

CHAPTER 5. ENVIRONMENTAL HEALTH

- A. Scope. This chapter provides requirements and guidance to prevent human illness through the elimination or control of biological disease agents and the various modes of their transmission to man.
- B. Background. Environmental health is a science devoted to the identification, evaluation and control of various environmental factors that arise in living or working environments that may lead to impaired health. The primary goal of environmental health is to ensure unit members are provided with healthful working and living conditions. History has repeatedly demonstrated the relationship between a healthful environment and mission accomplishment. To be effective, environmental health programs must be proactive, e.g., conducting training and sanitary inspections, versus reactive, e.g., determining what caused a disease outbreak. One of the best proactive methods is to educate all hands on environmental health hazards and methods of prevention. The following program areas will be discussed within this chapter:
1. Habitability.
 2. Swimming Pools and Spas.
 3. Pest Management.
 4. Food Safety.
 5. Potable Water and Waste Water Systems.
 6. Bloodborne Pathogens
- C. Responsibilities.
1. Maintenance and Logistics Command (kse).
 - a. Provide assistance, funding, equipment, training and references to Safety and Environmental Health Officers to ensure they are able to provide services needed by units in their areas of responsibility (AOR).
 - b. Evaluate units regarding compliance with this instruction during routine unit visits.
 2. Safety and Environmental Health Officer (SEHO).
 - a. Maintain equipment and references to provide services needed by units in their AOR.
 - b. Provide assistance to units regarding the contents of this instruction.

3. Group Commanders and Unit Commanding Officers.
 - a. Ensure that the contents of this instruction are enforced at their unit(s).
 - b. Contact the local SEHO for assistance with any requirements that are beyond the abilities and training of personnel assigned to the unit.

D. Environmental Health Standards.

1. Habitability.

a. References.

- (1) Naval Ships Technical Manual, Chapter 510, Heating, Ventilation, and Air Conditioning Systems for Surface Ships.
<http://cgweb.mlcpac.uscg.mil/mlcpv/>
- (2) Naval Ships Technical Manual, Chapter 330, Lighting.
<http://cgweb.mlcpac.uscg.mil/mlcpv/>
- (3) ASHRAE Standard 62-1999, Ventilation for Acceptable Indoor Air Quality, Section 6.1 (NOTAL)
- (4) Unaccompanied Personnel Housing (UPH) Design Guide, COMDTINST M11012.6 (series), Chapters 3 and 4
- (5) Illuminating Engineering Society (IES) Lighting Handbook (NOTAL)
- (6) Manual of Naval Preventive Medicine, NAVMED P-5010, Chapter 2
<http://www.vnh.org/PreventiveMedicine/PreventiveMedicine.html>

- b. Background. Habitability is an aspect of environmental health that focuses on improving living conditions in berthing and other living spaces. Basic components include sanitation, illumination and ventilation. When these components are optimized, health, morale and duty performance is heightened. Poor living conditions generally have an adverse effect and must be avoided whenever possible. Some operations environments may not allow for optimal habitability. In these situations, the command must continually monitor the status of the operation and determine if improvements in living conditions are possible without compromising the mission. Besides crew living environments, habitability is concerned with protecting the health and well being of personnel utilizing laundry, barber and beauty shops, playgrounds, campgrounds and picnic areas, gymnasiums, theaters, child care centers, administrative spaces, and other similar facilities.

c. Responsibilities:

- (1) Maintenance and Logistics Command (kse). Evaluate habitability of all appropriate areas as part of routine support visits.
- (2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in evaluating conditions in berthing. This includes, but is not limited to ventilation and lighting surveys.
- (3) Unit Commanding Officers and Officers in Charge. Ensure that habitability conditions at their unit meet the minimum standards of this instruction.

d. Habitability Standards. Minimum standards that shall be maintained are as follows:

(1) Berthing Afloat.

- (a) The master-at-arms is responsible for implementing a cleaning schedule in accordance with the Shipboard Regulations Manual. Berthing spaces, heads and showers shall be clean at all times, operable, well ventilated, and well illuminated.
- (b) Routine inspections of toilets, lavatories and berthing spaces shall be conducted to check for problems related to sanitation and health conditions. These inspections are normally conducted by the unit's health services technician (HS) and reported to the CO via XO on the health services log and during material/safety inspections. If no HS is assigned, document inspections during XO or material/safety inspections.
- (c) Indoor air quality shall meet the standards described in D.1.a(1), above.
- (d) Minimum lighting standards are found in D.1.a(2), above.
- (e) Use of polyurethane pillows and sleeping bags aboard ships are prohibited. Clean and comfortable mattresses and bedding are to be maintained.
- (f) Food items are not permitted in berthing spaces to preclude pest problems.

- (g) Pets or other animals are not permitted at any time in these areas.
- (h) Mops, brooms, and other cleaning gear will be thoroughly cleaned and properly stored away from berthing areas after each use in a manner to facilitate drying.
- (i) Problems related to sewage backflow through deck drains shall be identified and corrected as soon as possible using appropriate safe work practices to avoid exposure to potentially infectious human wastes.

(2) Unaccompanied Personnel Housing.

- (a) The master-at-arms will implement a daily cleaning schedule for their respective areas. All spaces shall be kept clean, well illuminated and free of unnecessary clutter.
- (b) The unit Commanding Officer or his/her designee will conduct routine inspections of these spaces to check for sanitation and health conditions. This inspection may be part of a routine material/safety inspection. Discrepancies will be reported back through the chain of command and promptly corrected.
- (c) Indoor air quality shall meet the standards described in D.1.a(3), above. Berthing areas that are not air-conditioned must have screened windows and self-closing doors.
- (d) Minimum lighting standards and other facility requirements are found in D.1.a(4), above.
- (e) Mattresses and bedding will be clean and free from defects.
- (f) Sewage overflow problems constitute an immediate health hazard and will be corrected immediately.
- (g) Dogs, cats, birds or similar pets shall not be permitted in berthing areas. Other pets are allowed at the discretion of the Commanding Officer.
- (h) Mops, brooms, and other cleaning gear will be thoroughly cleaned and properly stored away from living areas after each use in a manner to facilitate drying.

- (i) For officer berthing, the Commanding Officer shall ensure routine inspections are conducted of all spaces, including common rooms and head facilities for compliance of minimum standards of sanitation. Complaints of unsanitary conditions will be investigated and resolved promptly. All head facilities and common rooms will be cleaned on a daily basis. Facility requirements are found in D.1.a(4), above.
- (3) Child Development Centers (CDC). Environmental health concerns are discussed in Child Development Services Manual, COMDTINST M1754.15 (series), Chapter 3.

(4) Administrative Spaces.

- (a) Indoor air quality and illumination must be maintained in accordance with D.1.a(3) and (5), above, respectively.
- (b) Drinking fountains will be of the angle-jet type and should be cleaned at least once daily. Head facilities should be cleaned and re-supplied daily. The minimum ratio of plumbing fixtures to the number of persons to be accompanied are as follows:

	Water Closets	Lavatories	Urinals	Drinking Fountains
Females				
Up to 120	1/15	1/10	None	1/75
Males				
Up to 30	1/15	1/15	1/30	1/75
Up to 120	1/20	1/20	1/40	1/75

- (c) Floors should be cleaned regularly. The type of floor determines the method of cleaning. Carpets and rugs should be maintained and cleaned as recommended by the manufacturer. Lavatory floors, commodes, sinks, and shower stalls must be cleaned and disinfected on a daily basis.
- (d) Mops, brooms, and other cleaning gear will be thoroughly cleaned and properly stored away from working areas after each use in a manner to facilitate drying.
- (e) Cooking is not permitted in administrative spaces. Designated lounges or coffee messes can be utilized if inspected and approved by the unit HS or XO.

(f) Trash receptacles shall be emptied daily and cleaned periodically.

(5) Laundry Facilities.

(a) Members working in laundry areas shall be briefed on safety in the work place, as well as, the hazards of chemical cleaning agents. Personnel must practice proper personal hygiene such as frequent hand washing after cleaning or sanitizing the lavatory

(b) Laundry facilities shall be maintained in a clean and sanitary condition, free from infestation by rodents and insects. Floors will be cleaned at least once daily by dustless methods. Grease drip pans will be installed where necessary and cleaned daily. Paper and trash will be placed in covered containers. Lint will be removed as necessary from bulkheads, overheads, and supporting members.

(c) Plumbing fixtures and appliances will be properly installed, maintained in good repair, and kept in a sanitary condition. These fixtures and appliances will be connected to prevent backflow or cross-connection with the potable water supply. For afloat units, seawater must not be used for laundry facilities when the ship is in polluted waters.

(d) Adequate drinking water will be furnished by means of a drinking fountain of the sanitary angle-jet type. Adequate toilet facilities with a shower and ample locker space will be provided and maintained in a sanitary condition. A sign stating "Wash Hands Before Leaving" will be prominently displayed in all toilet areas.

(e) Eating, drinking (other than water fountain), cooking, smoking, and storage of food, drinks, or smoking materials will be prohibited in rooms where clothing is handled, sorted, marked, washed, and/or dry cleaned.

(f) Unwashed clothes will not be received, sorted, marked, or handled in close proximity to washed clothes. Rooms or spaces should be designed and machines and equipment arranged so that a separate flow of clean and soiled garments will be maintained through the laundry or cleaning process. This flow requires separate contact surfaces, such as tables, carts, shelves, etc. Ventilation should move air from clean to soiled areas to prevent cross-

contamination. Vehicles and containers used for the transportation and storage of laundry and dry cleaning will be kept clean and in a sanitary condition.

(g) Contaminated work clothing/coverall must be laundered separate from domestic laundry. This includes clothing or other laundry that is contaminated during industrial operations, chemical spill cleanups, alien migrant interdiction operations, etc. Personnel may use the laundry facility in their industrial area or the unit's laundry service. If contaminated clothing is laundered in unit laundry, care must be taken to avoid personnel exposure and it shall be laundered separately from normal laundry.

(1) Care must be taken when cleaning chemically contaminated clothing. If clothing is heavily contaminated, consider disposing as hazardous waste.

(2) Laundry that is biologically contaminated (e.g., AMIO, body parasites) shall be washed at a minimum temperature of 120° F and hot air dried. Laundry that may be infested with body parasites (head/body lice) shall be laundered under the direction of the unit HS or XO to maintain confidentiality.

(h) Additional standards for laundry and dry cleaning facilities are found in section 4 of D.1.a(6), above.

(6) Barber and Beauty Shops.

(a) Employees of barbershops and beauty shops will adhere to the following personal hygiene and physical requirements:

(1) All barber and beauty shop employees, including personnel employed by a civilian contract, must be medically screened and determined to be free of communicable disease prior to their initial assignment. Unless required by local laws for subsequent health screening, annual evaluation is not routinely required. The medical screening must be sufficiently comprehensive to detect acute or chronic diseases that may be transmitted by direct or indirect contact during the performance of their services. Depending upon the prevalence of

communicable diseases in the geographical location, local units may order specific testing they consider necessary. Barber and beauty shop employees may be screened by local military medical departments or they may present documentary evidence, acceptable to the command, that a complete and thorough medical screening was completed.

- (2) Barber and beauty operators shall maintain good personnel hygiene and wear clean clothing when attending patrons. Hands will be thoroughly washed with soap and hot water between patrons.
- (b) The serving of persons with inflamed or infectious conditions of the scalp, face, or neck without the written consent of the medical department representative is prohibited.
 - (c) Barbershops and beauty shops will not be located in food service or berthing areas. If barbershops and beauty shops are located within a BOQ, BEQ, officer club or enlisted club, a separate room is required.
 - (d) Indoor air quality and illumination must be maintained in accordance with D.1.a(3) and (5), above, respectively.
 - (e) These shops will be maintained and operated in a clean and sanitary manner as follows:
 - (1) Only FDA-approved tonics, lotions, bleaches, dyes, etc., will be used. Only EPA/FDA disinfectants or sanitizing agents will be used. Questionable or unlabeled products shall be referred to the unit HS, local SEHO, or MLC (kse) for determination of suitability.
 - (2) Therapeutic practices, such as treating skin problems (dermatitis), pimples, ingrown hair, etc., are prohibited.
 - (3) The treatment of eye conditions is prohibited.
 - (4) Common brushes, dusters, etc. are prohibited.
 - (5) Shaving is prohibited.

- (6) Individual sanitary neck strips must be used for each patron.
 - (7) The headrest of barber chairs will be covered with a clean sheet of paper or clean towel for each patron.
 - (8) Only types of material approved by the medical clinic or unit HS will be used to stop the flow of blood in case of “nicks.” These materials will be applied only with freshly laundered towels or sterile cotton.
 - (9) Covering clothes will be changed preferable daily or as often as necessary to ensure cleanliness.
 - (10) Street clothing of operators will not be stored with that of patrons.
 - (11) Barber or beauty operators will not eat, drink, or smoke while attending patrons.
 - (12) Clean, covered sanitary receptacles will be provided for waste materials and used linen. Receptacles should be lined with disposable bags.
 - (13) The removal of cut hair from the decks shall be done frequently by dustless methods. Floors must be washed with detergent and water on a frequent basis to prevent the accumulation of dirt.
 - (14) When compressed air is used to remove hair from patrons, the pressure shall be 15 psi or less.
- (f) Instruments shall be cleaned and disinfected as follows:
- (1) All instruments in direct contact with patrons shall be cleaned and disinfected. Instruments will be thoroughly washed with soap and hot water to remove all film, oil, and debris immediately after use on each patron. Following cleaning, the instruments will then be placed in an EPA-registered disinfecting solution. Solution must be replaced as per manufacturer’s instructions, but at least weekly. Due to the patron load at some facilities, the solutions may require changing on a more frequent basis. All instruments disinfected in a chemical

solution will be rinsed in running potable water to remove the chemical residue prior to use.

- (2) Non-removable clipper heads, must be wiped, dusted and sprayed with an EPA registered disinfecting spray between each patron. Removable clipper heads may be disinfected with the spray or removed, wiped and dusted, and placed in a disinfecting solution as described in the previous paragraph.
 - (3) Adequate numbers of instruments and supplies must be available to accomplish disinfection.
 - (4) Formaldehyde cabinets and similar practices involving highly toxic chemicals for disinfecting are prohibited. Ultraviolet light is not an acceptable method of disinfection
 - (5) The label and Material Safety Data Sheet (MSDS) for any chemical used, including disinfecting solutions and sprays, must be maintained and consulted for information concerning proper use and any storage or handling precautions.
- (g) Operators shall be expected to read, understand, and comply with these requirements. If necessary, bilingual/multilingual translation will be accomplished and posted.
 - (h) Unit HS shall conduct inspections of barber and beauty shops at least monthly.
 - (i) Further guidance can be found in D.1.a(6), above.
- (7) Other Facilities. Standards for campgrounds, picnic areas, play grounds, gymnasiums and theaters are found in D.1.a(6), above.

2. Swimming Pools, Spas, Wading Pools, and Training Tanks.

a. References.

- (1) Manual of Naval Preventive Medicine, NAVMED P-5010, Chapter 4.
<http://www.vnh.org/PreventiveMedicine/PreventiveMedicine.html>
- (2) Public Swimming Pools, ANSI/NSPI-1 1991.

(3) Public Spas, ANSI/NSPI-2 1999.

b. Background. Since water can transmit disease, swimming pools, spas, wading pools, and training tanks have the potential for causing many health problems if they are not properly operated. The risk of contracting a disease from a swimming pool, spa, wading pool, or training tank is extremely low if the facility is operated properly. Safety hazards play an equal and possibly greater role in causing harm to Coast Guard members and their families.

c. Responsibilities.

(1) Maintenance and Logistics Commands (kse). Evaluate swimming pool, spa, wading pool, and training tank sanitation as part of routine support visits.

(2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in evaluating proper sanitation of swimming pools, spas, wading pools, and training tanks.

(3) Group Commanders or Commanding Officers. Ensure the proper operation and safety of swimming pools, wading pools spas, and training tanks at their unit in accordance with D.2.a(1) through (3), above.

d. Swimming pools, spas, wading pools, and training tanks shall be maintained in a manner that affords maximum protection from disease and injuries. D.2.a(1), above, provides requirements for the safe and healthful operation of swimming pools and other bathing areas. Design, construction, operation and maintenance of facilities shall conform to D.2.a(2) and (3), above.

e. Standards for saunas and steamrooms are found in chapter 2 of D.2.a(1), above.

3. Pest Management.

a. References.

(1) Armed Forces Pest Management Board. Standard Pesticides Available to DoD Components and All Federal Agencies.
<http://www.afpmb.org/afpmbdirectoriate/standardlist.htm>

(2) U.S. Navy Shipboard Pest Management Manual.
<http://www.vnh.org/PestControl/>

- (3) Manual of Naval Preventive Medicine, NAVMED P-5010, Chapter 8.
<http://www.vnh.org/PreventiveMedicine/PreventiveMedicine.html>
 - (4) Armed Forces Pest Management Board Technical Information Memorandum Number 39, Guidelines for Preparing Pest Control Contracts. <http://www.afpmb.org/pubs/tims/tim39.htm>
 - (5) Armed Forces Pest Management Board Technical Guide Number 18, Installation Pest Management Program Guide.
<http://www.afpmb.org/pubs/tims/TG18/tg18.htm>
- b. Background. Pest management is important to the health and well-being of Coast Guard personnel and is needed to protect property and resources. Pest management is defined as the control or mitigation of insects and other arthropods, snails, slugs, fungi, weeds, birds, mammals, plant disease agents, and other pest organisms where their presence results in unacceptable consequences. This program seeks to minimize reliance on chemical pest control procedures and the adverse health effects of pesticides. Policy and procedures shall be consistent with the Federal Insecticide, Fungicide and Rodenticide Act, EPA and OSHA standards.
- c. Responsibilities.
- (1) Maintenance and Logistics Commands (kse).
 - (a) Evaluate pest management programs as part of routine support visits.
 - (b) Ensure that vessels that travel overseas are inspected and receive deratization certificate every six months.
 - (2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in evaluating pest control issues and pesticide storage and application.
 - (3) Group Commanders or Commanding Officers.
 - (a) Establish pest management programs as specified in this instruction to ensure the health of personnel and dependents, and to protect real and other property.
 - (b) Ensure that all pesticide applicators have received appropriate training and certification in accordance with

this instruction. This includes contractors that apply pesticides at the unit.

- (c) Use integrated pest management as the first line of defense for pest control. Chemicals shall be used only as a last resort.
- d. Pesticide Applicator Training and Certification. All Coast Guard military and civilian pesticide applicators shall be trained and certified under one of the programs listed below:
 - (1) State Certified or Licensed Pesticide Applicators. State Certified or Licensed Applicators have met the training and certification requirements of the State in which they work. A copy of the certification or license must be maintained onboard the unit.
 - (2) Shipboard Pest Management Specialist. Shipboard Pest Management Specialists have completed the Navy's Shipboard Pest Control Course or Medical Entomology and Pest Management Technology for Preventive Medicine Technicians Course and have received authorization from their respective MLC (kse) to apply non-restricted use pesticides afloat. This program is not available to civilians. Four hours of annual refresher training is required.
 - (3) Coast Guard Limited Duty Pesticide Applicators. Coast Guard Limited Duty Pesticide Applicators are military members authorized by the respective MLC (kse) to apply non-restricted use pesticides on Coast Guard property. This authorization is limited to isolated duty stations or where commercial pest control services are not readily available or are cost prohibitive. Approvals will be limited to specific targeted pests, products and facilities. Personnel must meet any state training requirements for applying non-restricted use pesticides. Units requesting approval for limited duty applicators shall contact their MLC (kse).
 - (4) Afloat unit FS's should be encouraged to attend shipboard pest control training to increase their understanding of sanitation practices related to shipboard pest control, pest recognition, and proper preparation of spaces before and after pesticides are applied. Although these personnel will not receive certification, they may assist the HS in applying pesticides, when directly supervised by authorized personnel.
- e. Integrated Pest Management (IPM) Strategy. It is the policy of the Coast Guard to establish and maintain safe, efficient, and environmentally sound integrated pest management programs to control pests that may adversely

affect health or damage structures or property. IPM is a comprehensive approach to pest control or prevention that considers all available strategies including mechanical, cultural, biological, and chemical techniques.

- (1) Non-chemical pest controls such as good sanitation practices and the elimination of pest harborage and access will be instituted prior to implementing chemical control measures. Occupants of buildings, including family housing, play a critical role in an effective pest management program.
- (2) The uses of preventive or scheduled periodic pesticide treatments are prohibited unless they are based on surveillance information or documented past uncontrolled pest problems (e.g., seasonal pest problems).
- (3) Control of nuisance pests by chemical means is prohibited unless approved by the respective MLC (kse). Nuisance pests are those that do not present a public health threat or do not cause damage to property (e.g., spiders).
- (4) Only pesticides listed in D.3.a(1), above, may be used by CG applicators at shore facilities. Pesticides approved for shipboard use are found in appendix A of D.3.a(2), above. Use of any pesticide not on one of these lists must receive approval from Commandant (G-WKS) prior to purchase.
- (5) Proposed pest management projects that involve the aerial application of pesticides shall be approved by Commandant (G-WKS).

f. Record Keeping. Each unit will maintain a log of all pesticide applications, including general use pesticides. The log must contain, name of applicator, chemical used, quantity used, date of application, location, targeted pest and description of pest problem. The log shall be maintained indefinitely. Non-chemical pest control activities involved in pest management should also be documented. Pest control logs will be made available for review by Headquarters or MLC (k) safety and environmental health professionals.

g. Mixing, Storage, and Transport. Pesticides will be stored, mixed and loaded in suitable facilities and in such a manner that the material is not degraded, and that workers, the public and the environment are not threatened by exposure under routine conditions or in the event of an accidental spill. D.3.a(3), above, provides general guidance on use of pesticides. D.3.a(2), above, gives specific guidance for shipboard use and

storage. Pesticides shall be secured when unattended to prevent tampering and accidental exposure or release into the environment. Units must include pesticides in their spill prevention control and contingency plans.

- h. Before handling any pesticide, read all label directions for use and precautions. Review the MSDS and any other product information sheets that may be available. It is required that pesticides be used according to manufacturers directions.
- i. Commercial and Contract Pest Control Services. Contractors performing pest control work on CG facilities shall comply with all certification, licensing, and registration and use requirements applicable in the legal jurisdiction in which the work is performed. Follow the guidelines in D.3.a(4), above, for all contracts for pest control services. Contracted pest control services shall have an IPM approach. Records must be maintained in accordance with D.3.f. of this chapter. A copy of the certification or license of all commercial applicators must be maintained at the unit.
- j. Rodent Control for Afloat Commands. Commanders of afloat units who travel overseas will maintain a vessel deratization certificate and keep it current every six months. One month extensions may be granted if a request is made to the original issuer before the certificate expires. When moored, approved rat guards shall be properly installed on all ship-shore lines at a minimum distance of 6 feet from ship's hull and 6 feet from the shore (D.3.a(2), above)).
- k. Additional information can be found in D.3.a(2), above, for afloat units and D.3.a(3) and (5), above, for shore units.

4. Food Service Sanitation.

a. References.

- (1) Food Service Sanitation Manual, COMDTINST M6240.4 (series).
- (2) U. S. Food and Drug Administration Food Code.
<http://www.cfsan.fda.gov/~dms/foodcode.html>
- (3) Manual of Naval Preventive Medicine, NAVMED P-5010, Chapter 1.
<http://www.vnh.org/PreventiveMedicine/PreventiveMedicine.html>

b. Background.

- (1) Food protection and environmental sanitation play an important role in preventing food borne illness, as well as ensuring

operational readiness. An oversight in sanitation can lead to proliferation of disease-causing microorganisms sufficient enough to cause an outbreak. For this reason, food service operations require careful management to protect the health and well being of patrons. Steps must be taken to prevent the contamination of food items as they flow through the galley by identifying and addressing critical control points.

- (2) D.4.a(1), above, details the requirements for the Coast Guard's food service sanitation program. D.4.a(2), above, is the industry standard for food service sanitation and D.4.a(3), above, details the U. S. Navy's program.

c. Responsibilities.

- (1) Maintenance and Logistics Command (kse). Evaluate the operation of galleys and the food service sanitation program as part of routine support visits.
- (2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in maintaining a quality food service sanitation program.
- (3) Group Commanders or Commanding Officers. Establish an effective food service sanitation programs as specified in this instruction and reference (1) to ensure the health of all personnel who use the galley or other food services at the unit.

d. Required Program Elements.

- (1) A Food Service Officer (FSO) shall be appointed by the Commanding Officer.
- (2) The unit HS or XO shall perform weekly food service facilities inspections. Results of the inspection shall be submitted to the unit CO/OIC with copies provided to the FSO.
- (3) Foods shall be acquired from approved sources and properly handled from receiving to serving.
- (4) Food service equipment shall be approved by the National Sanitation Foundation (NSF) and properly maintained.
- (5) Strictly follow cleaning and disinfection procedures.

- (6) Report food borne diseases using the disease alert format found in the Medical Manual, COMDTINST M6000.1 (series), Chapter 7. Immediately consult with the servicing MLC (kse) for assistance in a food borne illness investigation.
- (7) Ensure assigned food service personnel are trained annually on sanitation requirements.

5. Potable Water and Wastewater.

a. References.

- (1) Water Supply and Wastewater Disposal Manual, COMDTINST M6240.5 (series).
- (2) Manual of Naval Preventive Medicine, NAVMED P-5010, Chapters 5, 6 and 7.
<http://www.vnh.org/PreventiveMedicine/PreventiveMedicine.html>

b. Background.

- (1) One of the most significant environmental health threats to a unit's operational readiness is having inadequate or contaminated supplies of potable water. Potable water systems shall be managed to provide adequate supplies of potable water for human consumption and culinary purposes.
- (2) For additional information, see D.5.a(1), above, for details of the requirements for the Coast Guard's potable water and wastewater program. D.5.a(2), above, details the U.S. Navy's shore and afloat programs.

c. Responsibilities.

- (1) Maintenance and Logistics Command (kse). Evaluate the water and wastewater program as part of routine support visits.
- (2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in maintaining a proper operation and sanitation of their water and wastewater program.
- (3) Group Commanders or Commanding Officers. Establish a water and wastewater program as required at the unit in accordance with this instruction and D.5.a(1), above.

d. Required Program Elements.

(1) Water Supply Afloat.

- (a) Develop a Water Sanitation Bill to meet the individual needs of the ship and address any unique conditions.
- (b) Ensure that personnel responsible for the maintenance and treatment of the potable water systems receive adequate training.
- (c) Obtain water from approved sources. If the ship must use suspect water, it must be properly disinfected before use.
- (d) Properly handle and store potable water hoses.
- (e) Indoctrinate crew in water conservation methods.
- (f) Take appropriate actions to protect potable water tanks and piping systems.
- (g) Prevent cross-connections between the potable water systems and any other piping system on the ship.
- (h) Install a back-flow prevention device on all potable water hose connections to ensure nonpotable water or other materials are not pulled into the potable water system.
- (i) Conduct required halon residual, pH and bacteriological testing of the water system.
- (j) Investigate all complaints of taste or smell of the water using the guidelines in D.5.a(1), above.

(2) Water Supply Ashore.

- (a) Conduct required halon residual, pH and bacteriological testing of water throughout the unit, if required.
- (b) Properly label all non-potable water sources.
- (c) If unit has its own water system and does not receive water from an approved city water source, they must strictly follow the storage, disinfection, testing and record keeping requirements of D.5.a(1), above, and contact local authorities to determine additional requirements.

- (d) Units with wells must ensure they are properly protected and maintained in accordance with D.5.a(1), above.
- (e) Investigate all complaints of taste or smell in the water according to the guidelines in D.5.a(1), above.
- (f) Install a back-flow prevention device on all potable water hose connections to ensure nonpotable water or other materials are not pulled into the potable water system.
- (g) Follow storage and treatment requirements in D.5.a(1), above, if storing bulk potable water.

(3) Wastewater Treatment Afloat.

- (a) Follow local and federal regulations regarding the discharge of sewage and gray water, including reporting of releases.
- (b) Properly maintain the collection, holding and transfer (CHT) system to prevent accidental discharge of sewage.
- (c) Have a kit available for safe clean up and disinfection of sewage spills onboard.
- (d) Provide training to personnel who conduct maintenance on the CHT systems. Training should include personal hygiene, sanitation, personal protective equipment, and safety.

(4) Wastewater Treatment Ashore.

- (a) Units with septic systems must ensure proper operation and maintenance of the system. Inspect the tanks periodically based on the guidance provided in D.5.a(1), above. Contact the local health department to determine any additional requirements.
- (b) Units with community wastewater treatment systems must follow the guidelines provided in D.5.a(1), above, and contact local and state authorities to determine any additional requirements.
- (c) Provide training to personnel who conduct maintenance on the CHT systems. Training should include personal

hygiene, sanitation, personal protective equipment (PPE), and safety.

- (d) Units with a wastewater treatment plant shall comply with local laws and regulations.

6. Bloodborne Pathogens and Infectious Waste.

a. References.

- (1) Prevention of Bloodborne Pathogen Transmission, COMDTINST M6220.8 (series).
- (2) The Medical Manual, COMDTINST M6000.1 (series), Chapter 13, Section J.

b. Background.

- (1) It is essential to prevent the transmission of infectious disease. Some Coast Guard personnel have assignments that will put them at a higher risk of infectious diseases, particularly bloodborne diseases.
- (2) D.6.a(1), above, details the requirements for the Coast Guard's bloodborne pathogen program. D.6.a(2), above, contains guidelines for an infection control program.

c. Responsibilities.

- (1) Maintenance and Logistics Command (kse). Evaluate the bloodborne pathogen program as part of routine support visits.
- (2) Safety and Environmental Health Officer (SEHO). Provide units with assistance in the proper handling and disposal of bloodborne pathogen-related items.
- (3) Group Commanders or Commanding Officers. Establish an effective bloodborne pathogen program as specified in this instruction and D.6.a(1) and (2), above, as appropriate at the unit.

d. Required Program Elements.

- (1) Establish engineering controls as the first line of defense for bloodborne pathogens (e.g., sharps containers).

- (2) Personnel who are at risk for exposure to bloodborne pathogens must be offered the hepatitis B vaccine series.
- (3) Provide training to employees prior to them entering into a job that puts them at risk for exposure to bloodborne pathogens and then annually thereafter.
- (4) Use universal precautions at all times when there is blood or other potentially infectious material present or the possibility of the presence exists.
- (5) Post exposure evaluations must be conducted to determine vaccination status and possible need for post exposure prophylaxis.
- (6) Ensure proper disinfection of spills and the surrounding area.
- (7) Ensure proper segregation, storage, and disposal of infectious waste is in accordance with reference (2) and federal, state, and local regulations. Contact the county health department for more information.
- (8) Ensure proper handling of contaminated laundry.