

CHAPTER 5 WATER SUPPLY ASHORE

Section I GENERAL INFORMATION

	<i>Article</i>
Purpose.....	5-1
Background.....	5-2
Policy.....	5-2
Responsibilities.....	5-4

5-1. Purpose.

This chapter gives public health and preventive medicine information and guidance to Department of the Navy personnel concerned with the production and surveillance of potable water at fixed shore facilities and advanced bases. Department of the Navy personnel include military and civilian members of the Navy and Marine corps.

5-2. Background.

1. The Safe Drinking Water Act (SDWA) (Public Law 93-523) was signed into law on 16 December 1974. The SDWA and later amendments direct the U.S. Environmental Protection Agency (EPA) to develop National Primary Drinking Water Regulations (NPDWR) for all public water systems from a health standpoint. As a result of this legislation, primary enforcement authority (Primacy) is to be adopted by the individual states.

2. Under the SDWA, EPA has developed National Secondary Drinking Water Regulations (NSDWR) for all public systems. Contaminants covered by NSDWR may adversely affect the aesthetic quality of drinking water. The NSDWR are not federally enforceable, as are NPDWR; rather they are intended as guidelines for the states, but may be incorporated into state law and enforced by the respective state.

3. The NPDWR are published in Title 40, Code of Federal Regulations part 141(40 CFR 141); NSDWR are published as 40 CFR 143.

4. OPNAV Instruction 5090.1, Environmental and Natural Resources Protection Manual, published procedures and requirements of SDWA and 40 CFR 141 and 143 within the Department

of the Navy.

5. MEDCOM Instruction 6240.1 Series, Standards for Potable Water, set drinking water standards in the naval establishment ashore and afloat as well as outside the Continental United States. The use of forms DD 686, Fluoride Bacteriological Examination of Water, and DD 710, Physical and Chemical Analysis of Water, was also directed.

5-3. Policy.

1. In states where primacy has been granted by EPA, Navy and Marine Corps installations, classified as suppliers of water must follow substantive and procedural requirements of NPDWR to conform with the SDWA as may be published by state regulatory authorities.

2. In states and territories not having primacy, Navy and Marine Corps installations classified as suppliers of water (owner or operator of a public water system) must follow the substantive and procedure requirements of NPDWR to conform with the SDWA as administered by the applicable EPA regional office.

3. Navy and Marine Corps installations classified as suppliers of water located outside the continental limits of the United States (CONUS) shall comply with the substantive and procedural requirements of NPDWR to conform with the SDWA, or the host country whichever is more stringent. If compliance is inconsistent with international agreements, status of forces agreements, host country laws, or cannot be achieved for any reason, requests for deviation from CONUS drinking water standards must be submitted in writing to Chief, Bureau of Medicine and Surgery (B UMED), Washington, DC 20372-5120. This request must be forwarded via the cognizant Navy Environmental

and Preventive Medicine Unit (NAVENPVNT-MEDU and the Navy Environmental Health Center (NAVENVIRHLTHCEN).

4. The establishment of drinking water system standards and monitoring requirements aboard Navy ships, both USS and USNS is a responsibility of BUMED, and are published in Chapter 6, Water Supply Afloat, of this manual.

5. Field water supply standards and monitoring requirements are a responsibility of BUMED, and are published in Chapter 9 of this manual, titled "Preventive Medicine for Ground Forces."

6. When considered necessary, BUMED may publish additional standards of water quality and monitoring requirements for Navy drinking water systems, ashore and afloat.

5-4. Responsibilities.

1. NAVFACENGCOM Engineering Field Divisions (EFDs) are responsible for:

a. Giving technical and regulatory advice to major claimants and activities concerning actions necessary for compliance with SDWA, 40 CFR 141 and those states which have primacy.

b. Conducting periodic surveys of activity water systems and reporting technical and administrative deficiencies to activities via Utility Systems Assessments (USA).

c. Determining activity needs and helping activities with respect to training and certification of water treatment plant personnel.

d. Helping activities in the development of contracts and selection of laboratory services for potable water analyses.

e. At the request of activities, negotiating with state regulatory officials to ensure equitable and realistic terms for compliance between activities, state agencies, and EPA.

f. Serving as the focal point for liaison between activities, state agencies, and EPA.

g. Checking overall regulatory compliance for activities within respective geographic regions.

h. Timely review and action with respect to public notification during incidence of activity non-compliance as required by EPA and those states having primacy.

2. The Navy Energy and Environmental Support Activity (NEESA) is responsible for:

a. Updating, as needed, the standard op-

erating procedure for potable water monitoring.

b. Keeping EFDs and activities informed of related legislative and regulatory changes via directives from NEESA, Point Hueneme, California.

c. Giving Navy-wide defense environmental status reports to NAVFAC, CNO, major claimants and DOD as needed.

d. Helping EFDs concerning the development of water conservation projects and water contingency planning criteria. See Appendix H, H-3.1.

3. Per OPNAV Instruction 5090.1, major claimants and activity Commanding Officers with public water system are responsible for:

a. Operating, and maintaining facilities to manufacture drinking water which meets applicable standards.

b. Sampling, conducting analysis, reporting to EPA or states, and keeping records per 40 CFR 141. Copies of all records or reports sent to EPA or states must be forwarded to the proper EFD.

c. Giving notification per 40 CFR 141 to the state, or EPA and to all persons served by a community water system, if there is any failure to follow applicable substantive and procedural regulations.

d. Ensuring that water treatment plant personnel are trained and certified as required by EPA or state regulations.

4. Public Works officers (USN) and Maintenance Officers (USMC) are responsible for:

a. Developing, in coordination with the, installation medical authority, (preventive medicine department), adequate water supply treatment techniques to ensure water supply that is free of disease-producing organisms, hazardous concentrations of toxic materials, and objectionable color, odor, and taste. As a minimum, ensure the water supply meets all applicable NPDWR and the state water quality standards.

b. Pursuing, in coordination with the installation medical authority (preventive medicine department), an aggressive program to identify, isolate, and correct potential sources of contamination to the distribution system.

c. Coordinating with federal, state, and local agencies to set up a meaningful exchange of information regarding local water resources, NPDWR and NSDWR.

d. Ensuring local water treatment personnel are trained to meet levels of proficiency consistent with the operator certification requirements applicable to their location.

e. Encouraging operating personnel to attend seminars, short courses, and other formal instruction to remain abreast of new developments in water treatment practices. -

f. Maintaining quality control data to ensure NPDWR or state requirements are followed.

g. Developing a program to correct system deficiencies, and upgrading equipment as needed.

h. Collecting and shipping water samples following NPDWR, and NSDWR.

i. Notifying the installation medical authority (preventive medicine department) upon discovery that a water main break or similar occurrence has taken place.

j. Ensuring that all new mains and extensions are flushed and disinfected before placing them into service.

5. Installation medical authority (preventive medicine department). The installation medical authority, aided by the environmental health officer and/or preventive medicine technicians, has an advisory role and recommends corrective measures when any phase of water sanitation is unsatisfactory. Normally, adequate water quality can be maintained through cooperation and communication with the public works or maintenance officer. To carry out this advisory role, a

water surveillance program tailored to each individual water system is required. Appendix A is a model potable water monitoring program. The water surveillance program should include but is not limited to the following:

a. Maintaining liaison with federal, state, and local regulatory authorities regarding current drinking water regulations to ensure compliance.

b. Conducting periodic sanitary surveys to locate and identify possible health hazards in the potable water system.

c. Conducting tests for halogen residuals, bacteriological quality and other tests as needed to supplement sanitary surveys.

d. Maintaining, or having access to, a copy of the plumbing diagram of the potable water, fire fighting (if separate), and sanitary waste systems.

e. Maintaining records that reflect the chemical, radiological, and microbiological quality of the installation potable water supply system.

f. Monitoring and giving recommendations, when needed, regarding the disinfection of all new additions or repairs to water mains, wells, pumps, storage tanks, and other units of the water supply system.

g. Ensuring that all types of chemical additives to potable water supplies are approved by the supplier of water, the state, and the National Sanitation Foundation (NSF) and are used in proper concentrations.