

INCH-POUND

**MIL-STD-906A**

1 March 1990

**SUPERSEDING**

**MIL-STD-906**

**8 MARCH 1984**

# **MILITARY STANDARD**

## **SANITARY STANDARDS**

### **FOR ICE PLANTS**



AMSC N/A

**FSC 89GP**

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**MIL-STD-906A**

DEPARTMENT OF DEFENSE  
Washington, DC 20301-2300

**Sanitary Standards for Ice Plants**

1. This Military Standard is approved for use by all Departments and Agencies of the Department of Defense.
2. The proponent agency of this document is the Office of The Surgeon General. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commandant, Academy of Health Sciences, U.S. Army, ATTN: HSHA-IVS, Fort Sam Houston, TX 78234-6100 or use DD Form 1426 (Standardization Document Improvement Proposal), which is self-addressed, appearing at the end of this document.

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Enclosure: DD Form 2547 (Ice Plant Sanitary Compliance Checklist)

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### **1. SCOPE**

**1.1 Purpose.** This standard establishes the general sanitary requirements for ice plants.

**1.2 Application.** This standard is applicable to all types of plants supplying ice destined for Armed Forces procurement. Compliance with this standard is mandatory for the listing of plans in the Directory of Sanitarily Approved Establishments for Armed Forces Procurement (Short Title: the "Directory") as provided in AR 40-657/NAVSUPINST 4355.4/MCO P10110.31 and AFR 161-32.

**1.3 Objectives.** This standard is intended to insure clean, wholesome ice that is free from chemical, microbiological, and physical contaminants and to prevent the transmission of waterborne diseases 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 Government 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.

#### **Environmental Protection Agency (EPA)**

Code of Federal Regulations (CFR), Title 40, Protection of the Environment, Parts 100 to 149 and Parts 150 to 189.

(Application for copies should be addressed to Superintendent of Public Documents, U.S. Government Printing Office, Washington, DC 20402-0001)

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**U.S. Department of Agriculture (USDA)**

**List of Proprietary Substances and Non-food Compounds  
Authorized for Use Under USDA Inspection and Grading programs**

(Application for copies should be addressed to Superintendent of Public Documents, U.S. Government Printing Office, Washington, DC 20402-0001)

**U.S. Department of Health and Human Services (HHS)**

CFR, Title 21, Food and Drugs, Parts 100 to 169 and Part 170 to 199

(Application for copies should be addressed to Superintendent of Public Documents, U.S. Government Printing Office, Washington, DC 20402-0001)

**U.S. Department of Defense**

AR 40-5, Medical Services, Preventive Medicine

AR 40-657/NAVSUPINST 4355.4/MCO P10110.31 - Medical Services, Veterinary/Medical Food Inspection and Laboratory Service

AFR 161-32 - Aerospace Medicine, Food Safety and Inspection Program

(Application for copies should be addressed to the applicable purchasing agency.)

**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.)

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### National Sanitation Foundation (NSF).

NSF Standard #37 for Air Curtains for Entranceways in Food Establishments

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

(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 Adequate.** Methods that are needed to accomplish the intended purpose in keeping with accepted public health practices.

**3.2 Adulterated.** 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 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 its container is composed in whole, or in part, of any poisonous or deleterious substance which may render the contents injurious to health.

**3.3 Cleaning.** The physical removal of food residues, ingredients, and other soiling materials by approved methods.

**3.4 Contamination.** The act or process of exposing the product to an adulterant or unwholesome material.

**3.5 Critical Defect.** An imperfection, practice, or procedure which may result in hazardous or unsafe conditions or which is likely to prevent the use or performance of an item or product as intended or cause the product to be injurious to health.

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**3.6 Defect.** A product, practice, procedure, or condition at variance with specified requirements.

**3.7 Equipment.** All can fillers, chippers, conveyors, core fillers, coresucking devices, crushers, cubers, drop tubes, grinders, ice cans, ice makers, needles, packaging machines, and similar items used in ice plants.

**3.8 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.

**3.9 Food Contact Surface.** Those surfaces that contact human food and those surfaces from which drainage onto the food or onto surfaces that contact the food ordinarily occurs during the normal course of operations. "Food contact surfaces" includes utensils and food-contact surfaces of equipment (21 CFR 110).

**3.10 Ice.** The product in any form, obtained as a result of freezing water by mechanical, artificial, or natural means.

**3.11 Plant.** The building or buildings or parts thereof, used for or in connection with the manufacturing, processing, packaging, labeling, or storing of ice.

**3.12 Processing.** Steps in the manufacture, preparation, and packaging of a product into its final form.

**3.13 Production Area.** The room or area in which processing occurs.

**3.14 Product Area.** The production area and all other areas where the product, water, and packaging materials are handled or stored.

**3.15 Sanitize.** Adequate treatment of clean food contact surfaces by a process that is effective in destroying vegetative cells of pathogenic bacteria and in substantially reducing numbers of other microorganisms. Such treatment shall not adversely affect the product and shall be safe for the consumer (21 CFR 110).



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**3.16 Toilet Facility.** A fixture maintained within a toilet room for the purpose of defecation and/or urination and which is flushed with water.

**3.17 Toilet Room.** A room maintained within or on the premises of a plant, containing toilet and handwashing facilities for use by employees.

**3.18 Utensils.** Shall mean any multiuse cans, buckets, tubs, pails, vats, containers, covers, tongs, picks, and similar items used in manufacturing, packaging, and handling of ice.

**3.19 Urinal.** A toilet facility maintained within a toilet room for the sole purpose of urination and which is flushed with water.

**3.20 Water Closet.** A toilet facility maintained within a toilet room for the purpose of both defecation and/or urination and which is flushed with water.

**3.21 Wholesome.** Conducive to good health and well being.

## **4. GENERAL REQUIREMENTS**

**4.1 Sanitary Compliance Rating (SCR).** Establishments that attain an SCR of 90 or more shall be recommended for initial or continued listing in the Directory provided no critical defects, determined in accordance with 4.2.1, are recorded. When a critical defect is recorded, the inspection of the entire plant will be completed, annotating all deficiencies and an SCR shall still be computed; however, the plant shall not be recommended for listing or retention in the Directory.

**4.2 DD Form 2547 (Ice Plant Sanitary Compliance Checklist).** The Sanitary Compliance Checklist (DD Form 2547) will be utilized to record all defects during initial, special or update inspections. An abbreviated form may be used during routine inspections. A completed copy of the inspection form used will be provided to the plant management upon completion of the inspection. Sanitary requirements are set forth in this military standard and are itemized as sanitation defects in column 1 of the checklist. The

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individual defects are given assigned points in column 2 of the checklist unless defects are designated as critical (see paragraph 3.5). A copy of this form is located at the back of this publication for local reproduction. The form will be locally reproduced on 8 1/2 x 11-inch paper.

**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 shall be recorded in column 3. Any defect entry and related defect points that are not applicable to the plant being inspected shall be deleted by lining out the non-applicable defect and assigned defect points. Non-applicable defect points shall be subtracted from the total number of assigned defect points 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. Defects designated as critical in the checklist may not be downgraded or assigned defect points. Numerical and critical defects shall be explained in the remarks section in sufficient detail to clearly describe the condition which resulted in the rating. Deficiencies not listed in the checklist that are observed and considered by the inspector to be of sufficient importance will likewise be explained in the remarks section.

**4.2.2 Computation of the SCR.** To compute the SCR, Columns 2 and 3 are totaled and used as shown in the following formula:

$$\frac{\text{Net total of column 2} - \text{Net total of Column 3}}{\text{Net total of Column 2}} \times 100 = \text{SCR}$$

The SCR assigned will be rounded to the nearest whole percent (i.e. 0.01 to 0.49 will round down and 0.50 to 0.99 will round up).

**4.3 Additional Requirements.** Checklist items pertaining to "Other regulatory agencies concerned with sanitation of this establishment and Methodology" must be completed for every initial, special and update inspection. The methodology section will be completed in sufficient detail that anyone reading the report can visualize procedures from beginning to end.

**MIL-STD-906A****5. DETAILED REQUIREMENTS**

**5.1 Premises.** The premises shall present a clean and orderly appearance. They shall be well drained and 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 approaches to receiving and shipping docks shall be kept clean and maintained to minimize dust.

**5.2 Raw Material.** Only potable water will be used in all phases of ice manufacture. This will include water used for submersion or ice can spraying for cake removal and cleaning of ice cakes and ice contact surfaces.

**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. Overhead wiring, pipe and duct systems, and so forth, will be constructed or appropriately enclosed to prevent contaminants such as dust, paint, or other debris from falling on ice or product contact surfaces. Ceilings shall be free of peeling paint. Exterior openings, including doors, windows, conveyor openings, pipe openings, and vents, shall be in good repair. Exterior openings shall be equipped with screens or other effective means to prevent the entrance of insects, birds, rodents, and/or other animals. When the screening of openings is impracticable, such as in receiving areas, flying insect entry may be controlled by properly positioned air curtains and/or overlapping plastic strips large enough to cover the total door opening. Air curtains shall comply with the NSF Standard #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, stables, living quarters, toilets, garages, or maintenance shops. Facilities shall be provided for storing raw materials, packing and packaging materials, and finished products.

**5.3.1 Separate Rooms.** Ice for human consumption shall be processed or packaged in rooms used only for purposes of processing or storage of potable ice.

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**5.3.2 Construction of Toilet/Dressing Room and Handwashing Facilities.** A sufficient number of sanitary toilet facilities shall be provided. Toilet rooms shall be conveniently located, constructed of materials that can be easily and satisfactorily cleaned 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.

**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. Lights shall also be shielded where unpackaged ice is stored.

**5.5 Ventilation and Humidity.** Humidity shall be related 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 and directed outward 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 quality, as established in the 40 CFR; individual military service regulations; or acceptable host country drinking water standards as determined by the Major Command (MACOM) Surgeon. The water heater shall be of such capacity so as to be able to furnish a sufficient supply of hot water to meet the plant's cleaning and sanitizing requirements at all times throughout a working day. There shall be mixing valves at all scullery sinks and hose connections. There shall be no cross-connection between potable and nonpotable water lines. There shall be protection against possible back-siphonage. There shall be effective protection of wells from contamination by surface drainage or floods. Bacteriological examination and other water test results shall be maintained at the plant to show that the water supply has been approved by Federal, State, or local health authorities within the past 6 months. If the plant does not have such evidence of water potability, applicable military service regulations governing potable water supplies will be followed to approve the water supply(ies). Within the Continental United States (CONUS),

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Hawaii, and Alaska, Commonwealth of Puerto Rico, The U.S. Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands, a water supply approved by a Federal, State, or local health authority will be considered potable, if the samples drawn for testing were taken from the faucets located in the establishment.

**5.6.1 Nonpotable Water.** Nonpotable water outlets, such as wells, if present, shall be located and identified by a color code and labeled (labels will be multilingual as appropriate) nonpotable 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. The use of nonpotable water is permitted for the flushing of toilet facilities, 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 Disposal of Wastes.** Liquid wastes shall be conveyed to a public sewer system through inclosed piping or shall be disposed of in another sanitary sewage system approved by State/local or host country health authorities. Floor drains shall be functional and properly trapped. Dry and product waste shall be placed in 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.

**5.8 Toilet and Handwashing Facilities.** A sign directing employees to wash their hands before returning to work shall be conspicuously posted in all toilet rooms, break areas, and production areas. Handwashing signs shall be multilingual as appropriate. Handwashing facilities, with running water at tepid (approximately 105°F) temperature for handwashing, soap (liquid or powder), soap dispenser, sanitary single-service towels or hot air blower-type hand dryers will be conveniently located in the toilet rooms and throughout the processing areas. **NOTE: Warm air hand dryers shall not be the sole means of hand drying at employee lavatories.** Toilet rooms and fixtures, dressing rooms, and handwashing facilities will be maintained in a clean, orderly manner. There shall be a sanitary waste receptacle in each toilet room. Odor masking devices shall not be used as an attempt to conceal the effects of poor sanitation and/or ventilation. Toilet/ dressing rooms shall not be used for storage of cleaning equipment.

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**5.9 Construction, Repair, and Maintenance of Equipment and Utensils.** Equipment and utensils shall be designed, constructed, and used to preclude the adulteration of ice with toxic lubricants, fuel, metal fragments, contaminated water, or 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 in a manner that prevents contamination of ice or ice contact surfaces. The only lubricants authorized (within the stated limitations) are those listed in 21 CFR 178.3570. Many of these authorized lubricants are found in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs". The MACOM Surgeon may provide a list of other lubricants from 21 CFR 178.3570. Equipment and utensils shall be of such material and workmanship so as to be smooth, easily cleanable, and durable. The food contact surfaces of such equipment and utensils 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, brass, copper, cadmium, lead, zinc, and/or other toxic materials. Galvanized surfaces which contact ice are considered nontoxic provided that the galvanized surfaces are smooth, easily cleanable, and free of any visible corrosion and that the pH of the potable water used is above 6.5. The pH and chlorine will be checked as part of the sanitary inspection. Where the pH of the potable water is less than 6.5 and galvanized ice contact surfaces are used, additional potable water, core water, and ice samples will be taken. These samples will be laboratory tested for pH and presence of heavy metals. Laboratory results will be reviewed prior to completing the sanitary compliance checklist. Any ice contact surface that is not in good repair (chipped, corroded, broken, cracked, and so forth) should be carefully evaluated to determine if a serious health hazard, either the leaching of toxic metals or the inability to sanitize surfaces, exists which would require upgrading the defect to critical on the checklist. Solder on the food contact surfaces shall be hard solder. Equipment shall be located in a manner that provides adequate space for cleaning, maintenance, and inspection. Portable equipment and utensils shall be maintained in a clean sanitary condition when not in use and shall be stored in clean cabinets or other suitable enclosures for protection from contamination.

**5.9.1 Canvas Containers.** Canvas containers shall not be used unless provided with a sanitary single-service lining so as to completely protect the ice.



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**5.9.2 Tank Covers.** Freezing tank covers will be designed and maintained to protect ice containers from splash, drip, and other contamination.

**5.10 Cleaning and Sanitizing Treatment.** Methods used for cleaning and sanitizing shall not contaminate nor adulterate the product. All products shall be moved sufficiently 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 treatment shall be properly labeled and stored. Cleaning and sanitizing chemicals shall be used as prescribed by the manufacturer's label directions. The only sanitizers authorized (within the stated limitations) are those listed in 21 CFR 178.1010. Many of these are found in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs". The MACOM Surgeon may provide a list of other sanitizers from 21 CFR 178.1010. Freezing cans will be disinfected by steam or submerged for 1 minute in a 50 parts per million (ppm) free available chlorine solution at 75-80°F (24-27°C). When chemical sanitizers are used, a test kit, other devices, or approved method that accurately measures the correct concentration of the solution shall be available and used. If water is used as the sanitizer, it must be not less than 170°F (77°C) with a minimum of 30 seconds contact time. All rooms and areas used to receive, inspect, process, or store components or the finished product shall be maintained in a clean, sanitary manner to preclude the possibility of microbiological, chemical, or physical contamination.

**5.10.1 Contact Surfaces.** Loading platforms, conveyors, chutes, and other contact surfaces shall be washed and sanitized as often as necessary.

**5.10.2 Treatment Facilities.** All water filters, settling tanks, and other treatment facilities shall be cleaned as often as necessary to keep them in a clean and sanitary condition.

**5.11 Methods.** Methods used in processing, handling, and storage shall be conducted in a sanitary manner to prevent contamination or adulteration. Methods shall not contribute to deterioration of the product.

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**5.11.1 Ice.** Ice shall be made from a supply of potable water that meets the requirements of 5.6.

**5.11.2 Water Treatment.** Use of chemicals or additives shall be in accordance with regulations promulgated under the food additives amendment to the Federal Food, Drug, and Cosmetic Act (21 CFR).

**5.11.3 Dipping Wells.** Ice shall not come into direct contact with water in dipping wells. Only potable water shall be used in sprays and in filling dipping wells for the removal of ice cakes from the ice cans or tanks.

**5.11.4 Air.** Air used for water agitation shall be filtered or otherwise treated to render it free of dust, dirt, insects, and extraneous materials. Air intakes shall be located upstream from the compressor and shall be easily removable for cleaning or replacement. The blower or compressor for supplying air for water agitation shall be designed so it will deliver oil-free air.

**5.12 Public Health Controls.** When applicable, means shall be provided to assure adequate public health control of the raw materials and finished product. Means shall include physical, chemical, and microbiological examinations and tests necessary to establish that the product has not been adulterated or contaminated. Records of such examinations and/or tests shall be on file and made available to the military inspector. Water subjected to treatment shall be sampled prior to the manufacture of each production lot of ice.

**5.13 Cooling and Refrigeration.** Cooler rooms shall be free from objectionable odors and mold. They shall also be maintained in a sanitary condition. The coolers and freezers shall be capable of maintaining temperature and humidity necessary for the preservation of the foods being stored or processed. Refrigerated rooms shall be equipped with a thermometer graduated in not more than 2°F (1°C) divisions and with an accuracy of +/- 2°F (+/- 1°C) throughout the specified scale range. Cooling and refrigeration units must not be overloaded.



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**5.14 Storing and Storage Facilities.** Storage facilities shall be provided for storing incoming water, packing and packaging materials, and finished products. They shall be clean, sanitary, and in good repair. Storing methods that minimize deterioration and prevent contamination shall be used. Shelves, cabinets, and dunnage or pallets shall be used where necessary to protect materials from contamination. Single-service articles and packaging materials shall be maintained in sanitary boxes, cartons, tubes, or otherwise protected and handled in a sanitary manner. All storage facilities, including walk-in coolers, must have at least 4 inches between pallets of items and the wall.

**5.15 Control of Insects, Birds, Rodents, and/or Other Animals.** Insects, birds, rodents, and/or other animals shall be excluded from the plant. Effective measures for the control of insects, birds, rodents, and/or other animals shall be maintained at all times. The presence of any harborage, attractant, and/or 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 and extermination, or other means to effect exclusion of pests, dirt, and other filth that may be a source of contamination. Pesticides (insecticides and rodenticides), if used, shall be limited to those which appear 40 CFR 185. Many such pesticides are listed in the USDA publication, "List of Proprietary Substances and Nonfood Compounds Authorized for Use Under USDA Inspection and Grading Programs". Similar products that are approved by other Federal agencies such as the FDA or EPA can be used provided it can be determined (whether by approved labels on the product or other means) that the products are in fact approved by a recognized Federal Health Agency. The MACOM Surgeon may recommend additional products from 40 CFR 185. These products shall be used as prescribed by label directions, and shall be handled and stored in a safe manner.

**5.16 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. Vehicles used for transporting or delivering unpackaged ice shall be of closed construction with tight-fitting covered bodies. All vehicle surfaces coming in contact with packaged or unpackaged ice shall be thoroughly cleaned, washed, and sanitized immediately prior to loading the ice.

**MIL-STD-906A****5.17 Cleanliness and Health of Personnel.**

**5.17.1 Cleanliness.** All employees shall wash their hands before beginning work and upon returning to work from breaks, other absences, 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, drinking, smoking, expectorating, or using tobacco in any form shall be prohibited in each room and compartment where any food products or supplies are prepared, stored, or otherwise handled. With the exception of plain wedding bands or emergency medical bracelets, personnel involved in ice production shall not wear any jewelry or fingernail polish. All persons engaged in receiving, testing, processing, manufacturing, packaging, or handling shall wear clean, white, or light colored washable or disposable outer garments that are suitable for the work being performed. Hair nets, caps, beard nets, or other effective hair restraints to effectively cover hair shall be worn to prevent contamination of ice and ice contact surfaces. Employee's personal effects shall not be stored in production areas. A locker or other suitable storage facility will be provided for each employee. Locker rooms and lunch rooms shall be maintained in a clean, orderly fashion at all times. No personnel shall enter any room or area where ice contacts a walking surface, unless clean suitable boots or shoe coverings provided expressly for this purpose are worn. The boots or shoe coverings shall be removed when the individual leaves the room or area. If the boots or shoe coverings are not removed, they shall be thoroughly washed in an approved sanitizing solution before reentering such rooms or areas. Street shoes or boots without suitable coverings shall not be allowed or used in these areas or rooms.

**5.17.2 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 room 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, disease control, and of protection principles. They 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  
**Project No. 89GP-0131**

**Review activities:**

Army - MD  
Navy - MS  
Air Force - 50

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 Forms Center, ATTN: NPODS, 5801 Tabor Avenue, Philadelphia, PA 19120-5099. The title and identifying symbol should be stipulated when requesting copies of military standards.

ICE PLANT SANITARY COMPLIANCE CHECKLIST (This checklist is an integral part of MIL-STD-906A and its application is mandatory.)		1. DATE OF INSPECTION (YYMMDD)	
<b>2. PLANT INSPECTED</b>			
a. NAME		b. ADDRESS	
<b>3. PLANT OWNER</b>			
a. NAME OF COMPANY OR INDIVIDUAL			b. TELEPHONE NUMBER
<b>4. ACCOMPANYING INDIVIDUAL</b>			
a. NAME		b. TITLE	
SANITATION DEFECTS (1)		ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
<b>5. PREMISES</b>			
a. Not clean or well organized		3	
b. Not well drained		3	
c. Surroundings not free from nuisances and sources of contamination		5	
d. Approaches to shipping docks not clean and maintained to minimize dust		5	
<b>6. RAW MATERIALS</b>			
a. Ice not inspected upon receipt and at other times as needed for determination of adulteration, contamination, or other conditions		5	
b. Single-service articles and packaging materials not protected by sanitary boxes, cartons, or other means		4	
<b>7. CONSTRUCTION OF BUILDING</b>			
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. Wiring, pipes, hangers, ducts and so forth not clean or appropriately enclosed to prevent contamination		4	
e. Exterior openings not clean and in good repair		4	
f. Exterior openings do not prevent the entrance of insects, birds, rodents and/or other animals		4	
g. Air curtains, if used, not in compliance with NSF standards		3	
h. Screen doors not outward opening and/or not self-closing		3	
i. Processing area opens directly into living quarters, garages, maintenance shops and so forth		4	
<b>8. LIGHTING</b>			
a. Insufficient lighting		4	
b. Lights in processing and storage areas not equipped with shields when required		5	
<b>9. VENTILATION AND HUMIDITY</b>			
a. Insufficient control of moisture and 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 or not directed outward when required		5	
<b>10. WATER SUPPLY</b>			
a. Not easily accessible		4	
b. Inadequate in quantity		5	
c. Undiminished supply of hot water not available		5	
d. Mixing valves not available at all scullery sinks		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		5	
h. Potable water supply found to be nonpotable		Critical	
i. Nonpotable water outlets not identified by prominently displayed color code and labels		5	
<b>11. DISPOSAL OF WASTES</b>			
a. Liquid wastes not disposed of in a sanitary manner		5	
b. Floor drains not functional or properly trapped		3	

## ICE PLANT SANITARY COMPLIANCE CHECKLIST

SANITATION DEFECTS (1)	ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
<b>11. DISPOSAL OF WASTES (Continued)</b>		
c. Waste not collected in suitable, properly covered containers and disposed of at frequent intervals and/or in a sanitary manner	4	
<b>12. TOILETS / DRESSING ROOMS AND HANDWASHING FACILITIES</b>		
a. Sufficient number of toilets or privies not provided	5	
b. Toilet rooms not conveniently located	4	
c. Toilet rooms constructed of materials that are not easily cleaned	4	
d. Toilet rooms not adequately lighted	2	
e. Toilet rooms not separately vented to the outside	5	
f. Toilet doors not self-closing and tight-fitting	3	
g. Absence of handwashing sign	3	
h. Water at suitable temperature, soap, soap dispenser, or appropriate hand-drying facilities absent or not conveniently located	5	
i. Continuous cloth towel dispensers, if used, not in compliance with NSF Standards	3	
j. Sanitary waste receptacles not present	3	
k. Toilets, dressing rooms, or handwashing facilities not maintained in a clean, orderly fashion	4	
l. Restrooms used for storage of cleaning equipment	3	
m. Privies not separate from the processing building	Critical	
n. Privies not of sanitary type, location, and construction	5	
o. Each employee not furnished a locker or other suitable facility	5	
p. Boots or shoe coverings are not worn when required, and not removed or washed or sanitized when required	4	
<b>13. CONSTRUCTION AND REPAIR OF EQUIPMENT AND UTENSILS</b>		
a. Design, construction, and use of equipment and utensils does not preclude the adulteration of ice	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 product surfaces are readily sanitizable	5	
f. Equipment not easily accessible for cleaning, maintenance and inspection	5	
g. Canvas containers not provided with single-service liners	5	
h. Storage - water tanks not covered	5	
i. Tank covers do not meet requirements	5	
j. Prohibited lubricants used on ice contact surfaces	Critical	
k. Lubricants not used in a manner that prevents contamination of ice or ice contact surfaces	5	
<b>14. CLEANING AND SANITIZING TREATMENT</b>		
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	Critical	
d. Cleaning and sanitizing chemicals not properly labeled or stored	5	
e. Unauthorized chemical compounds used for cleaning and sanitizing	Critical	
f. Test kit or other device not used when chemical sanitizers are utilized	5	
g. Water used as sanitizer less than 170° F (77°C) and/or contact time less than 30 seconds	5	
h. Rooms and areas not maintained in a clean, sanitary manner	5	
i. Contact surfaces not cleaned and sanitized as required	5	
j. Treatment facilities not maintained in a clean, sanitary manner	5	
k. Cleaning and sanitizing chemicals not used as prescribed by manufacturer's recommendations	Critical	
<b>15. METHODS</b>		
a. Methods permit contamination / adulteration of product	Critical	
b. Methods permit deterioration of product	5	
c. Ice not made from potable water which meets requirements	Critical	
d. Chemicals or additives not used as required	5	
e. Ice comes into contact with water in dipping wells	5	
f. Air for water agitation not filtered or treated	5	

# ICE PLANT SANITARY COMPLIANCE CHECKLIST

SANITATION DEFECTS (1)		ASSIGNED DEFECT POINTS (2)	INSPECTOR'S DEFECT POINTS (3)
<b>15. METHODS (Continued)</b>			
g Air intakes not as required		4	
h Blower or compressor not as required		4	
<b>16. PUBLIC HEALTH CONTROLS</b>			
a When applicable, examinations not performed to assure adequate public health control of raw materials and finished products		5	
b Records of examination and tests of raw materials and finished products not available		5	
<b>17. COOLING AND REFRIGERATION</b>			
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	
<b>18. STORING AND STORAGE FACILITIES</b>			
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	
<b>19. CONTROL OF INSECTS, BIRDS, RODENTS, AND / OR OTHER ANIMALS</b>			
a Presence of insects, birds, rodents, and/or other animals in production area		Critical	
b Presence of insects, birds, rodents, and/or other animals in nonproduction area		5	
c Effective measures for control of insects, birds, rodents, and/or other 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 as prescribed by label directions		Critical	
g Insecticides or rodenticides are handled or stored in an unsafe manner		Critical	
<b>20. VEHICLES AND TRANSPORTATION FACILITIES</b>			
a Not constructed or operated to protect contents from contamination or deterioration		Critical	
b Not properly maintained or not clean		3	
c Not washed prior to loading unpackaged ice		4	
<b>21. CLEANLINESS AND HEALTH OF PERSONNEL</b>			
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 Unauthorized jewelry and/or fingernail polish worn by plant personnel		3	
e Employees not wearing garments / 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 that have an infectious wound, sore, or lesion on hands, arms, or other exposed parts of the body not excluded from contacting ingredients, 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, disease control, and proper sanitary rules of food handling		Critical	
<b>22. FORMULA</b>		<b>TOTALS</b>	<b>370</b>
$\text{SCR} = \frac{\text{Net Total of Column 2} - \text{Net Total of Column 3}}{\text{Net Total of Column 2}} \times 100$		<b>MINUS NONAPPLICABLE DEFECT POINTS</b>	<b>-</b>
		<b>NET TOTAL DEFECT POINTS</b>	
<b>23a. SCR COMPUTATIONS</b>			
<b>b. SCR ASSIGNED</b>		<b>c. NUMBER OF CRITICAL DEFECTS</b>	



## ICE PLANT SANITARY COMPLIANCE CHECKLIST

24. OTHER REGULATORY AGENCIES CONCERNED WITH SANITATION OF THIS ESTABLISHMENT *(Record the agency, date, and results of last inspection.)*

25. METHODOLOGY SECTION *(Record narrative information describing the plant, premises, equipment, and procedures.)*

## ICE PLANT SANITARY COMPLIANCE CHECKLIST

26. REMARKS / RECOMMENDATIONS (Key discrepancies noted to the subparagraph numbers above.)

## 27. INSPECTOR

a. TYPED NAME

b. TITLE

c. SIGNATURE

d. GRADE

e. DATE SIGNED (YYMMDD)



**INSTRUCTIONS:** In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (*DO NOT STAPLE*), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

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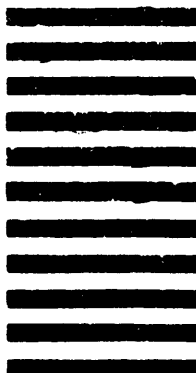
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**STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL***(See Instructions - Reverse Side)*

**1. DOCUMENT NUMBER**  
MIL-STD-906A

**2. DOCUMENT TITLE**  
Sanitary Standards for Ice Plants

**3a. NAME OF SUBMITTING ORGANIZATION**

**4. TYPE OF ORGANIZATION (Mark one)**

☐ VENDOR

☐ USER

☐ MANUFACTURER

☐ OTHER (Specify): \_\_\_\_\_

**b. ADDRESS (Street, City, State, ZIP Code)**

**5. PROBLEM AREAS**

**a. Paragraph Number and Wording:**

**b. Recommended Wording:**

**c. Reason/Rationale for Recommendation:**

**6. REMARKS**

**7a. NAME OF SUBMITTER (Last, First, MI) - Optional**

**b. WORK TELEPHONE NUMBER (Include Area Code) - Optional**

**c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional**

**d. DATE OF SUBMISSION (YYMMDD)**