratory testing. Results of laboratory testing complete the sanitation audit.

4.5 Sanitation Audit Rating.
A sanitation audit shall be rated either "Acceptable" or "Unacceptable". A critical defect will result in an Unacceptable rating. Four or more major defects will result in an Unacceptable rating. A sanitation audit will not be rated “Unacceptable” solely based upon Table VII, Food Security. Each requirement in Appendix A shall only be scored once for each severity, regardless of the number of findings. Observations will not result in an Unacceptable rating. The cumulative effect of multiple observations indicating an out-of-control process may require an upgrade to one major defect, due to the increased public health significance.

4.5.1 Corrective action.
Establishments receiving an “Unacceptable” Sanitation Audit Rating shall provide written confirmation of corrective actions taken, utilizing a CAR (see 6.5). Critical and major defects shall be addressed in the CAR.

5. DETAILED REQUIREMENTS

The following appendices contain specific requirements related to the cited reference document, but are not intended to be all-inclusive.

APPENDIX A General Requirements
APPENDIX B Bakery
APPENDIX C Manufactured Dairy Products

APPENDIX D Fluid Dairy
APPENDIX E Shell Eggs
APPENDIX F Frozen Desserts
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APPENDIX H Seafood
APPENDIX K Bottled Water/Soft Drinks
APPENDIX L Off Post Caterers and Civilian Restaurants
APPENDIX M Slaughter and Fabrication of Fresh Meat Products in OCONUS Areas
APPENDIX N Dry Dairy Products
APPENDIX J Pasteurized, Refrigerated Juices
APPENDIX O Slaughter and Fabrication of Poultry in OCONUS Areas
APPENDIX P Fresh-Cut Produce
APPENDIX R Mushrooms
APPENDIX S Vegetable Sprouts
APPENDIX T Low Acid Canned Food

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but it is not mandatory.)

6.1 Intended use.
This standard is intended to ensure that food products procured by DoD for use by Armed Forces personnel are safe and of acceptable quality.

6.2 Issue of DoDISS.
When this standard is used in acquisition, the applicable issue of the DoDISS must be cited in the solicitation.

6.3 Tailoring guidance.
To ensure proper application of this standard, invitations for bids, requests for proposals, and contractual statements of work should tailor the requirements in section 5 of this standard to exclude any unnecessary requirements. For example, if the requirement applies to a bakery establishment, only the requirements contained in this standard and in the bakery appendix should be mandated.

6.4 Audit guidelines.
The government will perform audits of contractors' premises based on guidelines contained in MIL-HDBK-3006A, Guidelines for Auditing Food Establishments. Copies may be obtained by request to Standardization Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.
(http://www.dodssp.daps.mil)

6.5 Corrective actions.
Follow the guidelines in MIL-HDBK-3006A for establishments that receive an Unacceptable rating.

6.6 Listing of plants.

Plants in compliance with this standard may be listed in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement (http://vets.amedd.army.mil/dodvsa/index.html). Requests for listing in the Directory should be directed to the appropriate procurement agency. Information related to its use should be directed to the appropriate MACOM veterinarian.

6.7 Subject term (key word) listing.

acceptable
analysis
audit
bakery
cheese
defect
eggs
fresh fruits
ice
observation
plants
sanitary
seafood
standard
unacceptable
vegetables
HACCP (Hazard Analysis Critical Control Point)

6.8 Changes from previous issue.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

APPENDIX A - General Requirements

A.1 SCOPE

A.1.1 Scope. This appendix establishes the general sanitation provisions for food production and storage facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

A.2 APPLICABLE DOCUMENTS

A.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

A.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

Code of Federal Regulations (CFR), Title 21, Part 110.

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

A.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

A.4 GENERAL REQUIREMENTS

This section is not applicable to this document.

A.5 DETAILED REQUIREMENTS

A.5.1 General. The requirements in Tables I through V and TableVII shall be as specified in the 21 CFR 110, but are not intended to be all-inclusive. The requirements herein relate to personnel safety and cleanliness, building and facilities, equipment and utensils, raw materials and operations, defect action levels, and hazard analysis to ensure the adequacy and safety of food products.

TABLE I. Subpart A - Personnel

ITEM	REQUIREMENT
A1	Adequate disease control measures are practiced. (Sec 110.10(a)).
A2	Employees are wearing suitable clothing. (Sec 110.10(b)).
A3	Employees are maintaining adequate cleanliness. (Sec 110.10(b)).
A4	Employees are washing hands thoroughly after each absence from the workstation and at any other time the hands may have become soiled or contaminated. (Sec 110.10(b)).
A5	Employees working in the processing area are free from unsecured jewelry or other objects. (Sec 110.10(b)).
A6	Employees are using proper gloves and maintaining them in an intact, clean, and sanitary condition. (Sec 110.10(b)).
A7	Employees are wearing effective hair or beard restraints. (Sec 110.10(b)).
A8	Employees' belongings are being properly stored. (Sec 110.10(b)).
A9	Employees are not eating food, chewing gum, drinking beverages or using tobacco where food is exposed or equipment and utensils are washed. (Sec 110.10(b)).
A10	Precautions are taken to protect food from being contaminated by employees. (Sec 110.10(b)).
A11	Employees are supervised by trained personnel and have clearly assigned responsibilities. (Sec 110.10 (9) (d)).

TABLE II. Subpart B - Buildings and Facilities

ITEM	REQUIREMENT
B1	Grounds are maintained in a condition that will protect against contamination or harborage of pests. (Sec 110.20 (a)).
B2	Buildings and structure are suitable in size, construction, and design to facilitate maintenance and sanitary operations to include food contact surfaces and food packaging materials. Potential for contamination is reduced by effective separation of operations in which contamination is likely to occur. (Sec 110.20(b)).
B3	Buildings (to include floors, walls, and ceilings), fixtures (to include those that allow dripping and condensation), utensils, and other physical facilities of the plant are maintained in a sanitary condition and in good repair. (Sec 110.20(b) & 110.35(a)).
B4	Adequate protection against glass breakage over exposed foods. (Sec 110.20).
B5	Adequate lighting, ventilation, and screening shall be provided. (Sec 110.20)
B6	Substances used for cleaning, sanitizing and pest control are safe, adequate, used IAW instructions, and are properly marked and stored. (110.35(b))
B7	Adequate measures are taken to exclude pests from processing area and to protect against contamination of foods by pests, pesticides, and/or rodenticides. (Sec 110.35(c)).
B8	Food contact surfaces adequately cleaned and sanitized as frequently as necessary and properly protected to preclude contamination of food, to include single service articles (Sec 110.35(d))
B9	The water supply is sufficient and from a sanitary source. Water potability is checked not less than annually by samples selected from within the plant. (Sec 110.37(a)).
B10	The plumbing is adequate in size and is adequately installed and maintained. (Sec 110.37 (b)).
B11	Sewage and rubbish are adequately disposed of. (Sec 110.37 (c) (f)).
B12	Adequate toilet facilities are provided for employees. Sanitarily maintained, in good repair, and do not open into food processing areas. (Sec110.37 (d)).
B13	Adequate hand-washing facilities are provided at convenient locations. (Sec 110.37 (e)).

TABLE III. Subpart C - Equipment and Utensils

ITEM	REQUIREMENT
C1	All pieces of equipment and utensils are adequately cleanable. (Sec 110.40(a)).
C2	Food contact surfaces are corrosion resistant, and made of nontoxic materials. (Sec 110.40(a)).
C3	Equipment lubrication does not contaminate the product; only food grade lubricants are used in the food zone. (Sec 110.40(a)).
C4	Seams on food-contact surfaces are smoothly bonded or maintained so as to minimize the growth of microorganisms. (Sec 110.40(b)).
C5	Surfaces of equipment, other than food contact surfaces, maintained in the food handling area, are constructed so they can be kept in a clean condition. (Sec 110.40(c)).
C6	Holding, conveying and manufacturing systems are designed and constructed so that they can be maintained in an appropriate sanitary condition. (Sec 110.40(d)).
C7	Adequate indicating thermometers, temperature-measuring devices, temperature-recording devices, and temperature controls are in place. (Sec 110.40(f)).
C8	Compressed air or other gases that are mechanically introduced into food or used to clean food-contact surfaces are free of indirect food additives. (Sec 110.40(g)).
C9	Properly installed thermometers or temperature recording devices are required for freezers and cold storage areas that hold food capable of supporting microbial growth. (Sec 110.40(e))

TABLE IV. Subpart E - Raw Materials and Operations

ITEM	REQUIREMENT
E1	Raw materials and other ingredients are purchased from approved sources, and are protected from contamination and adulteration at all times. (Sec 110.80(a)).
E2	Manufacturing operations are conducted under conditions and controls necessary to minimize the potential growth of microorganisms or contamination of foods. (Sec 110.80(a)).
E3	Foods are maintained under conditions during warehousing and distribution that will protect the food items and their containers against physical, chemical, and microbial contamination as well as against deterioration. (Sec 110.93).
E4	Chemical, microbial, or extraneous-material testing procedures are used where necessary to identify sanitation failures or possible food contamination. Test results must meet the applicable requirements (Sec 110.80).
E5	Methods to exclude physical contaminants are established and monitored (metal detector, visual screening, sieves, or other means). (Sec 110.80).

TABLE V. Subpart G - Defect Actions Levels

ITEM	REQUIREMENT
G1	Defect action levels are in compliance. (Sec 110.10).

TABLE VI. Subpart H - Hazard Analysis and Record Keeping

ITEM	REQUIREMENT
H1	Hazard analysis is performed, for all stages of production.
H2	A Hazard Analysis Critical Control Point (HACCP) plan is written and implemented for each kind of product produced.
H3	HACCP plan contains food safety hazards, critical control points, critical limits, monitoring procedures, corrective action plans, verification procedures and record keeping system.
H4	Corrective action plan is followed and deviant product segregated.
H5	Corrective actions are fully documented.
H6	Records include all required information.
H7	Records are reviewed, signed and dated as required.
H8	Records are retained as required (per reference standard) and are available and subject to public disclosure limitations.
H9	Internal reviews are performed as required.
H10	Overall verification is performed by a trained individual annually or as a process change is made and when the HACCP plan is modified.
H11	Sanitation control and monitoring is performed and documented with sufficient frequency to ensure compliance with Current Good Manufacturing Practices (CGMP) checklists as listed in Part 110.

TABLE VII. Subpart J – Food Security

ITEM	REQUIREMENT
J1	Appropriate measures taken to screen employees. (Sec 110.80)
J2	Reasonable precautions taken to control physical access to premises. (Sec 110.80)
J3	Reasonable precautions taken to control physical access to different functional areas of the establishment. (Sec 110.80)
J4	Raw materials and packaging/packing materials received in original, intact containers and protected from potential tampering (contamination, adulteration, etc.). (Sec 110.80).
J5	Manufacturing operations conducted under conditions and controls necessary to minimize the potential for tampering. (Sec 110.80).
J6	End item(s) maintained under controls during warehousing and distribution that will protect the food item(s) and its container(s) against potential tampering. (Sec 110.80).
J7	Protocols and training in place to recognize and respond to food security violations. (Sec 110.80)

NOTE: Reference to the controlling 21 CFR 110 sections are identified in parentheses in Table I through V and Table VII above.

APPENDIX B - Bakery

B.1 SCOPE

B.1.1 Scope. This appendix establishes the sanitation requirements for bakery facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

B.2 APPLICABLE DOCUMENTS

B.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

B.2.2 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

BAKING INDUSTRY SANITATION STANDARDS COMMITTEE

Sanitation Standards for the Design and Construction of Bakery Equipment and Machinery, January 1994

(Application for copies should be addressed to the Baking Industry Sanitation Standards Committee, 401 N. Michigan Avenue, Chicago, IL 60611, e-mail: bakesan@aol.com.)

B.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

B.4 GENERAL REQUIREMENTS

See Appendix A.

B.5 DETAILED REQUIREMENTS

B.5.1 General. The requirements in Table VIII shall be as specified in the Baking Industry Sanitation Standards, but are not intended to be all-inclusive.

TABLE VIII. Bakery requirements

APPENDIX A PARAGRAPH	REQUIREMENT
C1	Where equipment passes through walls, ceilings or floors, sufficient clearance is provided between the equipment and the wall, ceiling or floor, and the opening is finished to permit cleaning, or the equipment is sealed to the adjoining surface. (A6).
C5	Product chutes at floor level are installed so that the rim is a minimum of 100mm (4 inches) above floor level. Such chutes are provided with overlapping covers. (A13).
C4	Pans used to collect spillage or drip are readily accessible or readily removable, and are large enough to catch all spillage or drips. Also, fixed pans used to collect liquid spillage or drip are readily accessible, have drains, and are pitched to ensure complete drainage away from the product zone. (A14).
C5	Liquid ingredient inlet pipes, valves and fittings are of sanitary take-apart type, unless designed for in-place cleaning, and are pitched for self-draining, back to the point where the line is continuously filled. (A21).
B2	A concrete curb is built around all floor-mounted washing equipment to confine leakage. (A27).
C5	Vents on equipment for handling and storing dry ingredients are protected against entry of foreign material, and are provided with readily removable filters to exclude particles of 5 microns or larger. (1-4.1.3).
C5	Screw conveyor housings are hinged or removable so that the area around the helical flights can be cleaned from the outside. Sufficient clearance is provided between the bottom of the screw housing and the floor to permit sufficient exposure of the screw for cleaning. The screw housings are dust-tight and readily accessible. (1-4.1.8).
C5	Straight run surfaces of pneumatic conveyors, valves and rotary feeders are smooth and readily accessible or removable, except that piping, tubing, valves or feeders which are self-purging are exempt from the requirements for accessibility. (1-4.3.1).
C8	The air supply for blowers or compressors is filtered to exclude particles of 5 microns or larger. (1-4.3.4).
E2	Dry product handling includes a sifter. (1-4.4.1).
C8	Separate conveying air systems are provided before and after an atmospheric sifter in the system. (1-4.4.2).
C1	A removable flexible connection is provided between the inlet to the hopper and the product delivery equipment. (1-4.5.1).
C5	Discharge piping and unloading hoses are equipped with caps. (1-4.8.3).
C5	Bearings are outside the product zone and are sealed or self-lubricated; and design and construction are such that lubricant cannot leak, drip or be forced into the product zone. (2-4.2.6).
C1	Flexible tubing is transparent or translucent. Nozzles are readily removable. (5-4.1.3).
C1	Pumps, valves, pipe fittings, including those used to insert thermometers and pressure gauge bulbs, are of the sanitary take-apart type and are readily accessible or removable. (5-4.1.10).

TABLE VIII. Bakery requirements- Continued

C5	Stationary mixer bowls drain completely. Close-coupled sanitary drain valves which are accessible or removable are provided. (6-4.2.11).
C1	The system for lubricating dough-contact surfaces, as distinct from the means of mechanical lubrication, has a reservoir readily accessible or removable for cleaning. Distribution lines, valves and pumps are removable for cleaning, or so designed as to permit Cleaning In Place (CIP). (8-4.2.6).
E2	Proofing cloths are smooth, except they may be of absorbent material, but are readily removable for laundering. An extra set of proofing cloths are provided. (16-4.1.1).
C5	Pumping, piping, valves and fittings used to dispense or convey frying fats, batter, glaze, icing, jellies and fillings are of sanitary take-apart type at least equal to 3A standards, and are accessible for inspection and cleaning. (16-4.1.16).
C1	The icing and/or glazing reservoir return is readily accessible and self-draining. (32-4.1.1).
C5	Drip or catch pans are provided under all product transfer points, as well as under cleaning attachments, and are readily removable. (32-4.1.6).
C4	Drip or catch pans are provided between overhead trolleys and product zone, on suspended monorail type cooler. (33-4.2.5).

NOTE: References to the controlling Baking Industry Sanitation Standards Committee are identified in parentheses

APPENDIX C - Manufactured Dairy Products

C.1 SCOPE

C.1.1 Scope. This appendix establishes the sanitation requirements for manufactured dairy product facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

C.2 APPLICABLE DOCUMENTS

C.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

C.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

7 CFR, Part 58.

21 CFR, Parts 133, 173

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

National Institute of Standards and Technology, Handbook 44

(Application for copies should be addressed to National Institute of Standards and Technology, 110 Bureau Drive, Gaithersburg, MD 20899-0001, http://www.nist.gov/.)

C.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

C.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

C.4 GENERAL REQUIREMENTS

See Appendix A.

C.5 DETAILED REQUIREMENTS

C.5.1 General. The requirements in Table IX shall be as specified in 7 CFR 58, but are not intended to be all-inclusive.

TABLE IX. Manufactured dairy products requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E2	Graded product is marked, labeled, and handled in accordance with Part 58.
B2, B3	Building and facilities are maintained for laboratory, starter rooms, grading rooms, etc. in accordance with 58.126.
C5	All CIP systems, weighing and receiving tanks comply with 3-A accepted practices in accordance with 58.128.
C7, C8	If applicable, all can washers, associated water and steam lines are equipped and maintained for proper temperature and pressure controls. Steam pressure is not less than 80 lbs and the final rinse is an automatically controlled system, and does not exceed 140º F (60° C). (58.128 (c)).
C7, H6	All scales comply with the National Institute of Standards and Technology Handbook 44 (latest version) and are accurate to the specifications of 58.128 (m).
E1, E4, H6	Raw milk conforms to basic quality and classification specifications of 58.132 - 133 and is tested at the frequencies required, and records are maintained in accordance with 58.134 - 139.
C5	Receiving, holding, and processing of milk and cream and the manufacturing, handling, packaging, storing, and delivery of dairy products is in accordance with Part 58.
H8	Records are maintained for all required tests and analyses in accordance with 58.148.
C5	Sanitary seal assemblies are removable on all agitators, pumps, and vats, and are inspected at regular intervals and kept clean. (58.146 (a)).
E4, H6	Packaging room atmosphere is practically free from mold and verified in accordance with 58.151.
E1	Salt is free flowing, white, refined sodium chloride, and meets the requirements of Food Chemical Code 58.
E1	Color additives shall be approved by US FDA. (58.329, 58.719).
B2, B4, H6	A separate starter room or properly designed starter tank with satisfactory air movement is provided. The air supply is filtered to 90% efficiency in accordance with ASHRAE Synthetic Dust Arrestance Test. (58.406).
E4, H6	Mold counts for make rooms are not more than 15 colonies per plate/15 minutes. (58.407).
B2	Brine room is separately constructed with minimum corrosion. (58.408).
B2	Adequate shelving, air circulation, temperature and humidity control are provided and maintained in drying rooms. (58.409) (cheese plants only).
B2	Separate rooms are provided for packaging and boxing; maintained at proper temperature to prevent sweating prior to paraffining. (58.410) (cheese plants only).
B2	Separate rooms are provided for preparation of bulk cheese to be cut and wrapped into smaller packages. Air movement is outward moving. (58.413) (cheese plants only).

TABLE IX. Manufactured dairy products requirements - Continued

C6	Bulk starter vats are equipped with tight fitting lids and have adequate temperature controls and indicating/recording devices. (58.414).
C1, C2, C3	Vats, tanks, and drain tables are constructed of 16 gauge steel or equally corrosion resistant metal, properly pitched, welded, and fitted with sanitary outlets and valves for maintenance of heat to the lines. Auto curd makers, cyclone separators, conveying systems, and curd fillers are properly constructed and maintained.
C1	Mechanical agitators, shields, shafts, hubs, blades, forks, and stirrers are in accordance with 3-A Accepted Standards.
C1, C8	Automatic salters meet the specific requirements (salting method, design, and steam quality) of 58.418 (cheese plants only).
B4	Hoop and barrel washing equipment is vented to the outside. (cheese plants only).
C1, C2, C3	All hand utensils, knives, racks, shovels, scoops, paddles, strainers and other miscellaneous equipment meets 3A Sanitary Standards. Wires in curd knives are stainless steel, tight, and replaced as necessary. (58.419).
C1	Reuse of single service press cloths is prohibited. (58.421) (cheese plants only).
E2	Brine tanks, vacuumizers, and monorail systems do not contribute to the contamination of the product. (58.422, 423, and 424).
C7, E2	Cheese wax is kept clean. Paraffin tanks are of adequate size, fitted with wooden racks, and have heat controls and an indicating thermometer. (58.427) (cheese plants only).
E1, H6	Hydrogen peroxide, catalase, cheese cultures, calcium chloride, and other authorized ingredients comply with requirements. (21 CFR Part 133, 7 CFR Parts 58.431, 58.432, and 58.433)
E1	Rennet, pepsin, and other milk clotting/flavor enzymes meet the requirements of 58.436, (21 CFR, Parts 133, 173).
E4	Each vat and representative sample of finished product is analyzed for milk fat, moisture, and weight/volume control.
E2	Based on the variety of products produced, the stated quality, identity, and analytical requirements of Part 58 are met. (21 CFR, Parts 133, 173)
E1	Nonfat dry milk and whey shall be of USDA Extra grade except for moisture (Processed cheese). (7 CFR 58.716, 58.717)
B8	Conveyors, grinders/shredders, and cookers maintained cleaned to prevent contamination. (7 CFR Part 58.707, 58.708, 58.709)
E2	Fats/oils used on the surface of the cheese shall be of food grade. (21 CFR, Parts 133)

NOTE: Reference to the controlling CFR Title 7, Chapter 1, Part 58 sections are identified in text or parentheses above.

APPENDIX D - Fluid Dairy

D.1 SCOPE

D.1.1 Scope. This appendix establishes the sanitation requirements for fluid dairy facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

D.2 APPLICABLE DOCUMENTS

D.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

D.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, PUBLIC HEALTH SERVICE

Grade “A” Pasteurized Milk Ordinance (PMO), 1999

(Application for copies should be addressed to U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, Milk Safety Branch, 200 C Street SW, Washington, DC 20204.)

CODE OF FEDERAL REGULATIONS (CFR)

Title 21, Part 173.

(Application for copies should be addressed to Superintendent of Public Documents, U.S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/cfr-table-search.html - page1)

U. S. FOOD AND DRUG ADMINISTRATION

IMS List, Sanitation Compliance and Enforcement Ratings of Interstate Milk Shippers
(This publication is available at http://vm.cfsan.fda.gov/~ear/ims-toc.html)

U. S. DEPARTMENT OF AGRICULTURE

Dairy Plants Surveyed and Approved for USDA Grading Service
(This publication is available at http://vm.cfsan.fda.gov/~ear/ims-toc.html)

D.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

D.3 DEFINITIONS.

D.3.1 Definitions. Definitions are contained in the basic handbook.

D.4 GENERAL REQUIREMENTS

See Appendix A.

D.5 DETAIL REQUIREMENTS

D.5.1 General. The requirements in Table X shall be as specified in U.S. Public Health Service Publication 229 and 21 CFR 173, but are not intended to be all-inclusive.

TABLE X. Fluid dairy requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E1	Milk originates from herds accredited tuberculosis-free, brucellosis-free, and from countries/regions determined to be acceptable. (Sec. 8).
B7, H6	A system of tagging or recording tanker trucks that have been cleaned and sanitized is established and maintained for 15 days. (Sec. 7, Item 12p).
E1	Upon arrival, raw milk and/or raw products for pasteurization comply with bacteriological, chemical and temperature standards of Sec. 7, Table 1.
E4	Raw milk and milk products are screened for drug residues. (Sec. 6).
E2	Raw milk and milk products are held at 45° F (7º C) until processed. (Sec. 7, Item 17p).
C3	Welded portions of food contact surfaces are smooth and free from pits, cracks, or inclusions. (Sec. 7, Item 10p).
C2	All milk contact surfaces of multi-use containers and equipment are constructed of American Iron and Steel Institute (AISI) 300 series stainless steel or other non-corrosive material as described in the Pasteurized Milk Ordinance (PMO). (Sec. 7, Item 11p).
C5	Equipment is designed to protect against surface and overhead contamination. (Sec. 7).
B7	Storage tanks are cleaned when emptied and are emptied at least every 72 hours. (Sec. 7, Item 12p).
C7	Storage tanks used to store raw milk or heat-treated milk products are equipped with a 7 day temperature recording device. (Sec. 7, Item 12p).
C5	Equipment complies with the sanitary design and construction standards of the PMO. (Sec. 7).
E2	The overflow of the top rim of the constant level raw milk tank is lower than the lowest milk level in the regenerator. (See High Heat Short Time (HHST) exception) (Sec. 7, Item 16p(D)).
E2	Raw milk in the regenerator drains back to the constant-level tank. (Sec. 7, Item 16p(D)).
E2	The pasteurized side of the regenerator is always under higher pressure than the raw side. (Sec. 7, Item 16p(D)).
E2	An atmosphere break exists at least 30.48 centimeters above the raw milk. (See HHST exception) (Sec. 7, Item 16p(D)).
E2	There is no flow promoting device between the regenerator and the air-break. (Sec. 7, Item 16p(D)).
E2	There is no pump between the raw milk inlet to regenerator and the raw milk supply tank. (See HHST exception) (Sec. 7, Item 16p(D)).
E2	The holding tube is designed so that no deviations can be made to the flow rate or holding time. (Sec. 7, Item 16p(B)).
E2	The flow control sensor (Recording Thermometer) is not more than 46 centimeters (18 inches) up stream from the control device. (Sec. 7, Item 16p(B)).

TABLE X. Fluid dairy requirements – Continued

E2	The indicating and recorder thermometers are properly located. Sec. 7, Item 16p(B)).
E2	The flow diversion devices are properly installed and functioning. (Sec. 7, Items 16p(B)(C)).
E2	The flow promoting devices are properly located and of the proper speed, displacement, and capacity. (Sec. 7, Item 16p(F)).
E2	Pasteurized milk is not strained or filtered except through a perforated metal strainer. (Sec. 7, Item 15p(A)).
E2	Manual valves meet PMO standards (stop/leak grove/close coupled). (Sec. 7, Item 16p(A)).
E2	Pasteurization equipment and controls testing is performed in accordance with the PMO. (Appendix I).
H8	Pasteurization recording charts are maintained on file at the processing plant. (Sec. 7, Item 16p(E)).
C7	Thermometers meet requirements. (Sec. 7, Item 16p(A) & 16p(B), Appendix H).
E2	Air space heating is accomplished when required for Batch Pasteurization. (Sec. 7, Item 16p(A)).
E2, H8	Recording charts are complete and maintained. (Sec. 7).
C8	Culinary steam is in accordance with PMO. (Sec. 7, Item 16p(B)).
B8	Boiler water additives comply with 21 CFR 173.310.
C8	Air under pressure is in accordance with 3-A Accepted Practices. (Appendix H).
E2	There is no cross-connection or direct contamination of pasteurized milk or milk product. (USPHS Publication 229).
B6, C5	All openings, including valves, pipes, milk tanker trucks, etc. are capped or otherwise protected. (Sec. 7, Item 15p(A)).
E5	Filling lines are equipped with a device capable of detecting, in each container before filling, volatile organic contaminants. The device is interconnected so that the system will not operate unless the detection device is operational. (Sec. 7, Item 12p).
E2, E5	Recirculated cooling water is protected from contamination. (Appendix G).
E4	Recirculated cooling water is tested once per six-month period. (Appendix G).
C7	Clean-In-Place (CIP) systems are in compliance with PMO. CIP systems have a recording device installed in the return solution line or other appropriate area to record the temperature and time at which the line or equipment is exposed to cleaning and sanitizing solution (retained for 3 months) (Sec. 7, Item 12p).
H6, H7, H8, H9	Record of CIP cleaning process is maintained for recirculated cleaning systems. (Sec. 7, Item 12p).
C7	During processing, pipelines and equipment used to conduct milk are effectively separated from cleaning and sanitizing solutions (see the PMO for methods). (Sec. 7, Item 15p(B)).
B3	Plants where containers are manually cleaned have a two compartment sink and a steam cabinet to sanitize containers or a three compartment sink if a chemical sanitizer is used. (Sec. 7, Item 12p).
E4, H8	Pasteurized milk and/or milk products comply with bacteriological, chemical and temperature standards of Sec. 7. Results are recorded and records maintained. (Sec.7

TABLE X. Fluid dairy requirements - Continued

E2	Pasteurized milk and milk products are cooled to 45° F (7° C) and maintained at that temperature. (Sec. 7, Item 17p)
E4, H8	Residual bacteria counts for multi-use and single-service containers meet the standards listed in the PMO. Results are recorded and records maintained. (Sec. 7, Item 12p).
E1	Packaged milk and milk products which have physically left the premises or processing plant are not repasteurized for Grade A use (see the exception) (Sec. 7, Item 15p(A)).
B5	Poisonous or toxic materials are not stored in any room where milk or milk products are received, processed, pasteurized or stored. (Sec. 7, Item 15p(A)).
B5	Only approved rodenticides and insecticides are used. (Sec. 7, Item 15p(A)).

NOTE: Cited reference documents for the above are U.S. Public Health Service Publication 229 and 21 CFR 173.

APPENDIX E - Shell Eggs

E.1 SCOPE

E.1.1 Scope. This appendix establishes the sanitation requirements for egg processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

E.2 APPLICABLE DOCUMENTS

E.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

E.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

Title 7, Parts 56 and 59

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/cfr-table-search.html - page1)

E.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

E.3 DEFINITIONS

E.3.1 Definitions. Definitions are contained in the basic handbook.

E.4 GENERAL REQUIREMENTS

See Appendix A.

E.5 DETAILED REQUIREMENTS

E.5.1 General. The requirements in Table XI shall be as specified in 7 CFR 56, but are not intended to be all-inclusive.

TABLE XI. Shell egg requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E3	Grading and packing rooms are kept reasonably clean during grading and packaging operations, and are thoroughly cleaned at the end of each day. (56.76(a) (2)).
B4	The egg grading or candling area is adequately darkened to make possible the accurate quality determination of the candled appearance of eggs. There are no other light sources or reflections of light that interfere with, or prohibit accurate quality determination of eggs in the grading or candling area. Other light sources and equipment or facilities are provided to permit the detection and removal of stained or dirty eggs, or other under grade eggs. (56.76(b)(1) & (2)).
E3	The cooler room has refrigeration facilities capable of reducing within 24 hours and holding the maximum volume of eggs handled to 45° F (7° C) or below. Accurate thermometers are provided. (56.76(c) (1)).
E3	Eggs with excess moisture on the shell are not shell protected (oil processed). (56.76(d) (1)).
E3	Oil having any off odor, or that is obviously contaminated, is not used in shell egg protection. (56.76(d) (2)).
E1	Processing oil that has been previously used and which has become contaminated is filtered and heated at 180° F (82° C) for 3 minutes prior to use. (56.76(d) (3)).
C4, E2	Shell egg processing equipment is washed, rinsed and treated with a bactericidal agent each time the oil is removed. It is preferable to filter and heat treat processing oil and clean processing equipment daily when in use. (56.76(d) (4)).
E2	The temperature of the wash water is maintained at 90° F (32° C) or higher, and is at least 20° F (-6° C) warmer than the temperature of the eggs to be washed. These temperatures are maintained throughout the cleaning cycle. (56.76(e) (2)).
E2	Replacement water is added continuously to the wash water of washers to maintain a continuous overflow. Iodine sanitizing rinse is not used as part of the replacement water. (56.76(e) (5)).
E4, H6	An analysis of the iron content of the water supply, stated in parts per million, is performed. When the iron content exceeds 2 parts per million (ppm), equipment is provided to correct the excess iron content. If the water source is changed, new tests are performed. (56.76(e) (6)).
E2, E4, H6	The washing and drying operation is continuous and is completed as rapidly as possible. Eggs are not allowed to stand or soak in water. Immersion washers are not used. (56.76(e) (8)).
E2, E4	Washed eggs are spray-rinsed with water having a temperature equal to, or warmer than, the temperature of the wash water, and containing an approved sanitizer of not less than 50 ppm nor more than 200 ppm of available chlorine or its equivalent. Alternate procedures, in lieu of a sanitizer rinse, are approved by the FDA or MACOM. (56.76(e) (10)).
E2	During any rest period, eggs are removed from the washing and rinsing area of the egg washer and from the scanning area whenever there is a buildup of heat. (56.76(e) (12)).

NOTE: Reference to the controlling CFR Title 7, Part 56 sections are identified in parentheses.

APPENDIX F - Frozen Desserts

F.1 SCOPE

F.1.1 Scope. This appendix establishes the sanitation requirements for frozen dessert processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

F.2 APPLICABLE DOCUMENTS

F.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

F.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, PUBLIC HEALTH SERVICE

Most current Frozen Dessert Processing Guidelines, U. S. Department of Health and Human Services, Food and Drug Administration.

(Application for copies should be addressed to U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, Milk Safety Branch, 200 C Street SW, Washington, DC 20204.)

CODE OF FEDERAL REGULATIONS (CFR)

Code of Federal Regulations (CFR), Title 21, Part 135

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html)

C.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

F.3 DEFINITIONS

F.3.1 Definitions. Definitions are contained in the basic handbook.

F.4 GENERAL REQUIREMENTS

See Appendix A.

F.5 DETAIL REQUIREMENTS

F.5.1 General. The requirements in Tables XII, XIII, and XIV shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XII. Frozen dessert requirements, general considerations.

APPENDIX A PARAGRAPH	REQUIREMENT
E2, H6	Raw milk, low fat milk, skim or cream which was heated above 45º F (7° C), but below 160º F (71° C) for separation, is used in frozen dessert if: 1) It was heated only once for pasteurization, 2) After separation, it was immediately cooled to below 45º F (7° C), 3) No more than 3 days have elapsed between separation and shipment to the frozen dessert plant, or 4) If it is heated above 125º F (51° C), it meets 30,000 Standard Plate Count and 10 coliform at plant of shipment, 100 coliform at plant of receipt. (Page 4).
C5	Adequate physical breaks to the atmosphere (at least as large as the piping diameter) are provided in order to eliminate cross-connections, and are verifiable by walk-through with installation drawings. (Page 9).
E2	All openings into product or onto sanitized product-contact surfaces are capped, closed, or adequately protected. (Page 9).
C4	Fill line connections are made to tank fittings, and tank lids are not propped open during filling. (Page 9).
E3	Absorbent items such as rags and sponges are not used in the plant environment, and separate brushes are used for product and non-product surfaces. (Page 10).
B8	All containers, utensils, and equipment are cleaned and sanitized at least once during each day they are used; storage tanks are emptied and cleaned at least every 72 hours. (Page 11).
E2	Piping equipment and containers used to process or package aseptically processed frozen dessert mix beyond the final heat-treatment process are sterilized before any aseptically processed product is packaged. (Page 11).
E2	Pasteurized mix is frozen, dried, packaged, or shipped within 72 hours of being pasteurized. (Page 12).
C1	All openings in covers of tanks, vats, separators, etc. are protected by raised edges or other means to prevent the entrance of surface drainage. (Page 13).
C1	There are no threads used in contact with milk, milk products, frozen desserts, or frozen dessert mixes except where needed for functional and safety reasons, such as clarifiers, pumps, and separators. (Page 14).
B2	The following areas are separate from one another: 1) the tank truck receiving area, 2) the processing area, 3) the can or case wash areas, 4) the dry storage areas, 5) the packaging area. (Page 16).
E2	All milk, milk products, frozen dessert mix, liquid eggs, and dairy ingredients are maintained at 45º F (7° C) or below. Products in coolers are stored at temperatures under 45º F (7° C). (Page 17).

TABLE XIII. Frozen dessert requirements, plant systems.

APPENDIX A PARAGRAPH	REQUIREMENT
E2	Pressurizing air processing systems which incorporate air directly into the product, such as freezers, air blows, and air agitating systems, are properly designed to reduce potential contamination. They are equipped with filters and sanitary check valves. (Page 25).
B8, H6	Where steam is used to provide heat for vat or HHST processes, the water source for the boiler is identified as potable and is in compliance with CFR, Title 21. (Page 27).
E4, H6	The re-circulating cooling water (sweetwater) and re-circulating glycol and water mixtures are tested at least every six months and are free of coliforms and listeria. (Page 28).
B4	Outside air entering the facility is filtered and free of condensates. (Page 29).
E2	Dusty, raw ingredient blending operations which create powdery conditions are located away from pasteurized product areas. (Page 32).
E2	Products are pasteurized in accordance with the time/temperature tables listed in the Frozen Dessert Processing Guide. (Page 33).
E2	Pasteurization is in accordance with the methods explained in the Frozen Dessert Processing Guide. (Pages 32 through 67).
E1	Mix shipped in bulk tank trucks to another location is re-pasteurized at that plant prior to freezing and packaging. (Page 68).
E2	All dairy products, eggs, egg products, cocoa products, emulsifiers, stabilizers, liquid sweeteners and dry sugar are added prior to pasteurization. (Page 69).
E2	All reconstitution or recombination of dry, powdered, or condensed ingredients with water is done prior to pasteurization. (Page 69).
E2, H6	Ingredients which may be added after pasteurization are limited to those flavoring and coloring ingredients which are: 1) subjected to prior heat treatment sufficient to destroy pathogenic microorganisms, 2) of 0.85% water activity or less, 3) of pH less than 4.7, 4) roasted nuts added at the freezer, 5) contain high alcohol content, 6) bacterial cultures, 7) fruits and vegetables added at the freezer, and 8) subjected to any process which will assure that the ingredient is free of pathogenic microorganisms. (Page 69).
E4	A plant quality assurance program is in place to assure that the fresh fruit and vegetable products are of high quality and do not contaminate the dairy product. (Page 69).
C1	To prevent contamination, lids of tub and canister-type containers for frozen desserts are designed to overlap the tub or container to be overwrapped. (Page 70).
E2	If de-foamers are used, they do not return product or foam to the filler bowl. (Page 70).

TABLE XIV. Frozen dessert requirements, specific plant operations

APPENDIX A PARAGRAPH	REQUIREMENT
B7	Pails used for rework or adding flavors are cleaned after each use and sanitized prior to reusing. (Page 71).
C8	The air supply in the freezer is properly filtered. (Page 71).
E2	A bright distinctive food color is added to the brine used on novelty sticks if the brine is calcium carbonate, in order to detect leakage onto the finished product. (Page 72).
B3	When a stainless steel chute is used to convey product (novelty) to the wrapper after extraction, the chute is cleaned at least every four hours during the production run. (Page 72).
E2	Water used to glaze product to help prevent sticking to the paper wrapper is pasteurized or treated to lower the pH. Water dips have a continuous over-flow to minimize product accumulation throughout the product run. (Page 73).
C1	There is a physical break between pasteurized product for re-pasteurization when the product is loaded in a raw product receiving area, with particular attention being paid to product and CIP connections, so that raw product in lines and tanks is never directly connected to any line which extends back to the pasteurized product lines or tanks. A physical break is required. (Page 68).
C1	Adequate drip deflectors are provided at each filler valve. (Page 70).
C1	Tanks used for holding cooling media are adequately protected and are coliform and pathogen free. (Page 70).
E1	For reclaiming operations, only product which has not left the plant premises is reclaimed. (Page 74).
C1	Woven wire strainers are not used to remove bulky ingredients. (Page 74).
E1	Reworked product, such as ice cream, which is retained in buckets during startup while overrun is stabilized, is kept to a minimum. If this product is to be recycled back into product, it is properly protected and re-pasteurized. (Page 75).
E4, H6	Microbiological criteria for end items are not more than 50,000 cfu/g Standard Plate Count; not more than 10 coliform/g; and not more than 20 coliform/g for fruits, nuts, or other bulky flavors. (21 CFR 135).
E2	Hardening is performed immediately after mix is containerized. Rapid freezing is recommended from 0º F (-18° C) to -15º F (-26º C). (21 CFR 135).

NOTE: Page numbers cited in parentheses apply to the controlling Frozen Dessert Processing Guidelines or 21 CFR 135.

APPENDIX G - Ice

G.1 SCOPE

G.1.1 Scope. This appendix establishes the sanitation requirements for ice production facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

G.2 APPLICABLE DOCUMENTS

G.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

G.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

40 CFR Part 141 NATIONAL PRIMARY DRINKING WATER REGULATIONS

(Copies of this document are available for free download at http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr141_01.html)

G.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

INTERNATIONAL PACKAGED ICE ASSOCIATION

Sanitary Standard for Packaged Ice **6/26/89**

(Application for copies should be addressed to the International Packaged Ice Association, P.O. Box 1199, Tampa, FL 33601.)

G.3 DEFINITIONS

G.3.1 Definitions. Definitions are contained in the basic handbook.

G.4 GENERAL REQUIREMENTS

See Appendix A.

G.5 DETAIL REQUIREMENTS

G.5.1 General. The requirements in Table XV shall be as specified in the International Packaged Ice Association Sanitary Standard for Packaged Ice, but are not intended to be all-inclusive.

TABLE XV. Ice plant requirements.

APPENDIX A PARAGRAPH	REQUIREMENT
E4, H6	Bacteriological tests of the finished ice shall be conducted monthly, chemical and physical tests annually, and radiological tests every four (4) years (Section 7, para 5).
E4, H6	Random samples of ice produced in the plant shall be tested by an approved laboratory at least monthly for fecal and/or total coliform organisms and Heterotrophic Plate Count (HPC). Total coliform is not greater than 2.2 organisms/100 ml using the Most Probable Number (MPN) method and not greater than 1 organism/100 ml using the Membrane Filtration (MF) method. The HPC does not exceed 500 colonies/ml. Records of these tests are maintained for two (2) years. (Section 7, para 6).
E4, H6	A testing program has been implemented to obtain background information on the chemical and microbiological content of the brine solution as it relates to leaking cans and the subsequent contamination of the product. Such data reflects the presence of any refrigeration defrosting chemicals, such as ethylene or propylene glycol (if used in the plant), lead (Pb), cadmium (Cd), zinc (Zn), chromium (Cr), and nitrate (NO_2). The finished products (varying product types and packages) shall be randomly sampled and analyzed on a quarterly basis for ethylene or propylene glycol (if applicable) and chlorides (Cl). Reports of analyses are maintained for two years. (Section 7, para 7 & 8).
E3	Packaged ice products are tightly sealed and clearly labeled to show the name, manufacturer, location of processing plant, date code, and net weight. (Section 8, para 3).
E2	Filtering equipment is designed to protect ice from contamination and is subject to periodic treatment and cleaning. (Section 6, para 1)
E2	Freezing tank covers of acceptable materials are designed and constructed to protect ice containers from splash, drip, and other contamination; are easily cleanable and are kept clean and in good repair. Such covers are equipped with rings or similar devices when hooks are used for pulling. Can or tank covers, and the ledges of sides of the tank upon which the cover rests, are cleaned as often as necessary to keep them in sanitary condition. (Section 6, para 4).
C8	Air used for water agitation is filtered or otherwise treated to remove dust, dirt, insects, and extraneous material. Filters are placed upstream of the compressor and are easily removable for cleaning or replacement. The compressor used to supply air for water agitation is designed to deliver oil-free air. (Section 6, para 8 & 9).

TABLE XV. Ice plant requirements - Continued.

C2	Air lines and core or sucking (vacuum) devices are used as needed to produce ice free of rust or other foreign materials. (Section 6, para 11).
A6	Hands do not come into direct contact with the ice at any time during manufacturing, processing, packaging, and storage. (Section 7, para 1).
E3	All frozen unpackaged ice blocks intended for sale for human consumption or for refrigeration of food products are washed thoroughly with potable water. Ice manufactured for industrial purposes is handled and stored separately from ice intended for human consumption. (Section 7, para 2).
B10	Water used for washing or rinsing is not reused and is disposed of as liquid waste. (Section 7, para 3).
B7	All equipment used to store or deliver water, or in contact with ice in the freezing process, is regularly sanitized. (Section 7, para 4).

NOTE: Cited reference document for the above is Sanitary Standard for Packaged Ice.

APPENDIX H - Seafood

H.1 SCOPE

H.1.1 Scope. This appendix establishes the sanitation requirements for seafood processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

H.2 APPLICABLE DOCUMENTS

H.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

H.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

Title 21, Part 123, 161, and 172.

Title 50, Part 260

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

FDA FISH AND FISHERY PRODUCTS HAZARDS & CONTROLS GUIDE (JAN 98).

(Available on-line at: http://vm.cfsan.fda.gov/~dms/haccp-2a.html. Single copies of this Guide may be obtained as long as supplies form the FDA district offices and from: U.S. Food and Drug Administration, Office of Seafood, 200 C St., SW, Washington, D.C. 20204, 202-418-3133. Multiple copies may be obtained from: National Technical Information Service, U.S. Department of Commerce, 703-487-4650. This guide is also available electronically at: http://www.fda.gov/. Select "foods;" then select "seafood;" then select "HACCP.")

CURED, SALTED AND SMOKED FISH ESTABLISHMENTS GOOD MANUFACTURING PRACTICES (Revision June 1997)

(Available from the Association of Food and Drug Officials, 2550 Kingston Road, Suite 311, York, PA 17402, Email: afdo@afdo.org)

H.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

Cured, Salted and Smoked Fish Establishments Good Manufacturing Practices. An Association of Food and Drug Officials Model Code.

(Application for copies should be addressed to Association of Food and Drug Officials, 2250 Kingston, Suite 311, York, PA 17402, (717) 757-2888, http://www.healthfinder.gov/text/orgs/hr0316.htm/.)

H.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

H.4 GENERAL REQUIREMENTS

See Appendix A.

H.5 DETAILED REQUIREMENTS

H.5.1 General. The requirements in Table XVI shall be as specified in 21 CFR 123 and 172, or in the Cured, Salted and Smoked Fish Establishments Good Manufacturing Practices (FGMP), but are not intended to be all-inclusive.

TABLE XVI. Seafood requirements

APPENDIX A PARAGRAPH	REQUIREMENTS
B2	Processing rooms are separated/segregated to eliminate contamination. (Cured, Salted and Smoked Fish Establishments Good Manufacturing Practices (FGMP), 2.1 (a)).
E2	Equipment and utensils used in the handling of raw or frozen fish portions are not used in the handling, transport, or packaging of product after it has entered the smoking chamber or used in the handling of finished product. (FGMP, 2.2 (b)).
E2	Sanitary zones are established around areas in which processed fish is handled/stored. (FGMP, 2.2 (c)).
E1	Containers used to convey, brine, or store fish are not nested (stacked) while they contain fish or otherwise handled during processing or storage in a manner conducive to direct or indirect contamination of their contents. (FGMP, 3.1 (b)).
C6	Each smoking chamber is equipped with a temperature monitoring device so installed as to indicate accurately at all times the internal temperature of the fish within the smoking chamber. (FGMP, 3.1 (g)).
E2	Equipment and utensils are marked in some way to ensure that equipment and utensils used to handle raw fish are not used to handle product that has entered the smoking chamber, or used in the handling of finished product. (FGMP, 3.1 (I)).
E1	Imported fish or fishery products are obtained from approved sources. (Section 56.76, para (d) (4)) (21 CFR 123.12).
E1	Fresh and frozen fish received are inspected and adequately washed before processing. (FGMP, Sec. 4.1 (a)).
E3	Fresh fish, except those immediately processed, are iced or otherwise refrigerated to an internal temperature of 38° F (3° C) or below upon receipt and are maintained at that temperature until fish are to be processed. (FGMP, 4.1 (c)).
E3	All fish received in a frozen state are thawed promptly and processed, or stored at a temperature which will maintain it in a frozen state. (FGMP, 4.1 (d)).
E2	After thawing, fish are washed thoroughly with a vigorous potable water spray or a continuous water flow system. When thawing and brining occur concurrently, the fish are washed in this same fashion following the thawing and brining. (FGMP, 4.1 (f)).
E2	All fish are free of viscera prior to processing (see reference document for exceptions). (FGMP, 4.1 (g)).
E2	The evisceration of fish is conducted in a segregated or separate processing room. The evisceration is performed with minimal disturbance of the intestinal tract contents, and the fish, including the body cavity, is washed thoroughly with a vigorous spray or a continuous water flow system following evisceration. (FGMP, 4.1 (h)).
E4, H6	All processed fish are produced pursuant to the process as established by a competent processing authority. (FGMP, 4.2 (b)).

TABLE XVI. Seafood requirements - Continued

E3	All processed fish are distributed and sold in a manner that ensures that the internal temperature is maintained at 38° F (3° C) or below (see reference for exceptions). (FGMP, 4.2 (d)).
E2	The vacuum packaging or modified atmosphere packaging of processed fish is conducted only within the facilities of the manufacturer. (FGMP, 4.2 (e)).
E4	Processed fish to be vacuum packaged or modified atmosphere packaged are chemically analyzed for water phase, salt, and for nitrate and other additives when used, with sufficient frequency to ensure conformance with finished product specification requirements. (FGMP, 4.2 (f)).
A10	The finished product is handled only with clean, sanitized hands, gloves or utensils. Manual manipulation of the product is kept to a minimum. (FGMP, 4.4 (a)).
E3	Shipping containers, retail packages and shipping records relating to processed fish are appropriately labeled in accordance with the perishable nature of the product. (FGMP, 4.4 (c)).
E3	Each container of processed fish is legibly marked or labeled with an identifying code and required identification. (FGMP, 4.4 (d)).
E2, H6	Brining operations are performed IAW the appropriate time and temperature parameters. (FGMP, 5.1 (a)).
E2	For dry salting, the fish are returned to a refrigerated area of 38° F (3° C) or lower immediately after the application of the salt. (FGMP, 5.1 (b)).
E2	Different species of fish are not mixed in the same brine tank. (FGMP, 5.1 (c)).
E2, E4, H6	Brines are not reused without an adequate process available to return the brine to an acceptable microbiological level. (FGMP, 5.1 (d)).
E2	Fish are rinsed with fresh potable water after brining, except for fish which have been injected with brine. (FGMP, 5.1 (e)).
E2	Drying of a product to be cold smoked is carried out in a refrigerated area of 38° F (3° C) or below. (FGMP, 5.1 (f)).
E3, H6	The use of sodium nitrite is permitted with those species of fish allowed by regulation. (FGMP, 5.1 (g)). (21 CFR 172.175 and 172.177).
E3	Fish are of relatively uniform size and weight and arranged without overcrowding or touching each other within the smokehouse oven. (FGMP, 5.2 (a)).
E2	Liquid smoke, generated smoke, or a combination of liquid smoke and generated smoke are applied to all surfaces of the product at the appropriate times. (FGMP, 5.2 (b)).
C7	Hot processed smoked fish is produced by a controlled process that utilizes a temperature monitoring system to assure that all products reach the required temperature. (FGMP, 5.3 (a)).
E2, H6	For hot processed smoked fish to be air packaged, a controlled process is used to heat the fish. (FGMP, 5.3 (b)).
E2, H6	For hot processed smoked fish to be vacuum or modified atmosphere packaged, a controlled process is used to heat the fish. (FGMP, 5.3 (c)).

TABLE XVI. Seafood requirements - Continued

C7, H6	Cold processed smoked fish are produced by a controlled process that utilizes a temperature monitoring system assuring all products do not exceed process temperatures in accordance with authorized methods. (FGMP, 5.4 (a)).
E2, E4, H6	For cold processed smoked fish to be air packaged, fish that have brine contain not less than 2.5 percent water phase salt in the loin muscle of the finished product. (FGMP, 5.4 (b)).
E2, E4, H6	For cold processed smoked fish to be vacuum or modified atmosphere packaged, fish that have been brined contain not less than 3.5 percent water phase salt in the loin muscle of the finished product, or a combination of 3.0 percent water phase salt in the loin muscle of the finished product and not less than 100 nor more than 200 parts per million of sodium nitrite. (FGMP, 5.4 (c)).
E3	The finished products are properly cooled to 70º F (21° C) within 2 hours and further cooled to 38º F (3° C) within an additional 4 hours. Finished products are then maintained at 38º F (3° C). (FGMP, 5.5).
H8	Records are kept of every transaction involving the sale and distribution of processed fish. (FGMP, 4.3 (a)).
H6	Fish processing records are legibly written in English and identify the processing procedures, the product processed, process time, temperature, and the results of the chemical examination, together with the identifying lot code, the number of containers per coding interval, the size of the containers coded, and the year, day, and period when each lot was packed. (FGMP, 4.3 (b)).
H8	Records are maintained for the chemical examination of the finished product for the purpose of validating the water phased salt and sodium nitrite requirements. (FGMP, 4.3 (c)).
H8	All records relative to the scheduled process used to produce processed fish or smoked fish are readily available to government inspection personnel. (FGMP, 4.3 (d)).
H8	Records of refrigerated and/or frozen products, the general adequacy of equipment, process used, or results of scientific studies and evaluations, are retained for the amount of time specified in 21 CFR 123.9.
E1	Seafood shall be derived from shellstock received from harvesters certified by a shellfish control authority CFR 123.28
E1, H6	Identification tags containing all required information are affixed to each container. CFR 123.28
E3	Chilled or iced shucked shellstock is maintained at 45°F during storage and transport. CFR 123.11
E1	Shucked shellfish from different lots are not commingled. CFR 123.11
E1	Ice used to store shellstock shall be potable. CFR 123.11

NOTE: Reference to the controlling sections of the FGMP and of 21 CFR 123 and 172 are identified in parentheses.

APPENDIX J - Pasteurized, Refrigerated Juices

J.1 SCOPE

J.1.1 Scope. This appendix establishes the sanitation requirements for pasteurized, refrigerated juice processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

J.2 APPLICABLE DOCUMENTS

J.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

J.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

21 CFR Part 110, CGMPs

21 CFR Part 120, HACCP

Federal Register Volume 66, Number 13

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

J.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

J.4 GENERAL REQUIREMENTS

See Appendix A.

J.5 DETAILED REQUIREMENTS

J.5.1 General. The requirements in Table XVII shall be as specified in 21 CFR 110 and 120, but are not intended to be all-inclusive.

TABLE XVII. Pasteurized refrigerated juice requirements

PASTEURIZED, REFRIGERATED JUICES 21 CFR part 110, 120	
APPENDIX A PARAGRAPH	REQUIREMENT
H7	HACCP plan shall be validated and signed every 12 months by trained individuals.
E1	Imported juice shall originate from processors in countries with active MOU with the FDA, validated and documented HACCP plans, and each delivery shall be accompanied by Certificates of Conformance (COC) from government officials.
E2	Process controls shall exist to achieve a 5-log reduction in microbiological load and records of routine examination shall be available for review.
H8, H10	Pasteurization equipment shall be validated for achieving 5-log reduction.
H1	Juice processors with no HACCP plan, based on validated hazard analysis, shall reassess the adequacy of that hazard analysis whenever there are any changes in the process that could reasonably affect whether a food hazard exists. Such changes may include changes in the following: raw materials or source of raw materials; product formulation; processing methods or systems, including computers and their software; packaging; finished product distribution systems; or the intended use or intended consumers of the finished product be re-validated as required.
E4	Each production batch tested for E.coli presence/absence and yeast & mold.
H6	Records of equipment validation available.
H8	Procedures, steps, practices documented.
H3	Customer complaint process shall be in place to determine whether complaints relate to the performance of the HACCP plan or reveal unidentified CCPs.

APPENDIX K - Bottled Water/Soft Drinks

K.1 SCOPE

K.1.1 Scope. This appendix establishes the sanitation requirements for bottled water/soft drink processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

K.2 APPLICABLE DOCUMENTS

K.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

K.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

21 CFR, Parts 129 and 165

40 CFR, Part 141 National Primary Drinking Water Regulations

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

K.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

K.4 GENERAL REQUIREMENTS

See Appendix A.

K.5 DETAILED REQUIREMENTS

K.5.1 General. The requirements in Table XVIII shall be as specified in 21 CFR 129 and 165, but are not intended to be all-inclusive.

TABLE XVIII. Bottled water / soft drink requirements

APPENDIX A PARAGRAPH	REQUIREMENT
B2	The bottling room is separated from the other plant operations or storage areas by tight walls, ceilings, self-closing doors, and size of conveyor opening. Bottle washing and sanitizing are in an enclosed room and are positioned to minimize post-sanitization contamination. (129.20 (a), 129.20 (d)).
B5	Adequate ventilation is provided to minimize odors, noxious fumes, or vapors; and condensation in processing, bottling, container washing and sanitizing rooms. Ventilation equipment is clean. (129.20 (c)).
E2	Product in process in other than sealed piping systems under pressure is protected from back-siphonage and other sources of contamination. (129.20 (b)).
B2	Processing, washing, and storage rooms are not directly connected to room(s) used for domestic household purposes. (129.20(e)).
E1, H6	Product water used for bottling is from an approved source that has been inspected and the water sampled, and found to be of a safe and sanitary quality according to applicable laws and regulations of the government agencies having jurisdiction. (129.35 (a)).
E4, H6	Representative bacteriological samples are tested weekly for each type of finished product produced during a day's production. (129.80 (g)) (165.110).
E4, H6	Representative chemical, physical, and radiological samples are analyzed annually for each type of finished product water. (129.80 (g)) (165.110).
E4, H6	Source water is analyzed annually for chemical and physical parameters and once every four years for radiological parameters. Source waters, other than municipal sources, are analyzed weekly for microbiological quality. (129.35 (a)).
E4	Source and finished product test results meet requirements of 21 CFR Part 165.110(b) for maximum contaminants level. Product water from a public water system or water that has been treated with a chlorine-based disinfectant or ozone shall be tested for the residual disinfectants and disinfect ion by-products (DBP's) listed in §165.110(b)(4)(iii)(H). (129.35(a)(4), 129.80(g))
B8	Product water contact surfaces (utensils, pipes, equipment, etc.) are clean and are adequately sanitized daily. (129.37 (a)).
B8	Product water contact surfaces (utensils, pipes, equipment, etc.) are maintained free of scale, oxidation, and other residue. The presence of any unsanitary condition is corrected immediately. (129.37 (a)).
E3	Containers, caps, or seals are purchased and stored in sanitary closures (original containers) in a clean, dry place. They are examined before use and are handled, dispensed and used in a sanitary manner. They are washed, rinsed, and sanitized as needed. (129.37 (c)). Filling, capping, closing, sealing, and packaging are done in a sanitary manner.(129.37 (d)).
E2	Treatment equipment processes and substances are used which preclude contamination or adulteration of the product. (129.80 (a)).

TABLE XVIII. Bottled water / soft drink requirements - Continued

E3	Storage tanks are closed to exclude all foreign matter. Filtered vents are provided. Filters are readily cleanable or have replaceable elements. (129.40 (a))
E2, H6, H8	Treatment methods accomplish their intended purpose. Records are maintained to show type and date of treatments and physical inspections of equipment. Conditions found, performance and effectiveness are noted. (129.80 (a)).
E4, H6	Product water samples are taken after processing, prior to bottling, to assure uniformity and effectiveness of the treatment process. Methods of analysis are approved by the government agency having jurisdiction. (129.80 (a)).
E2	All unsanitary or defective containers are reprocessed or rendered unusable and discarded. Multi-service primary containers are cleaned, sanitized, and inspected immediately prior to being filled, capped, and sealed. (129.80 (b)).
C5, H6	Mechanical washers are inspected. Records of physical maintenance, inspections, conditions found, and performance of the mechanical washer, are maintained by the plant. (129.80 (b)).
E3	Multi-service shipping cases are maintained to assure that they will not contaminate primary containers or the product. (129.80 (b)).
H11	Records of the concentration of the sanitizing agent and the duration of contact time shall be maintained by the plant. (129.80 (c) and (d)).
E2	Sanitizing operations meet requirements contained in 129.80 (d)
E2	Each unit package is identified by a production code. The code identifies the particular batch or segment of a continuous run, and the production date. (129.80 (e)).
H6, H8	Records are maintained of product type, volume produced, date produced, lot code used, and distribution to wholesale and retail outlets. (129.80 (e)).
E1	Containers and closures are nontoxic and comply with FDA standards. (129.80 (f)).
E2	Filling, capping, and sealing are monitored. Filled containers are visually or electronically inspected. (129.80 (f)).
E4, H6	Quarterly swab and/or rinse bacterial counts on not less than 4 containers and closures (prior to filling) is performed. (129.80 (f)).
E4, H6	Records are maintained of sampling date, type of product, production code, and results of each analysis. (129.80 (h)).
H8	All records are retained for two years. Current certificates or notifications of approval authority for source and supply of product and operations water are on file. (129.80 (h)).

NOTE: Reference to the controlling 21 CFR 129 and 21 CFR 165 sections are identified in parentheses.

APPENDIX L - Off-Post Caterers and Civilian Restaurant Facilities

L.1 SCOPE

L.1.1 Scope. This appendix establishes the sanitation requirements for off-post caterers and civilian restaurant facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

L.2 APPLICABLE DOCUMENTS

L.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

L.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, PUBLIC HEALTH SERVICE

FDA Food Code 1999

(Application for copies should be addressed to U.S. Department of Health and Human Services, Food and Drug Administration, Food Service Sanitation Branch, Washington, DC 20204. Document No. PB99-115925 available printed, on CD ROM, or on diskette from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; 1-800-553-6847); or download from web site: http://vm.cfsan.fda.gov/~dms/foodcode.html/.)

L.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

L.4 GENERAL REQUIREMENTS

See Appendix A.

L.5 DETAIL REQUIREMENTS

L.5.1 General. The requirements in Table XIX shall be as specified in the Food Code, but are not intended to be all-inclusive.

TABLE XIX. Off-post caterers and civilian restaurant facility requirements.

APPENDIX A PARAGRAPH	REQUIREMENT
E1	Food prepared in a private home is not used or offered for human consumption in a food establishment. (3-201.11).
E1, E2	If game animals are used they have been commercially raised for food, are processed under a regulatory inspection program, and in accordance with applicable meat and poultry laws. (3-201.17).
E2	A food employee does not use a utensil more than once to taste food that is to be sold or served. (3-301.12).
A10	Food is protected from cross contamination by separation, packaging, cleaning, or other means. (3-302.11).
E3	Food items are stored in their original containers or are identified with their common name on working containers. (3-302.12).
E1	Pasteurized eggs or egg products are substituted for raw shell eggs in applicable foods, with exceptions as noted in the reference. (3-302.13).
E1	Prepared foods do not contain unapproved additives. (3-302.14).
E2	Raw fruits and vegetables are thoroughly washed/disinfected prior to processing, with exceptions as noted in the reference. (3-302.15).
E1	Ice used as an external cooler is not used as food. (3-303.11).
E2	During pauses in food preparation or dispensing, food preparation and dispensing utensils are stored in a manner to inhibit/reduce contamination. (3-304.12).
A6	If used, single-use gloves are used for only one task. Slash-resistant gloves and cloth gloves are used in an appropriate manner. (3-304.15).
E3	During preparation, unpackaged food is protected from environmental sources of contamination. (3-305.14).
E2	Raw animal foods comply with cooking requirements listed in the Food Code. (3-401.11/12).
E2	Fruits and vegetables that are cooked for hot holding are cooked to a temperature of 140° F (60° C). (3-401.13).
E2	Raw, raw-marinated, partially cooked, or marinated partially-cooked fish other than molluscan shellfish are frozen throughout to a temperature of either -4° F (-20° C) or below for 168 hours (7 days) in a freezer, or -31° F (-35° C) or below for 15 hours in a blast freezer, with exceptions as noted in the reference. Records are created and retained as specified, with exceptions as noted in the reference. (3-402.11/12).
E2	Potentially hazardous food (PHF) that is cooked, cooled, and reheated for hot holding is reheated so that all parts of the food reach a temperature of at least 165° F (74° C) for 15 seconds, with exceptions as noted in the reference.(3-403.11).
E2	Reheating for hot holding is done to ensure the food is not between 41° F (5° C) and 165° F (74° C) for more than 2 hours. (3-404.11)
E2	Frozen PHF is slacked under refrigeration below 41° F (5° C) with exceptions as noted in the reference. (3-501.12).

TABLE XIX. Off-post caterers and civilian restaurant facility requirements.- Continued

E2	Frozen PHF is thawed under proper refrigeration; proper running water technique; proper cooking techniques; and for proper time periods. (3-305.13).
E2	Cooked PHF is cooled utilizing proper time temperature requirements, and proper cooling methods, with exceptions as noted in the reference. (3-501.14/15).
E2	PHF is maintained in accordance with proper hot and cold holding procedures. (3-501.16).
E3	Ready-to-Eat PHF prepared and held refrigerated for more than 24 hours is clearly marked at the time of preparation with appropriate date marking, with exceptions as noted in the reference. (3-501.17).
E2	A food establishment obtains a variance from the regulatory authority when specialized processing methods are employed. (3-502.11).
C7	Food temperature measuring devices with glass stems or sensors are encased in shatterproof coatings. (4-201.12) .
C6, C7	Temperature measuring devices are properly designed, located and easily readable. (4-203.12).
C7	Warewashing machines are equipped with proper temperature and pressure indicating devices. (4-203.13 & 4-204.115).

NOTE: Cited reference document for the above is the Food Code.

APPENDIX M - Slaughter and Fabrication of Fresh Meat Products in OCONUS Areas

M.1 SCOPE

M.1.1 Scope. This appendix establishes the sanitation requirements for slaughter and fabrication of fresh meat products in overseas areas. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

M.2 APPLICABLE DOCUMENTS

M.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

M.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

9 CFR, Parts 53, 54, 71, 72, 75, 110, 307, 308, 309, 310, and 313.

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

M.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

M.4 GENERAL REQUIREMENTS

See Appendix A.

M.5 DETAIL REQUIREMENTS

M.5.1 General. The requirements in Table XX shall be as specified in 9 CFR 53, 54, 71, 72, 75, 110, 307, 308, 309, 310, and 313; and 21 CFR 110, but are not intended to be all-inclusive.

TABLE XX. Slaughter and fabrication of fresh meat products in OCONUS requirements

APPENDIX A PARAGRAPH	REQUIREMENT
A1, E1	Livestock originate from an approved region. Food production animals are free of communicable disease. Animals from a quarantine region are processed in that region. (9 CFR 71/72/75/53/54).
E1	Handling of livestock, from the unloading ramps to the stunning area, is conducted in a humane manner. (9 CFR 313).
B2	Pens, chutes and alleys are paved, drained and supplied with adequate hose connections for cleanup purposes. (9 CFR 307.2).
E2	Livestock entering the facility receive an adequate ante-mortem inspection on the day of and before slaughter and are properly segregated when required. (9 CFR 309.1/2).
B2	Satisfactory pens, equipment, lighting, and assistants are available for conducting ante-mortem inspection and for separating, marking and holding apart passed livestock from livestock which has been identified as suspect or condemned. (9 CFR 307.2).
B2	When holding pens of an establishment are located in a public stockyard, such pens are regarded as part of the premises of that establishment. (9 CFR 309.1).
B2	Holding and shackling pens are located outside of or effectively separated from the slaughtering department. (9 CFR 307).
E1	Animals have access to water in all holding pens and, if held longer than 24 hours, feed is provided. (9 CFR 313.2).
E1	Seriously crippled animals, "downers," are identified as suspects and properly disposed of. (9 CFR 309.2).
E1	Livestock found to be dead or in a dying condition on the premises of an establishment are identified as condemned and disposed of. (9 CFR 309.3).
E1	Any swine having a temperature of 106° F (41° C) or higher and any cattle, sheep, goats, horses, mules, or other equines having a temperature of 105° F (40° C) or higher are identified as condemned. (9 CFR 309.3)
B2	Floors of livestock pens, ramps, and driveways are constructed and maintained as to provide good footing for livestock. (9 CFR 313.1).
E1	Humane methods of slaughter are applied within an appropriate stunning area. (9 CFR 313).
E1	Animals are adequately stunned prior to being shackled, hoisted, thrown, cast, or cut (bleeding). (9 CFR 313.2).
E2	A careful post-mortem examination and inspection is made of carcasses and parts of all livestock slaughtered. (9 CFR 310.1).
E2	The head, tail, tongue, thymus gland, and all viscera of each slaughtered animal are handled in such a manner as to identify them with the rest of the carcass and as being derived from the particular animal involved, until the post-mortem examination of the carcass and parts thereof has been completed. (9 CFR 310.2).

TABLE XX. Slaughter and fabrication of fresh meat products in OCONUS requirements - Continued

E2	Identification devices (i.e., ear tags) are removed from the animal's hide or ear by an establishment's employee and are placed in a clear plastic bag and affixed to the corresponding carcass. Supervising veterinarian may allow alternate methods of tracing carcasses back to live animal records. (9 CFR 310.2).
E2	Each carcass, including all detached organs and other parts, in which any lesion or condition is found that might render the meat or any part unfit for food purposes, or otherwise adulterated, and which, for that reason, would require a subsequent inspection, is retained. All parts are retained until an approved authorized veterinary final inspection has been completed. Retained carcasses are not washed or trimmed unless authorized by a veterinary official. (9 CFR 310.3).
E2	Each carcass or part which is found on final inspection to be unsound, unhealthful, unwholesome, or otherwise adulterated is conspicuously marked. (9 CFR 310.5).
E2	Spermatic cords and pizzles are removed from all carcasses. Preputial diverticuli are removed from hog carcasses. (9 CFR 310.7).
E2	When a carcass is to be dressed with the skin left on, the skin is thoroughly washed and cleaned before any incision is made for the purpose of removing any part thereof or evisceration. (9 CFR 310.10).
E2	All hair, scurf, dirt, hoofs and claws are removed from hog carcasses, and the carcasses are thoroughly washed and cleaned before any incision is made for inspection or evisceration. (9 CFR 310.11).
E2	The sternum of each carcass is split and abdominal and thoracic viscera removed at the time of slaughter in order to allow proper inspection. (9 CFR 310.12).
E2	Carcasses found before evisceration to be affected with anthrax are not eviscerated but are retained, condemned, and immediately tanked, and the complete working area is cleaned and disinfected immediately. (9 CFR 310.9).
E2	The kidney capsule is opened to expose the kidneys for the purpose of inspection. (9 CFR 310.19).
E2	Partially skinned carcasses are not stimulated. (9 CFR 308.16).
B7	For hide-off stimulation, the carcass contact surfaces of equipment are disinfected between carcasses. (9 CFR 308.16).
E2	Carcass contamination of edible tissue by stomach contents, feces and/or urine is unacceptable. To prevent this contamination, any of the following are used prior to electrical stimulation: (9 CFR 308.16). a. Leave the sphincter muscles intact. b. Cut the rectum (scalp the bung) and the urethra free from surrounding tissue and securely tie each off. c. Partially open the mid-line and/or slay the brisket to reduce pressure on the visceral organs. d. Any other pressure-relieving or discharge-restricting alternative acceptable to the chief veterinary inspector. e. Rod (separate the esophagus from the surrounding tissue) and tie it off.

TABLE XX. Slaughter and fabrication of fresh meat products in OCONUS requirements - Continued

E2	When only a portion of a carcass is to be condemned on account of slight bruises, either the bruised portion is removed immediately and disposed of, or the carcass is promptly placed in a retaining room and kept until chilled, and the bruised portion is then removed and disposed of. (9 CFR 310.14).
C1	Tables, benches, and other equipment on which post-mortem inspection is to be performed, are of such design, material, and construction as to enable inspectors to conduct their inspection in a ready, efficient and clean manner. (9 CFR 307.2).
E2	Cases, carcasses, organs, and other parts are handled in a sanitary manner to prevent contamination (adulteration) with fecal material, urine, bile, hair, dirt, or foreign matter; however, if contamination occurs, it is promptly removed in a manner satisfactory to the inspector. (9 CFR 310.18). Specific preventive measures include: a. Knives are immediately disinfected after contamination (i.e., after sticking, head removal, following the initial cut through the hide/skin, after removal of an abscess, bruise or contamination). b. No water is placed onto a carcass until the entire hide has been removed and the carcass inspection has been performed. c. Manual hide removal begins at the hind leg and proceeds downward allowing the hide to be laid back away from the flesh. d. The final wash is begun at the highest point of the carcass and works downward. e. No portion of the forequarters comes in contact with eviscerating/inspection tables. f. Overhead rails are free of flaking rust or grease. g. Carcasses do not come in contact with walls, pillars, dividers or other features that will result in cross-contamination. h. Adequate separation is provided between offal rooms and product areas. i. Pressurized water used to wash down equipment and facilities is only used when carcasses are not in the location (to avoid splash contamination). j. Ventilation is provided at the location of a mechanical hide puller. k. Condensation does not drip onto carcasses. l. Carcasses are washed immediately after the final inspection and prior to being placed into a cooler. m. The floor area (dry landing) within the stunning box is maintained in a reasonably dry condition.
B8	Nonpotable water is permitted only in those parts of the establishment where no edible product is handled or prepared and then only for limited purposes, such as on ammonia condensers not connected with potable water supply. (9 CFR 308.3).
B8	Nonpotable water is not permitted for washing floors, areas, or equipment involved in trucking materials to and from edible product departments nor is it permitted in hog scalding vats, dehairing machines, or vapor lines serving edible product rendering equipment, or for cleanup of shackling pens, bleeding areas, or runways within the slaughtering department. (9 CFR 308.3).

TABLE XX. Slaughter and fabrication of fresh meat products in OCONUS requirements - Continued

B9	In all cases, nonpotable water lines are clearly identified. (9 CFR 308.3).
B8	If hot water is used for cleaning, it is not at a temperature of less than 180° F (82° C). (9 CFR 308.3).
B2	Rails are located so as to prevent product from coming in contact with posts, walls, and other fixed parts of the building, barrels, boxes, etc. (9 CFR 308.3).
A4	Butchers and others who dress or handle diseased carcasses or parts cleanse their hands with liquid soap and hot water, and rinse them in clear water, before handling or dressing other parts. (9 CFR 308.8).
B7	Implements used in dressing diseased carcasses are thoroughly cleansed with hot water having a minimum temperature of 180° F (82° C) or approved disinfectant. (9 CFR 308.8).
B3	The rooms and compartments in which any product is prepared or handled are free from dust and from odors from dressing and toilet rooms, catch basins, hide cellars, casing rooms, inedible tank and fertilizer rooms, and livestock pens. (9 CFR 308.3).
A10	Such practices as spitting on whetstones; spitting on the floor; placing skewers, tags, or knives in the mouth; inflating lungs or casings with air from the mouth are prohibited. (9 CFR 308.8).
C7, B5	Disinfecting units are maintained above 180° F (82° C) and are adequately located. Chemical disinfectants may be used during production when approved by the MACOM Veterinarian. (9 CFR 308.3).
C1	Cutting boards and tables are solid, clean and sanitary. (9 CFR 308.7).
A1	Employees showing evidence of a communicable disease or affected with boils, sores, or infected wounds do not handle or prepare any product. (9 CFR 308.14).
A2	Aprons, frocks, and other outer clothing worn by persons who handle product are clean and are changed each day. (9 CFR 308.8).
C1	Scabbards are constructed of a smooth impervious material. (9 CFR 308.6).
E2	Fabrication rooms are maintained at 50° F (10° C)
E2	Fresh meat does not exceed 45° F (7° C) during storage or fabrication. If hot boning is in place, the production takes place in a room that is maintained at 50° F (10° C) and the finished product is immediately chilled. (21 CFR 110.80).
E4	Livestock must be tested for Escherichia coli Biotype 1 (E. coli) at a minimum of one sample during each week of operation. (9 CFR part 310.25(a)(2))

NOTE: Cited reference documents for the above are 9 CFR 53, 54, 71, 72, 75, 110, 307, 308, 309, 310, and 313.

APPENDIX N - Dry Dairy Products

N.1 SCOPE

N.1.1 Scope. This appendix establishes the sanitation requirements for dry dairy products facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

N.2 APPLICABLE DOCUMENTS

N.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

N.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, PUBLIC HEALTH SERVICE

U.S. Public Health Service Publication 229 Grade “A” Pasteurized Milk Ordinance 1997,

Supplement 1 to the PMO, Condensed and Dry Milk Ordinance, 1995 Revision

(Application for copies should be addressed to U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, Milk Safety Branch, 200 C Street SW, Washington, DC 20204.)

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

National Institute of Standards and Technology, Handbook 44

(Application for copies should be addressed to National Institute of Standards and Technology, 110 Bureau Drive, Gaithersburg, MD 20899-0001, http://www.nist.gov/.)

CODE OF FEDERAL REGULATIONS (CFR)

21 CFR, Parts 131 and 173.

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

N.2.3 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/ASHRAE 52.1-1992 - Gravimetric and Dust Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter

(Application for copies should be addressed to American National Standards Institute, 11 West 42nd Street, New York, NY 10036, http://www.ansi.org/.)

N.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

N.4 GENERAL REQUIREMENTS

See Appendix A.

N.5 DETAIL REQUIREMENTS

N.5.1 General. The requirements in Table XXI shall be as specified in U.S. Public Health Service Publication 229 (PMO) and 21 CFR 173, but are not intended to be all-inclusive.

TABLE XXI. Dry dairy products plant requirements.

APPENDIX A PARAGRAPH	REQUIREMENT
E1	Milk originates from herds tuberculosis-free and brucellosis-free accredited herds, and is from countries/regions determined to be acceptable. (PMO, Sec. 8).
E1	The sources of water (to include reclaimed water), vitamins, flavorings, etc. meet standards. (Sec. 7, Item 7p and Appendix G of Suppl 1).
B7 & H6	A system of tagging or recording tanker trucks that have been cleaned and sanitized is established and maintained for 15 days (Sec. 7, Item 12p).
E1	Upon arrival, raw milk and/or raw products for pasteurization comply with bacteriological, chemical and temperature standards of Sec. 7, Table 1.
E4	Raw milk and milk products are screened for drug and pesticide residues. (Sec. 6 and Table 1).
E2	Raw milk and milk products are held at 45° F (7° C) until processed. (Sec. 7, Item 17p).
E2	Condensed milk is held at 45º F (7° C) or less. (Suppl 1, Sec. 7, Item 17p)
E2	Whey for condensing is maintained at 45º F (7° C) or less; or 145º F (63º C) or greater until processed. (Suppl 1, Sec. 7, Item 17p and Table 1).
E2	Condensed whey is cooled during the crystallization process to 45º F (7° C) or less within 18 hours of condensing. (Suppl 1, Sec. 7, Item 17p and Table 1).
E2	If the surge tanks or balance tanks are used between the evaporator and the drier, such tanks hold the product at 150º F (66º C) or above, or are cleaned at least once every 4 hours of operation (see exception for acid type whey or pH factor). (Suppl 1, Sec. 7, Item 17p).
C3	Welded portions of food contact surfaces are smooth and free from pits, cracks, or inclusions. (Sec. 7, Item 10p).
C2	All milk contact surfaces of multi-use containers and equipment are constructed of American Iron and Steel Institute (AISI) 300 series stainless steel or other non-corrosive material as described in the PMO. (Sec. 7, Item 11p).
C5	Equipment is designed to protect against surface and overhead contamination. (Sec. 7, Item 11p).
B7	Raw milk storage tanks are cleaned when emptied and should be emptied at least every 72 hours. (Sec. 7, Item 12p).
C7	Storage tanks used to store raw milk or heat-treated milk products are equipped with a 7-day temperature recording device. (Sec. 7, Item 12p).
C5	Pasteurizing equipment complies with the sanitary design and construction standards of the PMO. (Sec. 7, Item 11p).
E2	Pasteurization equipment and controls testing is performed in accordance with the PMO. (Appendix F).
H8	Pasteurization recording charts are maintained on file at the processing plant. (Sec. 7, Item 16p(E)).

TABLE XXI. Dry dairy products plant requirements - Continued

C7	Thermometers meet requirements. (Sec.7, Item 16p(A.e) Appendix E).
E2, H8	Temperature and pH recording charts are complete and maintained. (Sec. 7, Item 16p(C), Appendix H of Suppl 1).
C4	Equipment is constructed to ensure static accumulations are limited. (Sec. 7, Item 11p).
B2	Rollers and collectors are located in a room separate from other operations to prevent airborne contamination. (Sec. 7, Item 5p).
C1	Conveying equipment is cleaned at least daily. (Sec. 7, Item 12p).
C1	Sifter screens are easily removed and kept clean. (Sec. 7, Item 12p).
C5	The plant air filtration system meets requirements. (Sec. 7, Item 4p, 15p, and Appendix C of Suppl 1).
E2	Cooling water used in a cooling tower is not used where it will come in direct contact with products (cooling products). (Sec. 7, Item 7p).
E2	Safeguards are in place to preclude the contamination of finished products during filling. (Sec. 7, Item 18p).
E2	The topping off of containers to obtain the proper weight is done in a sanitary manner. (Sec. 7, Items 15p and 18p).
E1	Ingredients from damaged containers are reprocessed prior to being repackaged. (Sec. 7, Item 15p).
C8	Culinary steam is in accordance with PMO. (Sec. 7, Item 16p(B) and Suppl 1, Sec. 7, item 15p(A) and Appendix D).
B8	Boiler water additives comply with 21 CFR 173.310.
C8	Air under pressure is in accordance with 3-A Accepted Practices. (Appendix C).
E2	There are no cross-connections or direct contamination of pasteurized milk or milk products. (Sec. 7, Item 15p, and potable and non-potable waters (Sec. 7, item 7p to Suppl 1).
B6, C5	All openings, including valves, pipes, milk tanker trucks, etc. are capped or otherwise protected. (Sec. 7, Item 15p(A)).
E2, E5	Re-circulated cooling water is protected from contamination. (Sec. 7, Item 7p).
E4	Re-circulated cooling water is tested once per six-month period. (Appendix D and Appendix G).
C7	Clean-in-place (CIP) systems are in compliance with PMO. CIP systems have a recording device installed in the return solution line or other appropriate area to record the temperature and time which the line or equipment is exposed to cleaning and sanitizing solution (retained for 3 months). (Sec. 7, Item 12p).
H6, H7, H8, H9	Record of CIP cleaning process is maintained for recirculated cleaning systems. (Sec. 7, Item 12p).
B3	Plants where containers are manually cleaned have a two-compartment vat and a steam cabinet to sanitize containers, or a three-compartment vat if a chemical sanitizer is used. (Sec. 7, Item 12p).

TABLE XXI. Dry dairy products plant requirements - Continued

E4, H8	Pasteurized milk and/or milk products and water comply with bacteriological, chemical and temperature standards of Sec. 7, Table 1 and Appendix K of Suppl 1 and vitamin volume control of Sec 6 of Suppl 1. These are recorded and records maintained. (Sec. 7).
E4, H8	Residual bacteria counts for multi-use and single-service containers meet the standards listed in the PMO. These are recorded and records maintained. (Sec. 7, Item 12p).
B5	Poisonous or toxic materials are not stored in any room where milk or milk products are received, processed, pasteurized or stored. (Sec. 7, Item 15p(A)).
B5	Only approved rodenticides and insecticides are used. (Sec. 7, Item 15p(A)).
A10	Employee habits and dress, particularly the use of special clothing while handling or in contact with products or product contact surfaces, are appropriate. (Sec. 7, Item 20p).

NOTE: Cited reference documents for the above are USPHS Publication 229 with Supplement 1 and 21 CFR, Parts 131 & 173.

APPENDIX O - Slaughter and Fabrication of Poultry Products in OCONUS Areas

O.1 SCOPE

O.1.1 Scope. This appendix establishes the sanitation requirements for slaughter and fabrication of poultry products processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

O.2 APPLICABLE DOCUMENTS

O.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

O.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

9 CFR, Part 381.

(Application for copies should be addressed to Superintendent of Public Documents, U. S. Government Printing Office, Washington, DC 20402-0001, http://www.access.gpo.gov/nara/cfr/index.html/.)

O.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

O.4 GENERAL REQUIREMENTS

See Appendix A.

O.5 DETAILED REQUIREMENTS

O.5.1 General. The requirements in Table XXII shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XXII. Slaughter and fabrication of poultry products in OCONUS areas

APPENDIX A PARAGRAPH	REQUIREMENT
E1	Birds originate from healthy flocks. Birds are free of communicable disease. Birds from a quarantine region are processed in that region. (9 CFR 381.36).
B1, B7	Buildings must be in good repair and constructed and maintained in such a way as to preclude the entry of pests and vermin. (9 CFR 381.46).
B2	Rooms used for processing edible poultry shall be separate from areas used for inedible products. Rooms will be of sufficient size and construction to permit the processing of poultry in a sanitary manner. (9 CFR 381.47)
E2	Birds will receive ante mortem inspection and will be properly segregated when required. (9 CFR 381.36).
B2	Batteries, coops or other facilities in which live poultry is presented for ante mortem inspection shall be arranged, constructed and lighted so that the inspector can carry out the inspection. (9 CFR 381.36).
E2	Post-mortem inspection shall be made on a bird-by-bird basis. (9 CFR 381.76).
E2	Body cavity shall be opened to permit post-mortem inspection. No viscera shall be removed prior to post-mortem inspection, unless identity with the rest of the carcass is maintained. (9 CFR 381.76).
E2	The presence of the following conditions shall result in condemnation of the carcass: (9 CFR 381.80 thru 381.93) tuberculosis leukosis complex airsacculitis tumors parasites bruises affecting the whole carcass overscald (flesh has a cooked appearance) cadavers (died prior to slaughter) decomposition
C6	Receptacles for condemned carcasses must be watertight and readily cleanable. (9 CFR 381.53).
E2	Blood from the killing operation shall be confined to a relatively small area. (9 CFR 381.65)
E2	Birds shall have been thoroughly bled and have stopped bleeding prior to scalding. (9 CFR 381.65)
B10	The overflow outlets in scalding equipment shall be of sufficient size to permit feathers and water to be carried off. (9 CFR 381.53)
E2	Scalding tanks and chilling tanks shall be cleaned as often as is necessary, but not less frequently than once a day when in use. (9 CFR 381.65)
B9	Only potable water or potable ice may be used in chill tanks (9 CFR 381.66)
E2,E5	Poultry carcasses contaminated with visible fecal material shall be prevented from entering the chilling tank (9 CFR 381.65)

TABLE XXII. Slaughter and fabrication of poultry products in OCONUS areas - Continued

E2	The chilling medium in the warmest part of the system may not exceed 65°F (9 CFR 381.66)
E2	Poultry carcasses shall be chilled to not more than 40°F within the following times: (9 CFR 381.66) • under 4 pounds – 4 hours,• 4 to 8 pounds – 6 hours, • over 8 pounds – 8 hours
E2	Giblets shall be chilled to 40°F or lower within 2 hours after separation from the inedible viscera, unless they remain attached to the carcass. (9 CFR 381.66)
E2	Continuous chillers shall use a fresh water intake of not less than ½ gallon per chicken and 1 gallon per turkey (9 CFR 381.66)
E2	In continuous chillers, whenever the elevators or conveyors removing poultry from the chilling unit are stopped, the agitation must also be stopped and the carcasses must be removed within 15 minutes, unless the chilling medium is maintained at 40°F or below. (9 CFR 381.66)
C2	Ice shovels shall be smooth surfaced and made of impervious material (9 CFR 381.53)
C6	Immersion or spray freezing equipment shall be constructed of noncorrosive metal or other acceptable material. Compounds used in immersion or spray freezing shall be acceptable for contact with food. (9 CFR 381.66)
E2	Chicken which is further processed after slaughter may have a temperature no higher than 55°F. (9 CFR 381.66)
E2	Final product shall be practically free of: (9 CFR 381.1) - protruding pin feathers - vestigial feathers - head - feet - crop - oil glands - trachea - esophagus - entrails - mature reproductive organs - lungs
B9	Nonpotable water is permitted only in those parts of the establishment where no edible product is handled and then only for limited purposes such as vapor lines serving inedible product rendering tanks or in sewer lines for moving solids in the sewage. (9 CFR 381.50).
B9	Nonpotable water is not permitted for washing floors or areas; nor is it permitted in boilers, scalders, chill vats or ice making machines. (9 CFR 381.50).
B9	In all cases, nonpotable water lines are clearly identified. (9 CFR 381.50).
B6	If hot water is used for cleaning, it is not at a temperature of less than 180° F. Chemical disinfectants may be used during production when approved by the MACOM Veterinarian. (9 CFR 381.10).
E4	Livestock must be tested for Escherichia coli Biotype 1 (E. coli) at a minimum of one sample during each week of operation. (9 CFR part 310.25(a)(2))

NOTE: Cited reference documents are 9 CFR 381 10, 36, 45, 46, 50, 51, 61, 65, 66, and 76-93

APPENDIX P - Fresh-Cut Produce

P.1 SCOPE

P.1.1 Scope. This appendix establishes the sanitation requirements for fresh-cut produce processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

P.2 APPLICABLE DOCUMENTS

P.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

P.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

Code of Federal Regulations (CFR), Title 21, Part 110.

(Available on-line at http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1)

Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables, Guidance for Industry, Oct. 98, U. S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition (CFSAN).

(Application for copies should be addressed to Food Safety Initiative Staff, HFS-32, U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, 200 C Street S.W. Washington, DC 20204, http://www.foodsafety.gov/~dms/prodguide.html/.)

P.2.3 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

Food Safety Guidelines for the Fresh-Cut Produce Industry, 2001, Fourth Edition, International Fresh-Cut Produce Association

Assessment of the Risk of Botulism Contributed by Modified Atmosphere Packaging of Fresh-Cut Produce, 1993, A Report Prepared by the International Fresh-Cut Produce Association

(Available at International Fresh-cut Produce Association, 1600 Duke Street, Suite 440, Alexandria, VA 22314, or http://www.fresh-cuts.org/publications.)

Fresh Cut Produce Handling Guidelines, 1997, International Fresh-Cut Produce Association and Produce Marketing Association

(Application for copies of this document should be addressed to International Fresh-cut Produce Association, 1600 Duke Street, Suite 440, Alexandria, VA 22314 http://www.fresh-cuts.org/publications1329/publications.htm/, or Produce Marketing Association, P.O. Box 6036, Newark, DE 19714.)

Voluntary Food Safety Guidelines for Fresh Produce, Voluntary Guidelines for Minimizing Microbial Contamination in Fresh Produce, 1997, International Fresh-Cut Produce Association (IFPA) and Western Growers Association (WGA).

(Application for copies of this document should be addressed to International Fresh-cut Produce Association, 1600 Duke Street, Suite 440, Alexandria, VA 22314 http://www.fresh-cuts.org/publications1329/publications.htm, or Western Growers Association, 17620 Fitch Street, Irvine, CA 92614.)

Postharvest Chlorination - Basic Properties and Key Points for Effective Distribution, 1997

(Application for copies should be addressed to University of California, Davis, Dept. of Vegetable Crops, Div. Of Agriculture and Natural Resources, Attn: Trevor Suslow, Extension Specialist, One Shields Avenue, Davis, CA 95616 http://www.vric.ucdavis.edu/selectnewtopic.minproc.htm)

P.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

P.4 GENERAL REQUIREMENTS

See Appendix A.

P.5 DETAILED REQUIREMENTS

P.5.1 General. The requirements in Table XXIII shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XXIII. Fresh-cut produce requirements.

APPENDIX A PARAGRAPH	REQUIREMENT
E2	Trimming, coring, cutting and culling operations are performed in a sanitary manner. (21 CFR 110.35, 110.37, 110.40).
E2, E4, H6	Wash water disinfectant level established and pH (if applicable) monitored - Chlorine level parameter is established and monitored at 50-200 ppm total chlorine; pH 6.0-7.5, final rinse required. NOTE: Oxidation-Reduction Potential (ORP) monitoring recommended at values of 650 to 700 mV when used. - Hydrogen peroxide level not to exceed 59 ppm in wash water; final rinse required. - Peroxyacetic acid level not to exceed 80 ppm in wash water; pH range 1.0 – 8.0. - Ozone concentrations recommended at 1 ppm for 6 min. contact time or 2 ppm for 3 min. contact time; pH range 6.0-8.0. - Chlorine dioxide level not to exceed 3 ppm residual followed by a final rinse; pH range 6.0-10.0. - Ultraviolet (UV) light effective at 240-260 nanometer wavelength range. (Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables; Food Safety Guidelines for the Fresh-Cut Produce Industry).
E2, H6	Product contact time is established and monitored (dump tank, submersion, sprayer, flume, hydrocooler method). (Food Safety Guidelines for Fresh-Cut Produce Industry; Postharvest Chlorination - Basic Properties and Key Points for Effective Distribution.)
E2, H6	Water recirculation method is established and monitored (filtration, displacement, replacement). (Food Safety Guidelines for the Fresh-Cut Produce Industry; Postharvest Chlorination - Basic Properties and Key Points for Effective Disinfect ion).
E2	Only approved treatment process water additive(s) or water additive(s) such as surfactants to increase chlorine performance are used. (Food Safety Guidelines for the Fresh-Cut Produce Industry).
E2, H6	Dewatering, centrifugation, or drying methods established (when applicable) to ensure removal of free surface moisture after washing. (Minimal Processed Fresh Fruits and Vegetables, UC Davis)
E5, H6	Method(s) to exclude physical contaminants are established and monitored (metal detector, visual screening, sieves). (Food Safety Guidelines for the Fresh-Cut Produce Industry).
E2	Holding time throughout the entire process, especially post-wash and prior to packaging (weighing, transporting, collecting), is minimized. (Handling Guidelines for Fresh Cut Produce; IFPA/WGA Voluntary Food Safety Guidelines for Fresh Produce).

TABLE XXIII. Fresh-cut produce requirements - Continued.

E2, H6	Packaging materials are made of approved material, gas-permeable, and preclude packaging migration, the entrance of foreign materials, spoilage prior to toxin production and avoid anaerobic respiration. Gas permeable packaging material must be transparent over an area of at least 50% of the surface to permit the visual detection of spoiled product (IFPA Guidelines, pg 20) (Food Safety Guidelines for the Fresh-Cut Produce Industry; IFPA/WGA Voluntary Food Safety Guidelines for Fresh Produce).
E2, H6	Parameters for modified atmosphere(s) packaging are established and monitored (e.g. 2 - 8% oxygen/5 - 15% carbon dioxide). (Food Safety Guidelines for the Fresh-Cut Produce Industry; Assessment of the Risk of Botulism Contributed by Modified Atmosphere Packaging of Fresh-Cut Produce).
E2	Each retail and food service package has a “USE BY DATE” or distinguishable coding and a “KEEP REFRIGERATED” label. (IFPA, pg 20)
E3	Product temperatures maintained at 4.4ºC (40ºF) During storage and distribution. (IFPA Guidelines, pg 20)
E4	All product contact water has established and monitored disinfectant parameters to include filtration and recirculation methods. Note: Recycled water should run counter flow to produce (i.e., final rinse water may be used as cooling water). (Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables; Food Safety Guidelines for the Fresh-Cut Produce Industry).

NOTE: Reference to the controlling documents are identified in parentheses.

APPENDIX R - Mushrooms

R.1 SCOPE

R.1.1 Scope. This appendix establishes the sanitation requirements for mushroom growing and processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

R.2 APPLICABLE DOCUMENTS

R.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

R.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

40 CFR, PART 141, NATIONAL PRIMARY DRINKING WATER STANDARDS

(Available at http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr141_01.html)

R.2.3 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents which are DoD adopted are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

GOOD MANAGEMENT PRACTICES FOR SAFE GROWING, HARVESTING, AND PACKING OF FRESH MUSHROOMS

(This document is available at http://www.americanmushroom.org/gmp.htm)

R.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

R.4 GENERAL REQUIREMENTS

See Appendix A.

R.5 DETAILED REQUIREMENTS

P.5.1 General. The requirements in Table XXIV shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XXIV. Mushroom requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E-2	Pre-operational inspections, audits, or microbial sampling of the environment or of food contact surfaces are conducted to ensure cleaning and sanitizing procedures are effective. Pg. 11, 3.
B2	Areas where: raw animal manure; unpasteurized substrate which contains raw manure; or other potentially hazardous materials are processed, stored, or transported – are clearly separated from those areas where mushrooms are grown, harvested, and packed. (Pg. 4, 1)
B2	Separate areas are provided for the receipt of raw materials and mushroom loading and shipping areas. Pg. 4,1
A10	Traffic patterns for employees and equipment are established to avoid contamination of pasteurized substrate, casing materials, and mushrooms with raw manure and unpasteurized substrate. Pg. 4,1
B2	In rooms that are not steam pasteurized, floors shall be constructed of washable, nonporous materials and adequately sloped to allow drainage. Pg. 5, 3
B2, B3	Walls and ceilings where mushrooms are handled are made of light-colored, washable, and nonporous materials, or are steam cleaned. Pg. 5, 3.
B2	Ventilation systems are designed so that air does not flow from potentially contaminated areas to clean areas, and are adequately cleaned and maintained. Pg. 5,3.
E2	Equipment for moving, mixing, or otherwise handling unpasteurized substrate is not used for handling pasteurized substrate, casing materials, or mushrooms and is cleaned as needed to protect against contamination of the premises. Pg. 6, 1.
C7	Temperature recording devices, timers, alarms, data loggers, and any other equipment used to monitor and record process data are regularly maintained and calibrated. Pg.6,3.
E1	Controls for potential microbiological, chemical, and physical hazards in all materials received should be established by implementing a vendor approval and certification program. Page 7, 1
E1, H8	Appropriate records are kept to monitor the performance of suppliers and if necessary for trace back of sources of contamination. Pg. 7,1.
E3	Raw materials and unpasteurized substrate are stored as far away as possible from areas where mushrooms are grown, harvested, packed, and stored. Pg. 8,2.
B9	Water that directly contacts mushrooms or surfaces that come into contact with mushrooms meets federal drinking water standards. Pg. 9,1
B9. E4	Surface water, and ground water that is influenced by surface water, are treated to eliminate chemical or microbiological contamination. Water supply is tested on-site for fecal contamination. Pg. 9,1
B6, B9, E4	The concentrations of antimicrobial chemicals in treated water are routinely monitored and recorded to ensure they are maintained at appropriate levels. Pg. 10,3.

TABLE XXIV. Mushroom requirements – Continued

B6, B7	Application of approved pesticides is undertaken by or under the supervision of a licensed pest control applicator. The glue boards or mechanical traps with non-toxic bait are used in areas where mushrooms are grown unless the bait is of sufficient size to be prevented from mixing with the product. Pest control logs are maintained that include dates of inspection, inspection reports, and steps taken to eliminate any problems. Pg. 11, 6.1.
E3, H8	The label on all packages for wholesale or retail sale includes all items required by federal, state, and local regulations, including: name, street address, city, state, zip code, and product code that enables trace back to the point at which the mushrooms were grown and date they were processed. Pg. 16, 1.
H4, H5	Written procedures are developed in the event that a mushroom grower or processor wishes to remove a product from the marketplace. Pg. 16, 2.
E2	Temperatures are achieved during production of Phase I substrate and Phase II pasteurization that are adequate to kill mesophilic human pathogens. Pg. 18, 2.
E5	Where slicing blades are used, continuous monitoring of metal in packaged mushrooms is achieved using an online detector. Pg. 18, 3.
E3	The presence of at least two 1/8-inch film ventilation holes per package is maintained and monitored. Alternative packaging methods which do not create an airtight environment are acceptable. Pg. 18, 4.
C7	Refrigerators holding harvested mushrooms are maintained at or below 40 degrees Fahrenheit or below. Pg. 18, 5.
E3	Storage areas are either protected from rainfall by covering the materials or the runoff is collected using barriers or physical containment measures such as concrete blocks, soil berms, pits, or lagoons. Pg. 8,2.
H6	The scheduled master cleaning program specifies what areas or equipment are cleaned and/or sanitized, the person responsible, the method and frequency of cleaning, and verification procedures. Pg. 10, 5.1.
E2	A regularly scheduled and “as needed” program is implemented that ensures all parts of the operation are appropriately clean and sanitary. Pg. 10,5.1.

APPENDIX S - Vegetable Sprouts

S.1 SCOPE

S.1.1 Scope. This appendix establishes the sanitation requirements for vegetable sprouts produce processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

S.2 APPLICABLE DOCUMENTS

S.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

S.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

FDA Guidance for Industry, “Reducing Microbial Food Safety Hazards For Sprouted Seeds”, Oct 1999

This document is available at http://www.cfsan.fda.gov/~mow/sprouts2.html

40 CFR, PART 141, NATIONAL PRIMARY DRINKING WATER STANDARDS

(Available at http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr141_01.html)

S.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

S.4 GENERAL REQUIREMENTS

See Appendix A.

S.5 DETAILED REQUIREMENTS

S.5.1 General. The requirements in Table XXV shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XXV. Vegetable sprouts requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E1, H8	Appropriate records are kept to monitor the performance of suppliers and when necessary for trace back of sources of contamination. (ISGA)
E3	Adequate measures and monitoring are used to control in-storage humidity and moisture of dry beans. (ISGA)
E2	Seeds shall be pre-washed and soaked to provide adequate protection against microbiological growth. (ISGA)
B8	Recycled germination and growth containers shall be cleaned and disinfected prior to use. (ISGA)
B9	Water, to include irrigation water, that directly contacts sprouts or surfaces that come in contact with sprouts meets requirements of 40 CFR, Part 141.
E2	Adequate measures are taken to protect against any contamination during harvesting and packaging. (ISGA)
E2, E4	Wash water shall be adequately chilled and chlorinated. (ISGA)
B8	Wash tank and collection bins are cleaned and disinfected as needed. (ISGA)
E5	Methods to exclude physical contaminants are established and monitored (metal detector, visual screening, sieves, or other means). (Sec 110.80).
E3	Chill storage and distribution temperature shall be less than 40°F +/- 4°F.
E3	Products shall be dated and stock rotation controlled.
E4	Testing of irrigation water for pathogens is conducted after the initial 48 hours for each batch within the growing cycle.

APPENDIX T - Low-Acid Canned Food (LACF)

T.1 SCOPE

T.1.1 Scope. This appendix establishes the sanitation requirements for low-acid canned food processing facilities. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

T.2 APPLICABLE DOCUMENTS

T.2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this appendix. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this appendix, whether or not they are listed.

T.2.2 Government documents. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

CODE OF FEDERAL REGULATIONS (CFR)

21 CFR, Parts, 108, 110, 113

(Available on-line at http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1)

T.2.3 Non-government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified (see 6.2), the issues of the documents, which are DoD adopted, are those listed in the issue of DoDISS cited in the solicitation. Unless otherwise specified (see 6.2), the issues of documents not listed in the DoDISS are the issues most current in publication.

LOW-ACID CANNED FOOD MANUFACTURER'S GUIDES

Part 1: Administrative Procedures / Scheduled Processes

Part 2: Processes-Procedures

(Publications are on-line at: http://www.fda.gov/ora/inspect_ref/igs/lacfpt1/lacfpt101.html or contact FDA, 1-888-INFO-FDA (1-888-463-6332) for publication information.)

T.3 DEFINITIONS

The definitions in section 3 of this standard apply to this appendix.

T.4 GENERAL REQUIREMENTS

See Appendix A.

T.5 DETAILED REQUIREMENTS

T.5.1 General. The requirements in Table XXVI shall be as specified in the above references, but are not intended to be all-inclusive.

TABLE XXVI. Low-acid canned food requirements

APPENDIX A PARAGRAPH	REQUIREMENT
E1, E2	Raw materials are handled in a manner that does not allow the growth of microorganisms, challenge the lethality of the thermal process, or cause food product to spoil under normal conditions of canning and storage. 21 CFR, Part 110.80(a)
E1	Materials and ingredients are suitable for use in processing low-acid food. 21 CFR, Part 113.81 (a)
A11	Trained personnel supervise the operators of processing systems, retorts, systems and container and closure inspections. 21 CFR, Part 113.10
E2, H1, H2	Scheduled process includes: company name, date, product, production code, retort number, container size, # of containers, initial temp, time steam on, time vent closed, vent temp, time temp up, time steam off, actual processing time, MIG and recorder chart temperatures and other critical factors, specified in the scheduled process. 21 CFR, Part 113.83, Part 108.35 (a)
H8	Raw material and factors that are critical to the thermal process are identified by the processing authority and filed with the FDA as part of the scheduled process. 21 CFR, Part 108.35(a)
H3	Critical factors specified in the scheduled process are measured and recorded on the processing record at intervals not exceeding 15 min. 21 CFR, Part 113.100(a)
H4, H6	Process deviations from the scheduled process are recorded and substantiated by qualified scientific authority prior to using the change. 21 CFR, Part 108.35(c)(2)
E2	Can size and type are the same as those identified on the scheduled process for each item being produced. 21 CFR, Part 108.35(c)(3)
E2, C8	Water activity and the thermal process are controlled when the firm's filed scheduled process lists an a_w greater than 0.85 but less than the a_w that would allow the growth of spores of public health significance. 21 CFR, Part 113.81 (f)
E2, C8	pH is controlled and monitored when acids are added to reduce the pH of the product. 21 CFR, Part 113.81 (e)
C2, C4	Cans must meet container specifications and be free of serious defects. 21 CFR, Part 113.60 (a)
C2, E4	Visual seam inspections are conducted as often as necessary, but not less than every 30 minutes, and after each startup, prolonged break, and each seamer jam. Can Seam Teardowns are conducted at least every 4 hours. 21 CFR, Part 113.6, 113.60(a)(1)
C2, C3	Can seam measurements are performed using Micrometer Method-Cover hook, body hook, width, tightness, thickness measured in 3 places about 120° apart. Seam Scope/Seam Projector Method- Body hook, overlap, tightness, thickness by micrometer measured in 2 places. 21 CFR, Part 113.60, (a) (b) (c)
C7	Retort is properly fitted with temperature recorders, pressure gauges, steam controls, spreaders and bleeders. 21 CFR, Part 113.40(a)

TABLE XXVI. Low-acid canned food requirements - Continued

C7	Each retort is equipped with an accurate mercury-in-glass thermometer tested for accuracy against a known accurate standard. Calibration records are annotated and thermometers are identified. 21 CFR, Part 113.40 C(a)(1)
C7	MIG divisions are readable to 1° F and temperature range does not exceed 17° F. per inch of graduated scale. 21 CFR, Part 113.40 C(a)
C7	Retort has an accurate temperature-recording device. A means of preventing unauthorized changes in adjustment is provided. 21 CFR, Part 113.40 C(a)(2)
E2	Crates, trays, gondolas, etc., for holding containers shall be made of strap iron, adequately perforated sheet metal, or other suitable material. 21 CFR, Part 113.40 (a) (9)
E2	Dividers between the layers of containers should be perforated approximately the equivalent of 1-inch holes on 2-inch centers. CFR, part 113.40 C (a) (9)
A11	Retort operating and venting procedures for each product and container size being packed are posted near the processing equipment, or are readily available to the retort operator. 21 CFR, Part 113.87(a)
E2	Traffic in the retort room and processing area is controlled to prevent unprocessed LACF from circumventing the thermal process, as well as mixing of processed and unprocessed containers. 21 CFR, Part 113.87(b)
C7	Trucks, crates, etc. of retorted food product are plainly and conspicuously marked with a heat sensitive indicator, or by other effective means that will indicate visually, to thermal processing personnel, the units that have been retorted. 21 CFR, Part 113.87(b)
E2, H1	Initial temperature of the contents of the containers to be processed is determined and recorded. Product temperature is not lower than the minimum initial temperature specified in the scheduled process. 21 CFR, Part 113.87(b)
E2	Pocket or wristwatch is not used to record processing and venting time. 21 CFR, Part 113.87(d) & (e)
B9	Water used for cooling must be potable. Container cooling water shall be chlorinated or otherwise sanitized as necessary for cooling canals and for recirculated water supplies. There should be a measurable residual of the sanitizer employed at the water discharge point of the container cooler.
B9	When the steam comes into contact with the LACF, through direct injection of the steam into the food; during the exhausting of containers in a steam exhaust box; through injection of steam into the headspace of containers to form a vacuum, or through any other means, the boiler additives must be approved for use as a food additive and labeled for that use as per 21 CFR Part 173.310

CONCLUDING MATERIAL

Custodians:

Army - MD2
Navy - SA
Air Force - 03

Review activities:

Navy - MS, MC
DLA - SS

Preparing Activity:

Army - MD2
Project No. 89GP-0005

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.

2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send them to preparing activity.

3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE	1. DOCUMENT NUMBER MIL-STD-3006A	2. DOCUMENT DATE *(YYYYMMDD)* 20020607

3. DOCUMENT TITLE
GUIDELINES FOR AUDITING FOOD ESTABLISHMENTS

4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed)*

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME *(Last, First, MI)*	b. ORGANIZATION	
c. ADDRESS *(Include ZIP Code)*	d. TELEPHONE *(Include Area Code)* (1) Commercial (2) DSN *If applicable*	7. DATE SUBMITTED *(YYYYMMDD)*

8. PREPARING ACTIVITY

a. NAME COL S. Severin	b. TELEPHONE *(Include Area Code)* (1) Commercial (703) 681-3056 (2) DSN 761-3056
c. ADDRESS *(Include ZIP Code)* Director, DoD Veterinary Service Activity Office of the Surgeon General/HQDA 5109 Leesburg Pike Falls Church, VA 22041-3258	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533, Fort Belvoir, VA 22060-6221 Telephone (703) 767-6888 DSN 427-6888