

MIL-STD-1156C

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~~SUPERSEDING~~

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MILITARY STANDARD
SANITARY STANDARDS
FOR SOFT DRINK PLANTS



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8 January 1982

DEPARTMENT OF DEFENSE
Washington, D.C. 20301

Sanitary Standards for Soft Drink Plants

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1. This Military Standard is approved for use by all Departments and Agencies of the Department of Defense.
2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commandant, Academy of Health Sciences, US Army, ATTN: HSHA-IVS, Fort Sam Houston, TX 78234; by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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1. SCOPE

1.1 Purpose. This standard establishes the general sanitary requirements for plants that supply soft drinks to the Armed Forces.

1.2 Application. This standard is applicable to all types of plants supplying soft drink destined for Armed Forces procurement. Compliance with this standard is mandatory for the listing of plants in the Directory of Sanitarily Approved Establishments for Armed Forces Procurement as provided in AR 40-657/NAVSUPINST 4355.4C/AFR 163-2/MCOP 10110.31D.

1.3 Objectives. This standard is intended to insure clean, wholesome, soft drink free from chemical, microbiological, and physical contaminants and to prevent the transmission of foodborne disease to members of the Armed Forces.

1.4 Limitations. This standard will not be used to determine the capability of an establishment to produce or furnish products or services which are in compliance with specifications or other purchase descriptions.

2. REFERENCED DOCUMENTS

2.1 Issues of documents. The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this standard to the extent specified herein.

LAWS AND REGULATIONS

Environmental Protection Agency (EPA)

National Interim Primary Drinking Water Regulations

(Application for copies should be addressed to Superintendent of Public Documents, US Government Printing Office, Washington, DC 20402).

US Department of Agriculture (USDA)

List of Chemical Compounds Authorized for Use Under USDA Inspection and Grading Programs

(Application for copies should be addressed to Superintendent of Public Documents, US Government Printing Office, Washington, DC 20402).

US Department of Health and Human Services (HHS)

Code of Federal Regulations (CFR), Title 21, Food and Drug, and Regulations Promulgated Thereunder

(Application for copies should be addressed to the Superintendent of Public Documents, US Government Printing Office, Washington, DC 20402).

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2.2 Other publications. The following documents form a part of this standard to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply:

Illuminating Engineering Society (IES)

IES Lighting Handbook

(Application for copies should be addressed to Illuminating Engineering Society, 40 United Engineering Center, 345 East 47th Street, New York, NY 10017).

National Sanitation Foundation (NSF)

NSF Standard #37 for Air Curtains

(Application for copies should be addressed to the National Sanitation Foundation, PO Box 1468, Ann Arbor, MI 48106).

National Soft Drink Association (NSDA)

Sanitary Code for Soft Drink Manufacturers

(Application for copies should be addressed to the National Soft Drink Association, 1101 16th Street, NW, Washington, DC 20036).

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies).

3. DEFINITIONS

3.1 General.

3.1.1 Adequate. Methods which are needed to accomplish the intended purpose in keeping with accepted public health practices.

3.1.2 Adulterated. Adulterated shall mean the condition of a food (a) if it bears or contains any poisonous or deleterious substance in a quantity which may render it injurious to health; (b) if it bears or contains added poisonous or deleterious substance for which no safe tolerance has been officially established, or in excess of such tolerance if one has been established; (c) if it consists in whole or part of any filthy, putrid, or decomposed substance, or if it is otherwise unfit for human consumption; (d) if it has been processed, prepared, packed, or held under insanitary conditions, whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health; (e) if it is in whole or in part the product of a diseased animal, or an animal which had died otherwise than by slaughter; or (f) if its container is composed in whole, or in part, of any poisonous or deleterious substance which may render the contents injurious to health.

3.1.3 Carbonated beverage. Carbonated beverage shall be any beverage containing one or more volumes of carbon dioxide.

3.1.4 Contamination. Contamination shall be the act or process of exposing the product to an adulterant or unwholesome material.

3.1.5 Finished product. The finished product shall be that soft drink which has been bottled, canned, or packaged.

3.1.6 Food. Any raw, cooked or processed edible substance, ice, beverage, or ingredient used or intended for use or for sale in whole or in part for human consumption.

3.1.7 Plant. The building or buildings or parts thereof, used for or in connection with the manufacturing, processing, packaging, labeling, or holding of human food.

3.1.8 Processing. Processing is any step in the manufacture or preparation of a product into its final form.

3.1.9 Production area. The room or area in which processing occurs.

3.1.10 Product area. The production area and all other areas where the product, ingredients, and packaging materials are handled or stored.

3.1.11 Product zone (food contact surface). The surface of any equipment or other material that contacts the product or ingredients during processing.

3.1.12 Sanitize. Means adequate treatment of product zones by a process that is effective in destroying vegetative cells of pathogenic bacteria and in substantially reducing other microorganisms. Such treatment shall not adversely affect the product and shall be safe for the consumer.

3.1.13 Soft drink. A soft drink shall be any nonalcoholic beverage compounded primarily for refreshment purposes. The beverage may be carbonated or noncarbonated and may have synthetic or natural flavoring.

3.1.14 Wholesome. That characteristic possessed by a food product that is conducive to good health and well being in the consumer.

4. GENERAL REQUIREMENTS

4.1 Sanitary compliance rating (SCR). Establishments that attain an SCR of 90 or more shall be recommended for listing in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement, provided no critical defects, determined in accordance with 4.2.1, are recorded. When a critical defect is recorded, an SCR shall not be computed and the plant shall not be recommended for listing or retention in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement.

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4.2 Plant sanitary compliance checklist. The sanitary requirements are set forth in this military standard and itemized as sanitation defects in column 1 of the checklist (see Appendix). The individual defects are given assigned points in column 2 of the checklist, with some being designated as critical.

4.2.1 Recording of defects. The inspector designates as critical or numerically rates the observed sanitation defects. The numerical rating shall be within the numerical range of the assigned defect points in column 2 and recorded in column 3. Any defect entry and related defect points that are not applicable to the plant shall be deleted by lining out the nonapplicable defect and assigned defect points. Nonapplicable defect points shall not be included when totaling column 2. In instances where the inspector considers a defect to be of such magnitude as to constitute a serious health hazard, the numerical rating shall be deleted in column 2 and the word 'critical' shall be recorded in columns 2 and 3. Numerical and critical defects shall be explained in the remarks section in sufficient detail so as to clearly describe the condition which resulted in the disrating. Also, any other deficiencies observed and considered by the inspector to be of sufficient importance to affect the SCR shall be explained in this section.

4.2.2 Computation of the sanitary compliance rating (SCR). If a critical defect is recorded, an SCR shall not be computed. If no critical defects are found, columns 2 and 3 are totaled and the SCR shall be computed using the following formula:

$$\frac{\text{Sum of column 2} - \text{Sum of column 3}}{\text{Sum of column 2}} \times 100 = \text{SCR}$$

4.2.3 Checklist reproduction. Reproduction of the checklist locally is authorized.

5. DETAILED REQUIREMENTS

5.1 Premises. The premises shall present a clean and orderly appearance. They shall be well drained, free of environmental conditions and/or materials that are a nuisance or a hazard to sanitation. The area shall be free of weeds, debris, and unused equipment and materials. The area shall be free of waste materials that are stored or handled in such a manner as to be a potential health hazard. The presence of any breeding area for insects, rodents, or birds shall not be permitted. If the plant grounds are bordered by grounds not under the plant operator's control, care must be exercised in the plant by inspection, extermination, or other means to effect exclusion of pests, dirt, and other filth that may be a source of food contamination. The approaches to receiving and shipping docks shall be kept clean and maintained to minimize dust.

5.2 Raw materials. All raw materials must be obtained from approved sources as required by AR 40-657/NAVSUPINST 4355.4C/AFR 163-2/MCOP 10110.31D. Food which shows evidence of adulteration, contamination, active insect infestation, or any condition that from a public health or esthetic standpoint renders the product unfit for human consumption, shall not be accepted by the plant.

5.2.1 Single-service articles and packaging materials. Single-service articles and packaging materials shall be free of contamination and maintained in sanitary boxes, cartons, tubes, or otherwise protected and handled in a sanitary manner.

5.3 Construction of building. The building shall be large enough to accommodate the operation without hampering sanitary practices. Floors, walls, and ceilings shall be constructed of materials that can readily be kept clean, sanitary, and in good repair. An unnecessary clutter of wiring, pipes, hangers, ducts, etc., shall be avoided. Ceilings shall be free of peeling paint (painted ceilings shall be avoided) and condensates. The exterior openings, including doors, windows, conveyor openings, pipe openings, and vents, shall be clean and in good repair. Where practicable, exterior openings shall be equipped with screens or other effective means (e.g., air curtains) to prevent the entrance of insects, birds, and animals. When the screening of openings is impracticable, such as in receiving areas, flying insect entry shall be controlled by properly positioned air curtains large enough to cover the total door opening. Air curtains shall comply with the National Sanitation Standard No. 37 for Air Curtains for Entrances in Food Establishments. Screen doors shall open outward and be self-closing. Rooms in the processing areas shall not open directly into any barns or stables, living quarters, toilets, garages, or heavy maintenance shops.

5.3.1 Separate rooms. A separate room shall be provided for compounding and mixing syrups; it shall be separate from other areas of the plant by a solid wall construction. Bottle washing and filling operations shall be separate from the receiving, storing, and shipping area.

5.4 Lighting. Each room shall have sufficient natural or artificial lighting for the purpose for which it is to be used. Lighting intensities shall conform to the intensities established in the latest edition of the IES Lighting Handbook. Lights in the processing areas shall be equipped with protective shields or shall be of such construction that they will not shatter if broken.

5.5 Ventilation and humidity. Humidity shall be regulated in conjunction with ventilation or air movement to control condensation, objectionable odors, and mold growth on ceilings and walls in all areas. Air for ventilation shall be adequately filtered as appropriate to prevent contamination. Ventilation systems shall be kept clean and maintained in good repair.

5.6 Water supply. The water supply shall be readily accessible, of a sufficient quantity, and have an acceptable sanitary quality, as established in the National Interim Primary Drinking Water Regulations. The water heater shall be of such capacity so as to be able to furnish an undiminished supply of hot water for a complete food plant cleaning procedure at all times throughout a working day. There shall be mixing valves at all scullery sinks and hose connections. There shall be protection against possible back-siphonage. There shall be no cross-connection between potable and nonpotable lines. There shall be effective protection of wells from contamination by surface drainage or floods. Bacteriological examination and water test results shall be maintained at the plant to show that

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the water supply has been approved by Federal, state, or local health authorities within the past six months.* Within CONUS, Hawaii, and Alaska, a water supply approved by a Federal, state, or local health authority will be considered potable, and certification of potability will normally not be required. Non-potable water outlets, if present, shall be located and identified by color code and labeled nonpotable so as to preclude the use of nonpotable water for other than the purposes designated. The color code used shall be readily identifiable, prominently displayed, and clearly understood by plant personnel.**

*If Federal, state, or local health authorities do not have such evidence of water potability, applicable military regulations governing potable water supplies will be followed to approve the water supply(ies).

**The use of nonpotable water is permitted for the flushing of urinals and commodes, for boilers, and for such other similar uses provided it does not directly, nor indirectly, contact the ingredients, product, packaging materials, product area, or personnel handling the product.

5.7 Ice (if used). Ice shall be made from a supply of potable water which meets the requirements of 5.6. It shall be manufactured, handled, stored, and used in a sanitary manner.

5.8 Disposal of wastes. Liquid wastes shall be conveyed to a public sewer through inclosed piping or shall be disposed of in another sanitary sewage system approved by local/state health authorities. Floor drains shall be functional and properly trapped. Dry and product waste shall be placed in suitable covered receptacles conveniently located throughout the plant and premises. All waste shall be collected and disposed of at frequent intervals in a sanitary manner to prevent insect and rodent attraction and development of objectionable odors.

5.9 Toilet, dressing room, and handwashing facilities. A sufficient number of sanitary toilets or privies shall be provided. Toilet facilities required:

<u>Persons of same sex</u>	<u>Toilet bowls required</u>
1-15 inclusive	1
16-35 inclusive	2
36-55 inclusive	*3
56-80 inclusive	*4
For each additional 30 persons in excess of 80	*1

*Urinals may be substituted for toilet bowls but only to the extent of one-third of the total number of bowls stated.

Toilet rooms shall be conveniently located, constructed of materials which can be easily and satisfactorily cleaned, adequately lighted, and separately vented to the outside. They shall be constructed so that they do not open

directly into rooms or areas where components or products are processed or stored. The doors shall be tight-fitting and self-closing. A sign directing employees to wash their hands before returning to work shall be conspicuously posted in all toilet rooms. Handwashing signs will be multilingual, as appropriate. Handwashing facilities, with running water at a suitable temperature for hand washing, soap (liquid or powder), soap dispenser, and sanitary single-service towels or hot air blower-type hand dryers will be conveniently located in the toilet rooms and throughout the processing areas. Toilets, dressing rooms, and handwashing facilities will be maintained in a clean, orderly manner. There will be a sanitary waste receptacle in each toilet room. Restrooms shall not be used for storage of cleaning equipment. Privies shall be separate from the processing building, and of a sanitary type, location, and construction. Each employee shall be furnished a locker or other suitable facility, and lockers and dressing rooms shall be kept clean and orderly.

5.10 Construction and repair of equipment and utensils. Equipment and utensils shall be designed, constructed, and used so as to preclude the adulteration of food with toxic lubricants, fuel, metal fragments, contaminated water, and any other contaminants. Lubricants used on contact surfaces of moving parts to pumps, product handling and processing equipment shall be edible and nontoxic and shall be used sparingly. The only lubricants authorized for use are those listed in the USDA publication, "List of Chemical Compounds Authorized for Use Under USDA Inspection and Grading Programs".

5.10.1 Equipment and utensils. All equipment and utensils shall be designed and be of such material and workmanship so as to be smooth, easily cleanable, and durable. The food contact surfaces of such equipment shall, in addition, be easily accessible for cleaning, nontoxic, corrosion-resistant, and consist of nonabsorbent material. Food contact surfaces and solder shall be corrosive-resistant and shall not contain antimony, bismuth, cadmium, lead, zinc, and/or other toxic materials. Solder on the food contact surface shall be hard solder of such formulation so as to be nontoxic under use conditions. Equipment shall be so located as to provide adequate space for cleaning, maintenance, and inspection.

5.10.2 Washing, filling, and crowning devices. If the washing, filling, and crowning devices are not integral parts of one machine, but are performed by separate units of equipment, they shall be arranged to exclude manual contact with the necks or tops of the bottles between filling and crowning.

5.10.3 Syrup equipment. Mixing and storage tanks, pipelines, filters, and other apparatus employed in the preparation and distribution of syrups shall be of sanitary construction and made of materials resistant to the action of syrup ingredients. The tanks shall be self-draining, free from defects and seams, and shall be of such construction as to be readily flushed, cleaned and sanitized. Galvanized iron, lead, zinc, copper, or brass-lined containers, pipelines, or apparatus of other deleterious materials shall not be used in preparation, storage, or conveyance of syrups.

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5.10.4 Carbonated water pipelines. Carbonated water shall not be conveyed in pipelines of galvanized iron, lead, zinc, copper, or other deleterious materials.

5.10.5 Bottle washers. Bottle washers shall be equipped with accurately functioning indicating thermometers. The thermometer determining the temperature of the alkali washing solution shall be of the recording type or shall be of the dial type with temperatures being recorded on quality control records at least every two hours while the bottle washer is in operation.

5.10.6 In-place cleaning equipment. Cleaned-in-place beverage pipelines and return solution lines (if used) shall be rigid, self-draining, and supported in a manner so as to maintain uniform slope and alignment. Where necessary, each cleaning circuit shall have access points such as valves, removable sections, fittings, etc., that are adequate for inspection of the interior of the line in addition to the entrances and exits. These access points shall be located at sufficient intervals to determine the general condition of the interior surface of the piping.

5.10.7 Compressed air equipment. Compressed air utilized for air cleaning of cans or other single-service containers prior to filling or used for any other purpose where it contacts a beverage or beverage ingredient product zone or which is introduced into the product, shall be filtered. Where piston-type compressors are used, the air lines shall be equipped with oil and moisture traps.

5.11 Cleaning and sanitizing treatment. The methods used for cleaning and sanitizing shall be of such that the product shall not be contaminated or adulterated. All products shall be moved sufficiently far away or otherwise protected prior to the start of cleaning to avoid contamination or adulteration by splashing. All multiple-service containers, equipment, and utensils used in handling, processing, storing, or transporting of exposed product shall be disassembled, as applicable, cleaned thoroughly, and sanitized after use. Chemicals used in cleaning and sanitizing treatments shall be properly labeled and stored. Cleaning and sanitizing chemicals shall be used IAW the manufacturer's recommendation. The only chemical compounds authorized for use are those listed in the USDA publication, "List of Chemical Compounds Authorized for Use Under USDA Inspection and Grading Programs". If water is to be used as the sanitizer, it must be not less than 170°F (77°C). All rooms and areas used to receive, process, or store components or the finished product shall be maintained in a clean, sanitary manner so as to preclude the possibility of microbiological, chemical, or physical contamination. All pipelines, apparatus, and containers used in the manufacturing processes shall be thoroughly sanitized at adequate intervals, but never less frequently than once weekly. Apparatus and containers shall be washed and rinsed before sanitizing. Fillers shall be cleaned and sanitized at the end of each day's operation and flushed with potable water before beginning operations. Since accepted industry practice permits syrup to remain in the syrup tanks and lines between periods of processing operations, the syrup tanks and lines will be cleaned and sanitized when emptied, as scheduled by the plant. After scheduled cleaning and sanitizing, the syrup tanks and lines shall be flushed with potable water before beginning processing operations.

5.11.1 Bottle washing. Before being refilled, reusable glass containers used in the manufacture of soft drinks shall be sanitized by being washed in an automatic washing machine. An indicating thermometer and caustic solution test equipment shall be used to ascertain the temperature and caustic strength of the washing solution. The washing solution shall consist of at least 2 percent caustic with a minimum contact period of 5 minutes and a temperature of 130°F (54°C) or an equivalent cleansing and sanitizing process. The bottles shall then be rinsed free of washing solution with potable water. Single-service containers may be cleaned by air or water rinsing machines.

5.11.2 In-place cleaning. Piping and other equipment intended for in-place cleaning shall be so designed, constructed, and installed so that cleaning and sanitizing solutions can be circulated throughout the fixed system. Cleaning and sanitizing solutions will contact all interior surfaces. Cleaning and sanitizing procedures shall result in a thoroughly cleaned and sanitized piece of equipment or piping.

5.12 Methods. Methods used in the processing, handling, and storage shall be conducted in a sanitary manner so as to prevent contamination or adulteration, and not contribute to deterioration of the product from a public health standpoint.

5.12.1 Preparation of syrups. Syrups shall be prepared in a sanitary manner. Every precaution shall be taken against contamination, absorption, or deleterious substances during the preparation and subsequent storage. Mixing shall be by mechanical means and shall be performed so as to prevent contamination of syrup.

5.12.2 Filling. Bottles and cans shall be filled and capped by means of automatic machinery, and neither the operator nor his clothes shall come in contact with any part of the bottles, cans, or machinery that might result in contamination of the product. Removal of the crown of imperfectly crowned bottles and recrowning shall not be permitted. Crowns which have been touched on the inner side by the operator, as may occur while adjusting the crowner, shall be discarded. Returnable bottles shall be inspected for any abnormal condition immediately before or after being filled.

5.13 Public health controls. When applicable, means shall be provided to assure adequate public health control of the raw materials and finished product. The means shall include physical, chemical, and microbiological examinations and/or tests necessary to establish that product has not been adulterated or contaminated. Evidence that all necessary examinations and/or tests have been performed and records of such examinations and/or tests shall be on file and made available to the military inspector. All bottling plants shall record the temperature of the main tank of the bottle washer on the quality control records at least every two hours during operation of the bottle washer. This record shall also include the start-up time and close-down time of the bottle washer.

5.14 Cooling and refrigeration. Cooler rooms shall be free from objectionable odors and from mold. They also shall be maintained in a sanitary condition. The

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coolers and freezers shall be capable of maintaining temperature and humidity necessary for the preservation of the foods being stored or processed.

5.15 Storing and storage facilities. Storage facilities shall be provided for storing raw materials, packing and packaging materials, and finished products. They shall be clean, sanitary, and in good repair. Storing methods which minimize deterioration and prevent contamination shall be used. Shelves, cabinets, and dunnage or pallets shall be used where necessary to protect materials from contamination.

5.16 Control of insects, birds, and animals. Insects, birds, and animals shall be excluded from the plant. Effective measures for the control of insects, birds, and animals shall be maintained at all times. Operations or procedures which produce rodent harborages or insect breeding areas are prohibited. Insecticides and rodenticides, if used, shall be only those which appear in the USDA publication, "List of Chemical Compounds Authorized for Use Under USDA Inspection and Grading Programs". These products shall be used by approved methods and shall be handled and stored in a safe manner.

5.17 Vehicles and transportation facilities. Vehicles and transportation facilities shall be constructed and operated to protect contents from contamination and deterioration. They shall be kept clean and in good repair.

5.18 Cleanliness and health of personnel.

5.18.1 Cleanliness. All employees shall wash their hands before beginning work and upon returning to work after using toilet facilities, eating, smoking, or otherwise soiling their hands. They shall keep their hands clean and follow acceptable hygienic practices while on duty. Eating, expectorating, or use of tobacco in any form shall be prohibited in each room and compartment where any food products or supplies are prepared, stored, or otherwise handled. Personnel shall not wear insecure jewelry. All persons engaged in receiving, testing, processing, manufacturing, packaging, or handling food products shall wear clean, white, or light-colored washable or disposable outer garments. Hair nets, headbands, caps, beard nets, or other effective hair restraints to effectively cover hair shall be worn so as to prevent contamination of food and food contact surfaces. Employee's personal effects shall not be stored in production areas.

5.18.2 Health. No person afflicted with, or a carrier of, a communicable disease shall be permitted in any room or compartment where products are prepared, manufactured, or otherwise handled. No person who has a discharging or infected wound, sore, or lesion on hands, arms, or other exposed portion of the body shall work in any processing rooms or in any capacity resulting in contact with the processing or handling of products, containers, or equipment. Where health authorities require health certificates, they shall be kept on file at the plant office. Plant personnel shall receive appropriate training in proper food handling techniques and food protection principles and will be cognizant of the danger of poor personal hygiene and insanitary practices.

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Custodians:

Army - GL
Navy - SA
Air Force - 50

Preparing activity:

Army - GL
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Review activities:

Army - MD
Navy - MS

Copies of this standard for military use may be requisitioned on DD Form 1425 (Specification and Standard Requisition) and submitted to Commanding Officer Naval Publications and Form Center, 5801 Tabor Avenue, Philadelphia, PA 19120. The title and identifying symbol should be stipulated when requesting copies of military standard.

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SOFT DRINK PLANT SANITARY COMPLIANCE CHECKLIST		Page 1 of 2 Pages	
REFERENCE: MIL-STD-1156C This appendix is an integral part of MIL-STD-1156C and its application is mandatory.			
NAME AND ADDRESS OF ESTABLISHMENT INSPECTED:		DATE INSPECTED:	
NAME AND TITLE OF ACCOMPANYING INDIVIDUAL:		INSPECTOR: (Name, Grade, Unit Telephone No.)	
SANITATION DEFECTS		ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
(1)			
1. PREMISES			
A. Not clean or well organized-----		3	
B. Not well drained-----		3	
C. Not free from nuisances and sources of contamination-----		5	
2. RAW MATERIALS			
A. Not obtained from approved source-----		Critical	
B. Not inspected upon receipt and at other times as needed for determination of adulteration, contamination, or infestation-----		5	
C. Single-service articles and packaging materials not protected-----		4	
3. CONSTRUCTION OF BUILDING			
A. Not large enough to accommodate the operation without hampering sanitary practices-----		4	
B. Rooms not separate when required-----		4	
C. Walls, floors, ceilings not in good repair or not constructed of materials that can easily be kept clean and sanitary-----		4	
D. Unnecessary clutter of wiring, pipes, hangers, ducts, etc.-----		4	
E. Exterior openings not clean and in good repair-----		4	
F. Exterior openings do not prevent the entrance of insects, birds, or animals-----		4	
G. Air curtains, if used, not in compliance with NSF standards-----		3	
H. Screen doors not outward opening and not self-closing-----		3	
I. Processing area opens directly into living quarters, garages, heavy maintenance shops, etc.-----		4	
4. LIGHTING			
A. Insufficient lighting-----		4	
B. Lights in processing area not equipped with shields when required-----		5	
5. VENTILATION AND HUMIDITY			
A. Insufficient control of ventilation or air movement-----		5	
B. Presence of mold on walls or ceilings in processing or storage areas-----		5	
C. Accumulation of condensates in processing or storage areas-----		5	
D. Ventilation system not kept clean and maintained in good repair-----		3	
E. Air not filtered and not directly outward when required-----		5	
6. WATER SUPPLY			
A. Not easily accessible-----		4	
B. Inadequate in quantity-----		5	
C. Undrained supply of hot water not available-----		Critical	
D. Mixing valves not available at all scullery sinks and hose connections-----		4	
E. Cross-connection exists between potable and nonpotable water supply or sewage-----		Critical	
F. Not adequate protection against possible back-siphonage-----		5	
G. Potability certificate not current or available-----		Critical	
H. Potable water supply found to be nonpotable-----		5	
I. Nonpotable water outlets not identified by prominently displayed color code and labels-----		5	
7. ICE (IF USED)			
A. Not made from potable water which meets requirements-----		Critical	
B. Not manufactured, handled, stored, or used in a sanitary manner-----		5	
8. DISPOSAL OF WASTES			
A. Liquid wastes not disposed of in a sanitary manner-----		5	
B. Floor drains not functional or properly trapped-----		3	
C. Waste not collected in suitable, properly covered containers, and disposed of at frequent intervals and/or in a sanitary manner-----		4	
9. TOILET, DRESSING ROOM, AND HANDWASHING FACILITIES			
A. Sufficient number of toilets or privies not provided-----		5	
B. Toilet rooms not conveniently located or constructed of materials not easily cleaned-----		4	
C. Toilet rooms not adequately lighted-----		2	
D. Toilet rooms not separately vented to the outside-----		5	
E. Toilet rooms open directly into processing area-----		5	
F. Doors not self-closing and tight-fitting-----		3	
G. Absence of handwashing sign-----		3	
H. Absence of suitable temperatured water, soap, soap dispenser, or appropriate hand-drying facilities, conveniently located-----		5	
I. Sanitary waste receptacles not present-----		3	
J. Toilets, dressing rooms, and handwashing facilities not maintained in a clean, orderly fashion-----		4	
K. Restrooms used for storage of cleaning equipment-----		3	
L. Privies not separate from the processing building-----		Critical	
M. Privies not of sanitary type, location, and construction-----		5	
N. Each employee not furnished a locker or other suitable facility-----		5	
10. CONSTRUCTION AND REPAIR OF EQUIPMENT AND UTENSILS			
A. Design, construction, and use of such equipment and utensils does not preclude the adulteration of food-----		Critical	
B. Product-contact surfaces not of impervious material, not smooth, nor of corrosion-resistant material-----		4	
C. Product-contact surfaces not of nontoxic material-----		Critical	
D. Not clean or not in good repair-----		5	
E. Not constructed so that all surfaces are readily sanitizable-----		5	
F. Equipment not easily accessible for cleaning, maintenance, and inspection-----		5	
G. Washing, filling, and crowing devices do not meet requirements-----		5	
H. Syrup equipment does not meet requirements-----		5	
I. Carbonated water pipelines not as required-----		5	
J. Bottle washers do not meet requirements-----		5	
K. In-place cleaning equipment does not meet requirements-----		5	
L. Compressed air not filtered-----		5	
M. Piston-type compressor air lines not equipped with oil and moisture traps-----		5	

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SOFT DRINK PLANT SANITARY COMPLIANCE CHECKLIST		Page 2 of 2 Pages	
SANITATION DEFECTS (1)		ASSIGNED DEFECT POINTS (2)	INSPECTION DEFECT POINTS (3)
11. CLEANING AND SANITIZING TREATMENT			
A. Cleaning or sanitizing methods do not prevent product contamination or adulteration-----		Critical-----	
B. All products not moved away or protected prior to equipment or area cleaning, to avoid contamination or adulteration-----		Critical-----	
C. All multiservice containers, equipment, and utensils not cleaned and sanitized after use-----		5-----	
D. Cleaning and sanitizing chemicals not properly labeled or stored-----		5-----	
E. Unauthorized chemical compounds used for cleaning and sanitizing-----		Critical-----	
F. Water used as sanitizer less than 170°F (77°C)-----		5-----	
G. Rooms and areas not maintained in a clean, sanitary manner-----		5-----	
H. Bottle washing operation not conducted as required-----		5-----	
I. In-place cleaning not conducted as required-----		5-----	
12. METHODS			
A. Methods permit contamination/adulteration of product-----		Critical-----	
B. Methods permit deterioration of product-----		5-----	
C. Syrups not prepared in a sanitary manner-----		5-----	
D. Filling operation insanitary-----		5-----	
13. PUBLIC HEALTH CONTROLS			
A. When applicable, examinations not performed to assure adequate public health control of the raw materials and finished products-----		5-----	
B. Records of examination and tests of raw materials and finished products not available-----		5-----	
14. COOLING AND REFRIGERATION			
A. Cooler rooms not free from objectionable odors and from mold-----		5-----	
B. Cooler rooms not maintained in a sanitary condition-----		5-----	
C. Product not stored at proper temperature and humidity-----		5-----	
15. STORING AND STORAGE FACILITIES			
A. Storage facilities not clean, sanitary, or in good repair-----		3-----	
B. Storing methods do not minimize deterioration or contamination-----		5-----	
C. Shelves, cabinets, or dunnage not used where necessary to prevent contamination or deterioration-----		5-----	
16. CONTROL OF INSECTS, BIRDS, AND ANIMALS			
A. Presence of insects, birds, and animals in production area-----		Critical-----	
B. Presence of insects, birds, and animals in nonproduction area-----		5-----	
C. Effective measures for the control of insects, birds, and animals not maintained at all times-----		3-----	
D. Rodent harborages or insect breeding places present-----		4-----	
E. Unauthorized insecticides or rodenticides used-----		Critical-----	
F. Insecticides or rodenticides not used by approved methods-----		5-----	
G. Insecticides or rodenticides are handled or stored in an unsafe manner-----		5-----	
17. VEHICLE AND TRANSPORTATION FACILITIES			
A. Not constructed or operated to protect contents from contamination or deterioration-----		Critical-----	
B. Not properly maintained or not clean-----		3-----	
18. CLEANLINESS AND HEALTH OF PERSONNEL			
A. Employees not washing hands after contamination-----		Critical-----	
B. Failure of employees to be hygienically clean-----		4-----	
C. Personnel not prohibited from eating, smoking, chewing tobacco, or expectorating in product handling areas-----		3-----	
D. Insecure jewelry worn by plant personnel-----		3-----	
E. Employees not wearing garment/hair restraints suitable for work being performed-----		5-----	
F. Storage of employee's personal effects in production rooms-----		3-----	
G. Employees affected with or a carrier of a communicable or infectious disease not excluded from product areas-----		Critical-----	
H. Plant employees having an infectious wound, sore, or lesion on hands, arms, or other exposed parts of the body not excluded from contacting ingredient, products, or product zone-----		Critical-----	
I. Prescribed medical examinations of personnel not being made and/or records of such not available-----		4-----	
J. Plant personnel not instructed in acceptable hygienic practices and proper sanitary rules of food handling-----		Critical-----	
19. TOTALS			
20. a. SCR COMPUTATIONS	b. SCR ASSIGNED	c. NUMBER OF CRITICAL DEFECTS	
21. REMARKS/RECOMMENDATIONS			
TYPED NAME, GRADE, AND TITLE OF INSPECTOR		SIGNATURE OF INSPECTOR	

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