

Section 2  
TABLE OF CONTENTS  
Sanitation

Section:	Page
02.A General .....	2-1
02.B Housekeeping .....	2-1
02.C Drinking Water .....	2-1
02.D Non-Potable Water .....	2-3
02.E Toilets .....	2-3
02.F Washing Facilities .....	2-6
02.G Showers .....	2-6
02.H Changing Rooms .....	2-7
02.I <u>Laundry of Work Clothing</u> .....	2-7
02.J Food Service .....	2-7
02.K Waste Disposal .....	2-8
02.L Vermin Control .....	2-8
Tables:	
2-1 – Minimum Toilet Facilities (Other than Construction Sites) .....	2-5
2-2 – Minimum Toilet Facilities (Construction Sites) .....	2-6

THIS PAGE INTENTIONALLY LEFT BLANK

## SECTION 2

### Sanitation

02.A General. Employers shall establish and maintain hygienic sanitation provisions for all employees in all places of employment as specified in the following paragraphs.

#### 02.B Housekeeping.

02.B.01 Places of employment shall be kept as clean as possible, taking into consideration the nature of the work. Regular cleaning shall be conducted in order to maintain safe and sanitary conditions in the workplace.

a. Periodic sanitation inspections of food preparation areas (kitchens and dining facilities) shall be conducted at least weekly and documented.

b. In workplaces where toxic dusts, fumes, or mists are generated, all surfaces in the work area and adjacent common use areas shall be cleaned in accordance with a written Housekeeping Plan based on the frequency and quantity of toxic material generation.

02.B.02 The floor of every workroom shall be kept as dry as possible. Drainage shall be maintained where wet processes are used, and false floors, platforms, mats, or other dry standing places shall be provided, when possible. Appropriate footwear shall also be provided.

02.B.03 To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, clutter and unnecessary holes and openings.

#### 02.C Drinking Water.

02.C.01 An adequate supply of potable water shall be provided in all places of employment, for both drinking and personal cleansing.

a. Drinking water shall be provided, whenever possible, from a local municipal water supply that is in compliance with federal, state, and local drinking water standards.

b. When drinking water is obtained from an on-site well, the water shall be tested and the system supplied in accordance with the Safety Drinking Water Act, 40 CFR 141-143, and any state or local drinking water regulations.

c. If water is not available from a local municipal water supply or on-site well, a temporary potable water system shall be provided from a licensed drinking water source.

d. Outside the Continental United States (OCONUS), drinking water at military fixed facilities shall be provided in compliance with country-specific Final Governing Standards (FGS). In the absence of FGS, the National Primary Drinking Water Regulations (NPDWR) as outlined in the Overseas Environmental Baseline Guidance Document (OEBGD), Department of Defense Instruction (DODI) 4715.5-G shall be followed. In addition, sanitary control and surveillance of water supplies and chlorination and fluoridation shall be conducted according to applicable Department of Defense (DoD) Component guidelines, or if more stringent, the host nation requirements.

e. Drinking water on all Army floating vessels shall be provided according to 40 CFR 141 and Chapter 6 of Navy Medical (NAVMED) P-5010. Drinking water and water for washing on all Army floating vessels shall be provided from a potable water source which meets the federal and state requirements or, if generated on the vessel, shall be tested and shall meet the federal and state drinking water requirements.

(1) All hoses, pumps, and valves, shall be dedicated to potable drinking water only and shall be rinsed before each use.

(2) Before connecting at shore side, the supply water should be flushed for 30 seconds.

(3) After transfer is complete, the vessel hose shall be removed first, then the shore side hose removed, and the supply source shall be flushed again and capped.

(4) Drain all hoses, pumps, and valves after each use.

(5) Storage tanks on vessels shall be either chemically or mechanically disinfected when the water fails to meet two consecutive drinking water tests.

02.C.02 Cool drinking water shall be provided during hot weather.

02.C.03 Only approved potable water systems may be used for the distribution of drinking water. Construction trailers and other temporary or semi-permanent facilities shall be properly connected to the local municipal water supply unless the remoteness of the location makes this prohibitive. When unable to connect to the municipal supply, temporary potable water systems shall be utilized and the services provided by a licensed potable water contractor. "Reclaimed water" (treated wastewater) use in potable systems is strictly prohibited.

02.C.04 Drinking water shall be dispensed by means that prevent contamination between the consumer and the source.

02.C.05 Portable drinking water dispensers shall be designed, constructed, and serviced to ensure sanitary conditions, shall be capable of being closed and shall have a tap. Any container used to distribute drinking water shall be clearly marked "DRINKING WATER" and may not be used for other purposes.

02.C.06 Open containers (i.e., barrels, pails, or tanks) or any container (with or without a fitted cover) from which the water is dipped or poured are prohibited for drinking water. Lid shall remain on a container except when being sanitized, washed or filled.

02.C.07 Fountain dispensers shall have a guarded orifice.

02.C.08 Use of a common cup (a cup shared by more than one worker) and other common utensils is prohibited. Employees shall use cups when drinking from portable water coolers/containers. Unused disposable cups shall be kept in sanitary containers and a waste receptacle shall be provided for used cups.

02.C.09 Potable drinking water dispensers shall only contain drinking water and shall not be used to store or cool drinks or food or other items.

02.C.10 All potable wells intended for drinking water or human contact shall include appropriate wellhead protection to ensure sanitary quality. Wellhead protection shall include methods or accessories to prevent fecal contamination, insect infestation, and deliberate human actions that might jeopardize the quantity and quality of the water supply.

#### 02.D Non-Potable Water.

02.D.01 Outlets dispensing non-potable water shall be conspicuously posted "CAUTION - WATER UNSAFE FOR DRINKING, WASHING, OR COOKING". Outlets dispensing non-potable water at Corps Dumping Stations within campgrounds may, in lieu of this requirement, be posted in accordance with USACE's Engineering Pamphlet (EP) 310-1-6A and EP 310-1-6B.

02.D.02 There shall not be any cross-connection, open or potential, between a system furnishing potable water and a system furnishing non-potable water.

02.D.03 Non-potable water may be used for cleaning work areas, except food processing and preparation areas and personal service rooms, provided this non-potable water does not contain concentrations of chemicals, fecal coliform or other substances which could create unsanitary conditions or be harmful to employees.

#### 02.E Toilets.

02.E.01 General. Toilets shall be present in all places of employment and shall contain the following:

➤ Exception: The requirements below do not apply to mobile crews or to normally unattended work locations if employees working at these locations have transportation readily available to nearby toilet and/or washing facilities which meet the other requirements of this paragraph.

a. Separate toilet facilities, in toilet rooms provided for each sex shall be provided in all places of employment according to Table 2-1. Separate toilet rooms for each sex need not be provided if toilet rooms can only be occupied by one person at a time, can be locked from the inside and contain at least one toilet seat (where such single-occupancy rooms have more than one commode, only one commode in each toilet room may be counted);

b. Hot and cold running water, or tepid running water [tepid water is 60° F - 100° F (15.5° C - 37.8° C)];

c. Hand soap or similar cleansing agents shall be provided;

d. Individual disposable paper towels or warm air blowers designed for hand-drying, convenient to the lavatories;

e. An adequate supply of toilet paper and a holder for each seat;

f. Contained within an individual compartment and equipped with a door and separated from other toilet fixtures by walls or partitions sufficiently high to ensure privacy;

g. Adequate interior lighting;

h. Washing and toilet facilities shall be cleaned regularly and maintained in good order;

i. Each commode shall be equipped with a toilet seat and toilet seat cover. Each toilet facility - except those specifically designed and designated for females - shall be equipped with a metal, plastic or porcelain urinal trough; and

j. Adequate ventilation. All windows and vents shall be screened; seat boxes shall be vented to the outside [minimum vent size 4 in (10.1 cm)] with vent intake located 1 in (2.5 cm) below the seat.

02.E.02 Construction Sites. Toilet facilities on construction sites shall be provided as follows (the requirements of this subsection do not apply to mobile crews or to normally unattended work locations if employees working at these locations have transportation immediately available to nearby toilet facilities):

a. Where sanitary sewers are not available, job sites shall be provided with chemical toilets, re-circulating toilets, or combustion toilets unless prohibited by state/local codes;

b. Each toilet facility shall be equipped with a toilet seat and toilet seat cover. Each toilet facility - except those specifically designed and designated for females - shall be equipped with a metal, plastic, or porcelain urinal trough. All shall be provided with an adequate supply of toilet paper and a holder for each seat;

TABLE 2-1

Minimum Toilet Facilities  
(Other than Construction Sites)

Number of employees	Minimum number of Toilets <sup>1</sup>
1 to 15	One (1)
16 to 35	Two (2)
36 to 55	Three (3)
56 to 80	Four (4)
81 to 110	Five (5)
111 to 150	Six (6)
Over 150	Refer to Note <sup>2</sup>

Note:

<sup>1</sup>Where toilet facilities will not be used by women, urinals may be provided instead of commodes, except that the number of commodes in such cases shall not be reduced to fewer than 2/3 of the minimum number specified.

<sup>2</sup>One additional toilet fixture for each additional 40 employees.

c. Toilets shall be provided for each sex according to Table 2-2. Separate toilet rooms for each sex need not be provided if toilet rooms can only be occupied by one person at a time, can be locked from the inside and contain at least one toilet seat;

d. Where it is not practical to provide running water, hand sanitizers may be used as a substitute for running water. Hand sanitizers must contain at least 60% ethyl alcohol as its active ingredient and workers shall be trained to properly use the sanitizer.

e. Toilet facilities shall be constructed so that the occupants are protected against weather and falling objects; all cracks shall be sealed; the door shall be tight-fitting, self-closing, and capable of being latched from the inside;

f. Adequate ventilation shall be provided; all windows and vents shall be screened; seat boxes shall be vented to the outside [minimum vent size 4 in (10.1 cm)] with vent intake located 1 in (2.5 cm) below the seat;

g. Toilet facilities shall be constructed so that the interior is lighted; and

h. Provisions for routinely servicing and cleaning all toilets and disposing of the sewage shall be established before placing toilet facilities into operation. The method of sewage disposal and the placement location selected shall be in accordance with Federal, state, and local health regulations.

TABLE 2-2

Minimum Toilet Facilities  
(Construction Sites)

Number of employees	Minimum number of Toilets <sup>1</sup>
20 or fewer	One (1)
20 or greater	One (1) toilet seat and One (1) urinal per 40 workers.
200 or greater	One (1) toilet seat and One (1) urinal per 50 workers.

Note: <sup>1</sup>Where toilet facilities will not be used by women, urinals may be provided instead of commodes, except that the number of commodes in such cases shall not be reduced to fewer than 2/3 of the minimum number specified.

02.E.03 Employees working in temporary field conditions, in mobile crews or in normally unattended work locations shall be provided at least one toilet facility unless transportation to nearby toilet facilities is readily available.

02.F Washing Facilities.

02.F.01 Washing facilities shall be provided at toilet facilities and as needed to maintain healthful and sanitary conditions.

02.F.02 Each washing facility shall be maintained in a sanitary condition and provided with water from an approved potable water supply. Water shall be either hot and cold or tepid running water. Soap and either individual disposable paper towels or warm air blowers designed for hand-drying shall be provided. If impractical to provide running water, hand sanitizer and individual disposable paper towels may be used.

02.F.03 Washing facilities shall be in close proximity to the worksite.

02.G Showers.

02.G.01 Washing facilities for persons engaged in application of paints, coatings, herbicides, insecticides, or other operations where contaminants may be harmful shall be at or near the work site and shall be equipped to enable employees to remove such substances.



02.G.02 Whenever showers are required by a particular standard, the showers shall be provided in accordance with the following:

- a. One shower shall be provided for every ten employees (or fraction thereof) of each sex, who are required to shower during the same shift;
- b. Body soap or other appropriate cleansing agents for the showers shall be provided;
- c. Showers shall be equipped with hot and cold water from an approved potable water supply feeding a common discharge line; and
- d. Employees who use showers shall be provided with individual clean towels.

02.H Changing Rooms. Whenever employees are required by a particular standard to wear protective clothing, changing rooms shall be equipped with separate storage facilities for both street clothes and protective clothing.

02.I Laundry of Work Clothing. If non-disposable work clothing provided by the employer becomes contaminated, provisions shall be made to ensure clothing is laundered and decontaminated by the employee prior to reuse. Employees shall not wear contaminated clothing when leaving the worksite. If contaminated work clothing is taken to a commercial laundry, the laundry representative must be advised of the potential contaminants on the clothing.

02.J Food Service.

02.J.01 All USACE food service facilities and facilities operated under USACE contracts, including galleys aboard vessels, shall be compliant with the US Public Health Service (USPHS) Food and Drug Administration (FDA) Food Code.

02.J.02 All employee food service facilities and operations shall be conducted in accordance with sound hygienic principles.

02.J.03 In places of employment where all or part of the food service is provided, the food dispensed shall be wholesome, free from spoilage, and shall be processed, prepared, handled, and stored in such a manner as to be protected against contamination.

02.J.04 No employee may be allowed to consume food or beverages in a toilet room or in any area exposed to a toxic material.

02.J.05 No food or beverages may be stored in toilet rooms or in an area exposed to a toxic material.

02.J.06 Food handlers are not required to have a general medical exam, but must obtain a statement from a licensed physician, physician's assistant, or nurse practitioner attesting that they are free of communicable diseases. Food handlers shall complete at least 8 hours of food service sanitation training annually.

02.J.07 All USACE food service facilities and facilities operated under USACE contracts, including galleys aboard vessels, shall be inspected for compliance with the USPHS FDA Food Code at least semi-annually.

#### 02.K Waste Disposal.

02.K.01 An adequate number of waste receptacles shall be provided in a food service area and used for the disposal of waste food. Receptacles shall be constructed of smooth, corrosion-resistant, easily cleanable, or disposable materials, provided with solid tight-fitting covers, emptied at least daily and maintained in a sanitary condition.

02.K.02 Receptacles used for putrescible solid or liquid waste or refuse shall be constructed in order to prevent leakage and to allow thorough cleaning and sanitary maintenance. Such receptacles shall be equipped with solid tight-fitting covers, unless they can be maintained in sanitary conditions without covers.

02.K.03 All sweepings, solid or liquid wastes, refuse, and garbage shall be removed in a manner which avoids creating a menace to health and should be discarded as often as necessary or appropriate to maintain sanitary conditions in the place of employment.

#### 02.L Vermin Control.

02.L.01 Every enclosed workplace shall be constructed, equipped, and maintained, as practicable as possible, in order to prevent the entrance or harborage of rodents, insects, or other vermin.

02.L.02 A continuing and effective extermination program shall be instituted when the presence of vermin is detected. The use of licensed exterminators/pest control personnel is required.

## STUDY QUESTIONS

1. Outlets dispensing non-potable water shall:
  - a. have a conspicuously posted Caution sign.
  - b. not be allowed on Government construction sites.
  - c. have a failsafe lock.
  - d. be no larger than one inch in diameter.
  
2. Open containers such as barrels, pails, or tanks, may be used for drinking water if properly sterilized.
  - a. True
  - b. False
  
3. Reclaimed water (treated wastewater) used in potable systems is \_\_\_\_\_.
  - a. permitted when properly labeled
  - b. permitted only when approved by the APP
  - c. strictly prohibited
  - d. prohibited unless no other means is available to obtain drinking water
  
4. Open containers such as barrels, pails, or tanks, or any container from which the water is dipped or poured may be permitted for drinking water when tested.
  - a. True
  - b. False
  
5. No employee may be allowed to consume food or beverages \_\_\_\_\_.
  - a. outdoors on the worksite
  - b. in any area exposed to a toxic material
  - c. in rooms containing cleaning supplies
  - d. in offices or meeting rooms