f. ENG Form 6211, Rescue Service Evaluation (non-mandatory) (https://publications.usace.afpims.mil/LinkClick.aspx?fileticket=RADyavlF2UY%3d&tabid=16438&portalid=76&mid=43543) (34-10.f)

g. ENG Form 6212, Confined Space Survey (non-mandatory) (https://publications.usace.afpims.mil/LinkClick.aspx?fileticket=ddYCx6I_KB0%3d&tabid=16438&portalid=76&mid=43543) (34-10.g)

Chapter 35
Sanitation

35-1. References.

a. ANSI/ASSP A10.25, Sanitation in Construction (https://webstore.ansi.org/) (35-1.a)

b. ANSI/ISEA Z358.1, Emergency Eyewash and Shower Equipment (https://webstore.ansi.org/) (35-1.b)

c. ANSI/SAI Z4.3, Sanitation – Non-Sewered Waste-Disposal Systems – Minimum Requirements (https://webstore.ansi.org/) (35-1.c)

d. EP 310-1-6a, Sign Standards Manual, (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/) (35-1.d)

e. EP 310-1-6b, Sign Standards Manual, VOL 2 (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/) (35-1.e)

f. EPA Integrated Pest Management Principles (https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles) (35-1.f)

g. FDA Food Code 2009: Chapter 4 - Equipment, Utensils & Linens (https://www.fda.gov/food/fda-food-code/food-code-2009) (35-1.g)

h. NAVMED P-5010-6, Water Supply Afloat (https://www.med.navy.mil/Directives/) (35-1.h)

i. NSF/ANSI 12, Automatic Ice Making Equipment (https://webstore.ansi.org/standards/nsf/nsfansi122018) (35-1.i)

j. TB MED 530/NAVMED P-5010-1/AFMAN 48-147_IP, Tri-Service Food Code (https://armypubs.army.mil/ProductMaps/PubForm/TB_Cal.aspx) (35-1.j)

k. TB MED 531, Facility Sanitation Controls and Inspections (https://armypubs.army.mil/ProductMaps/PubForm/TB_Cal.aspx) (35-1.k)

l. TB MED 577 NAVMED P-5010-10/AFMAN 48-138_IP, Sanitary Control and Surveillance of Field Water Supplies (https://armypubs.army.mil/ProductMaps/PubForm/TB_Cal.aspx) (35-1.l)

m. U.S. Public Health Service (USPHS) - FDA, Food Code (https://www.fda.gov/media/110822/download) (35-1.m)

n. 29 CFR 1910.22, General Requirements (Walking-Working Surfaces) (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol5/pdf/CFR-2020-title29-vol5-sec1910-22.pdf) (35-1.n)

o. 29 CFR 1910.141, Sanitation (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol5/pdf/CFR-2020-title29-vol5-sec1910-141.pdf) (35-1.o)

p. 29 CFR 1915.81, Housekeeping (General Working Conditions) (https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol7/pdf/CFR-2021-title29-vol7-sec1915-81.pdf) (35-1.p)

q. 29 CFR 1926.32, Definitions (General Safety and Health Provisions) (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol8/pdf/CFR-2020-title29-vol8-sec1926-32.pdf) (35-1.q)

r. 29 CFR 1926.51, Sanitation (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol8/pdf/CFR-2020-title29-vol8-sec1926-51.pdf) (35-1.r)

s. 40 CFR 141, National Primary Drinking Water Regulations (https://www.govinfo.gov/content/pkg/CFR-2020-title40-vol25/pdf/CFR-2020-title40-vol25-part141.pdf) (35-1.s)

t. 40 CFR 142, National Primary Drinking Water Regulations Implementation (https://www.govinfo.gov/content/pkg/CFR-2020-title40-vol25/pdf/CFR-2020-title40-vol25-part142.pdf) (35-1.t)

u. 40 CFR 143, Other Safe Drinking Water Act Regulations (https://www.govinfo.gov/content/pkg/CFR-2020-title40-vol25/pdf/CFR-2020-title40-vol25-part143.pdf) (35-1.u)

35-2. Definitions.

a. Contaminated. Any material which by reason of its action upon, within, or to a person is likely to cause physical harm. (35-2.a)

b. Food Handler. A food handler is an employee of a food facility/establishment who is involved in the preparation, storage, service, or handling of food products. Anyone who prepares food or who may come in contact with food products, food utensils or equipment is a food handler. (35-2.b)

Note. Non-food establishment employees participating in food handling (for example, organizational days) should consult with local and state requirements for required food safety training.

c. Hand Washing Facility. A washing facility for hand washing with potable water, cleansing agent, and drying mechanism. (35-2.c)

d. Hygienic. Conducive to maintaining health and preventing disease, especially by being clean; sanitary. (35-2.d)

e. Potable Water. Water that meets the standards for drinking purposes of the state or local AHJ, or water that meets the quality standards prescribed by the U.S. EPA National Primary Drinking Water Regulations (40 CFR 141). See also TB MED 577 NAVMED P-5010-10/AFMAN 48-138_IP and NAVMED P-5010-6. (35-2.e)

f. Tepid. Tepid water is 60° F - 100° F (15.6° C - 37.8° C). (35-2.f)

g. Toilet Facility. A fixture maintained within a toilet room for the purpose of defecation or urination, or both. A toilet facility may be a toilet, water closet, commode, urinal, or similar. (35-2.g)

h. Toilet Room. An enclosure containing one or more toilet facilities. (35-2.h)

i. Toilet Seat Cover. A disposable or removable seat covering intended to protect the user from direct contact with the toilet seat. (35-2.i)

j. Vermin. Insects, birds, and other animals, such as rodents and feral cats, that may create safety and health hazards for employees. (35-2.j)

k. Washing Facility. A facility near the work site that can be used to provide adequate washing for employees. (35-2.k)

35-3. Personnel Required Qualification/Training.

a. Food Handlers. (35-3.a)

(1) 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.

(2) Training. Food handlers must complete food service sanitation training annually according to TB MED 530/NAVMED P-5010-1/AFMAN 48-147_IP, and local and state laws. Food handlers must meet the following:

(a) Trained to perform their duties in a safe manner and with the ability to protect themselves and others from intentional and unintentional food contamination.

(b) Trained in the basic principles of food safety, which includes but is not limited to the CDC's five foodborne illness risk factors:

(b-1) Food from unsafe sources.

(b-2) Inadequate cooking.

(b-3) Improper holding/time-temperature.

(b-4) Contaminated equipment/cross contamination protection. Discussion must include general sanitation and food allergens.

(b-5) Poor personal hygiene. Discussion must include the impact to public health, communicable diseases transmitted by food handlers, and employee health and hygiene.

(3) Each food handler must receive a minimum of 4 hours of food safety refresher training annually to reinforce training subjects identified in paragraph 35-3.a(2). Exceptions to this requirement are employees who do not prepare food and food handlers who serve in a supervisory role and maintain a Food Protection Manager Certification.

(4) Refresher training.

(a) Must be conducted within a 12-month period beginning no earlier than one month following an employee's initial training.

(b) May be executed incrementally throughout the year to achieve the 4-hour requirement.

b. Extermination license/certification. The determination to use licensed exterminators/pest control personnel must be based on the necessary methods required by the AHA, analysis of SDSs, manufacturer's recommendations, this manual, applicable federal, state, and requirements. (35-3.b)

35-4. Roles and Responsibilities.

a. Employers must establish and maintain hygienic sanitation provisions for all employees in all places of employment as specified in the following paragraphs. (35-4.a)

b. Employees must follow established hygienic sanitation provisions while in all places of employment as specified in the following paragraphs. (35-4.b)

35-5. Inspection Requirements.

a. Inspect all USACE-operated food service facilities and facilities operated under USACE contracts, including galleys aboard vessels, according to TB MED 530 and the USPHS Food Code. (35-5.a)

b. High Risk Facilities. Periodic sanitation inspections of food preparation areas of high risk facilities must be conducted and documented according to TB MED 530 table 8-2, at least quarterly. (35-5.b)

35-6. Activity Hazard Analysis (AHA) Requirements.
Develop AHAs according to paragraphs 1-6 or 2-6, as applicable.

35-7. Minimum Plan Requirements.

a. Housekeeping Plan. A written housekeeping plan or program is required when toxic dusts, fumes, or mists are generated and must include the following elements: (35-7.a)

(1) Detailed description of the activity being performed.

(2) Description of anticipated hazards or concerns and the control measures that will be implemented to control to an acceptable level.

(3) Assignment of personnel and their roles and responsibilities. Include necessary information/documentation to support qualifications/training of such persons. (See para 35-3)

(4) Routine maintenance and housekeeping procedures and schedule.

(5) Inspection and oversight methods to ensure adherence to the plan.

b. Extermination Plan. If vermin controls are implemented on a work site, a written Extermination Plan is required (for example, prevent the entrance or harborage

of rodents, insects, and other vermin). Written plans must be developed according to EPA's Integrated Pest Management Principles and must include the following elements: (35-7.b)

(1) Detailed description of the activity being performed.

(2) Description of anticipated hazards or concerns and the control measures that will be implemented to control to an acceptable level.

(3) Assignment of personnel and their roles and responsibilities. Include necessary information/documentation to support qualifications/training of such persons, to include proof of license/certification when necessary. (See para 35-3)

(4) Description of extermination activities to be performed, including necessary PPE and equipment needed and disposal and clean-up procedures.

(5) SDSs of products (see chapter 6).

(6) Inspection and oversight methods to ensure adherence to the plan.

35-8. General Requirements.

a. Housekeeping. Maintain places of employment as clean as possible, taking into consideration the nature of the work. Conduct regular cleaning to maintain safe and sanitary conditions in the workplace. (35-8.a)

(1) In workplaces where toxic dusts, fumes, or mists are generated, clean all surfaces in the work area and adjacent common use according to a written Housekeeping Plan based on the frequency and quantity of toxic material generation. (See para 35-7)

(2) Keep the floors of workrooms as dry as possible. Maintain drainage where wet processes are used via false floors, platforms, or mats, or provide dry standing places when possible. Utilize appropriate footwear.

(3) To facilitate cleaning, keep all floors, working places, and passageways free from protruding nails, splinters, loose boards, clutter and unnecessary holes and openings.

(4) Regularly clean and maintain in good order all washing and toilet facilities and rooms.

(5) Ice machines must be cleaned at a frequency specified by the manufacturer according to FDA Food Code 2009 chapter 4, part 602.11 section (E) items (4a and b) and NSF/ANSI 12.

b. Drinking Water. Provide an adequate supply of potable water in all places of employment for both drinking and personal hygiene. (35-8.b)

(1) Whenever possible, provide drinking water from a local municipal water supply that meets federal, state, and local drinking water standards.

(2) When drinking water is obtained from an onsite well, test the water and the supply system according to drinking water regulations (that is, 40 CFR 141-143) and any state or local drinking water regulations.

(3) If potable water is not available from a local municipal water supply or onsite well, provide a temporary potable water system from a licensed drinking water source. Purchase of specialized drinking water (for example, bottled water) with use of appropriated funds (USACE only) must be authorized.

(4) Connect construction trailers and other temporary or semi-permanent facilities to the local municipal water supply unless the remoteness of the location makes this prohibitive. See chapter 4 for Temporary Facilities and chapter 11 for NEC standards related to bonding requirements. When unable to connect to the municipal supply, utilize temporary potable water systems and the services provided by a licensed potable water contractor.

(5) Outside the Continental Unites States, provide drinking water at military fixed facilities in compliance with country-specific Final Governing Standards. Additionally, conduct sanitary control and surveillance of water supplies and chlorination and fluoridation according to applicable DoD Component guidelines, or if more stringent, the host nation requirements.

(6) Provide reasonably cool, 50°F to 60°F (10°C to 15.6°C), drinking water during hot weather.

(7) Use only approved potable water systems for the distribution of drinking water. Do not use “reclaimed water” (treated wastewater) in potable systems.

(8) Design, construct, operate and maintain portable drinking water dispensers to ensure sanitary conditions. Portable drinking water dispensers must be capable of being closed and must have a tap. Mark containers used to distribute drinking water with “DRINKING WATER” and do not use for any other purpose. Dispense drinking water by means that prevent contamination between the consumer and the source.

(9) All fountain dispensers must have a guarded orifice.

(10) Portable water coolers, dispensers, or containers will be supplied with single-use disposable cups in a sanitary container attached to or nearby the dispenser body and a waste receptacle for used cups adjacent to the dispenser. Single-use disposable cups or individual refillable containers must be used when drinking from water coolers

or containers. Do not use a common cup or other common utensils (shared by more than one person).

(11) Do not use potable drinking water dispensers to store or cool drinks or food or other items; they may only contain drinking water.

(12) Do not use open containers (for example, barrels, pails, or tanks), or any container (with or without a fitted cover) from which the water is dipped or poured for drinking water. A lid must remain on the container except when being sanitized, washed, or filled.

(13) All potable wells intended for drinking water or human contact must include appropriate wellhead protection to ensure sanitary quality. Wellhead protection includes methods or accessories to prevent fecal matter contamination, insect infestation, and deliberate human actions that might jeopardize the quantity and quality of the water supply.

c. Non-Potable Water. (35-8.c)

(1) Conspicuously mark outlets dispensing non-potable water "CAUTION WATER UNSAFE FOR DRINKING, WASHING, OR COOKING." Outlets dispensing non potable water into dumping stations at USACE managed campgrounds may, in lieu of this requirement, be posted according to EP 310-1-6A and EP 310-1-6B.

(2) There must not be any cross-connection, open or potential, between a system furnishing potable water and a system furnishing non-potable water.

(3) 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.

d. Toilet Facilities. Provide toilet facilities in all places of employment according to the following requirements. For construction sites, see paragraph 35-8.d(2). (35-8.d)

(1) General. 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 facilities which meet the other requirements of paragraph 35-8.d.

(a) Provide separate toilet rooms and facilities for each sex (see table 35-1). 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 toilet rooms have more than one toilet facility, only one toilet facility in each toilet room may be counted.

(b) Provide an adequate supply of toilet paper and a toilet paper holder (roller) for each seat.

(c) When more than one toilet is present in a toilet room, provide each toilet with an individual compartment equipped with a door and separated from other toilets by walls or partitions sufficiently high to ensure privacy.

(d) Provide adequate interior lighting (see chapter 7).

(e) Equip each toilet with a toilet seat and toilet seat cover.

(f) Provide adequate ventilation. Screen all windows and vents and vent seat boxes to the outside minimum vent size 4 inches (10.2 cm) with vent intake located 1 inch (2.5 cm) below the seat.

(g) Extreme Temperatures. Maintain adequate temperatures within toilet rooms to prevent damage to facilities and components and minimize thermal stressors to personnel (see chapter 6).

(2) Construction Sites. Provide toilet facilities on construction sites. The requirements of paragraph 35-8.d 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 that meet the other requirements of this paragraph 35-8.d.

(a) Where sanitary sewers are not available, provide jobsites with chemical toilets, re-circulating toilets, or combustion toilets, unless prohibited by state or local codes.

(b) Equip each toilet with a toilet seat and toilet seat cover.

(c) Each toilet facility, except those specifically designed and designated for females, must be equipped with a metal, plastic, or porcelain urinal trough (see table 35-2).

(d) Provide an adequate supply of toilet paper and a toilet paper holder (roller) for each seat.

(e) Provide separate toilet rooms and facilities for each sex (see table 35-2). 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.

(f) Construct toilet facilities so that the occupants are protected against weather and falling objects, all cracks are sealed, and the door is tight-fitting, self-closing, and capable of being latched from the inside.

(g) Provide adequate ventilation. Screen all windows and vents and vent seat boxes to the outside (minimum vent size 4 inches (10.1 cm)) with vent intake located 1 inch (2.5 cm) below the seat.

(h) Provide adequate interior lighting (see chapter 7).

(i) Establish provisions for routinely servicing and cleaning all toilets and disposing of the sewage before placing toilet facilities into operation. Ensure sewage disposal and the placement location selected are according to applicable federal, state, and local health requirements.

(3) Provide employees working in temporary field conditions, on mobile crews, or in normally unattended work locations with at least one toilet facility, unless transportation to nearby toilet facilities is readily available.

e. Hand Washing Facilities. Provide hand washing facilities at all toilet facilities and as needed to maintain healthful and sanitary conditions. (35-8.e)

(1) Provide all hand washing facilities with water from an approved potable water supply. Water must be either hot and cold running water or tepid running water.

(2) Provide hand soap or similar cleansing agents.

(3) Provide individual disposable paper towels or warm air blowers designed for hand-drying, convenient to the washing facilities.

(4) Where it is not practical to provide running water, hand sanitizer and individual disposable paper towels may be used. Hand sanitizers must contain at least 60% ethyl alcohol as its active ingredient and workers must be instructed on proper use.

f. Washing Facilities. (35-8.f)

(1) Provide adequate washing facilities for persons engaged in application of paints, coatings, herbicides, insecticides, or other operations where contaminants may be harmful at or near the work site so that employees are able to remove such substances.

(2) Whenever showers are required by a particular standard, adhere to the following:

(a) Provide one shower for every ten employees (or fraction thereof) of each sex, who are required to shower during the same shift.

(b) Provide body soap or other appropriate cleansing agents.

(c) Provide hot and cold water from an approved potable water supply feeding a common discharge line.

(d) Provide employees who use showers individual clean towels.

g. Changing Rooms. Whenever employees are required by a particular standard to wear protective clothing, provide changing rooms with separate storage facilities for both street clothes and protective clothing. (35-8.g)

h. Laundry of Work Clothing. If non-disposable work clothing provided by the employer becomes contaminated, establish provisions to ensure clothing is laundered and decontaminated by the employee prior to reuse and prior to leaving the work site. If contaminated work clothing is taken to a commercial laundry, advise the laundry representative of the potential contaminants on the clothing. (35-8.h)

i. Food Service. (35-8.i)

(1) All USACE-operated food service facilities, including galleys aboard vessels, must maintain compliance with TB MED 530 and USPHS Food Code. All other facilities operated under USACE contracts, including galleys aboard vessels, must maintain compliance with the USPHS Food Code.

(2) Provide food that is wholesome, free from spoilage, that is processed, prepared, handled, and stored in such a manner so that it is protected against contamination.

(3) Do not consume, store food, or beverages in a toilet room or in any area exposed to a toxic material.

(4) Food handlers must meet the qualifications and training requirements as listed in paragraph 35-3.

(5) All food service facilities must be inspected according to paragraph 35-5.

j. Waste Disposal. (35-8.j)

(1) Provide an adequate number of waste receptacles in each workspace for proper disposal of materials. Receptacles must be constructed of smooth, corrosion-resistant, easily cleanable, or disposable materials, be provided with solid tight-fitting covers (for food service areas), be emptied at least daily, and be maintained in a sanitary condition.

(2) Provide receptacles used for putrescible solid or liquid waste or refuse that are constructed to prevent leakage and to allow thorough cleaning and sanitary maintenance. Such receptacles must be equipped with solid tight-fitting covers unless they can be maintained in sanitary conditions without covers.

(3) Remove all sweepings, solid or liquid wastes, refuse, and garbage in a manner which avoids creating a menace to health and discarded as often as necessary or appropriate to maintain sanitary conditions.

k. Vermin Control. (35-8.k)

(1) Construct, equip, and maintain enclosed workplaces, as practicable as possible, to prevent the entrance or harborage of rodents, insects, or other vermin.

(2) When the presence of vermin is detected, establish an Extermination Plan according to paragraph 35-7.

35-9. Figures and Tables.

Table 35-1
Minimum Toilet Facilities (Other than Construction Sites)

Number of Employees	Minimum Number of Toilets
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)
Number of Employees	Minimum Number of Toilets
111 to 150	Six (6)
Over 150	Refer to Note 2

Note:
[1] Where toilet facilities will not be used by women, urinals may be provided instead of toilets, except that the number of toilets in such cases must not be reduced to fewer than 2/3 of the minimum number specified.
[2] Add one additional toilet fixture for each additional 40 employees.

Table 35-2
Minimum Toilet Facilities (Construction Sites)

Number of Employees	Minimum Number of Toilets
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:
Where toilet facilities will not be used by women, urinals may be provided instead of toilets, except that the number of toilets in such cases must not be reduced to fewer than 2/3 of the minimum number specified.

35-10. Checklists and Forms.

Not Applicable.