

DEPARTMENT OF THE NAVY BUREAU OF MEDICINE AND SURGERY 7700 ARLINGTON BOULEVARD FALLS CHURCH VA 22042

IN REPLY REFER TO BUMEDINST 6240.10C BUMED-M4 18 Sep 2018

BUMED INSTRUCTION 6240.10C

From: Chief, Bureau of Medicine and Surgery

Subj: DEPARTMENT OF THE NAVY MEDICAL DRINKING WATER PROGRAM

- Ref: (a) NAVMED P-5010-5
 - (b) OPNAV M-5090.1 of 10 Jan 2014
 - (c) CNICINST 5090.1
 - (d) CNICINST 5090.2A
 - (e) CNICINST 5090.3
 - (f) MCO P5090.2A
 - (g) BUMEDINST 6240.12
 - (h) NAVMED P-5010-6
 - (i) 40 CFR
 - (j) 42 U.S.C. §300f-300j
 - (k) DoD Instruction 4715.05 of 1 November 2013
 - (1) TB MED 577/NAVMED P-5010-10/AFMAN 48-138_IP
 - (m)AR 40-657/NAVSUPINST 4355.4H/MCO P10110.31H
 - (n) National Automatic Merchandising Association Standard for the Sanitary Design and Construction of Food and Beverage Vending Machines
 - (o) Environmental Protection Agency Revised Public Notification Handbook, EPA 816-R-09-013 of March 2010
 - (p) OPNAV memo 5090 Ser/16U132466 of 14 Oct 2016

Encl: (1) Definitions

1. <u>Purpose</u>. To update policy, provide guidance, and assign roles and responsibilities for medical personnel in the Department of the Navy (DON) Drinking Water Programs per references (a) through (p). This instruction is a complete revision and must be read in its entirety.

- 2. Cancellation. BUMEDINST 6240.10B.
- 3. <u>Scope and Applicability</u>. This instruction applies to all DON medical personnel.
- 4. Roles and Responsibilities
 - a. <u>Chief, Bureau of Medicine and Surgery (BUMED) must:</u>

(1) Per references (a) through (f), provide public health advice and consultative services to Commander, Navy Installations Command (CNIC); Commander, Marine Corps Installation Command; Commanding Officer (CO), Naval Facilities Engineering Command for Navy

installations and installation properties outside the United States, its territories, and its possessions regarding drinking water quality exceedances and concerns. This includes overseas installations that may be located on a variety of properties, which can include ceded, leased, government and nongovernment, and non-contiguous installation properties or properties provided by other types of instrumentalities.

(2) Formulate and disseminate Navy Medicine policy and guidance related to drinking water quality.

(3) Provide direct public health advice and representation at all overseas drinking water and CNIC Water Quality Oversight Council (WQOC) executive meetings.

b. <u>Commander, Navy Medicine Education, Training and Logistics Command must</u> maintain the formal Catalog of Navy Training Courses (CANTRAC) Navy Drinking Water Program Preventive Medicine Authority (PMA) course (B-322-1073) which addresses medical roles and responsibilities for providing drinking water quality public health advice and consultation. For purposes of course curriculum management, Navy Medicine Education, Training, and Logistics Command will be the course curriculum authority and will collaborate with Navy and Marine Corps Public Health Center (NAVMCPUBHLTHCEN) subject matter experts (SME). The PMA training course will follow all education and training management processes.

c. Commander, NAVMCPUBHLTHCEN must:

(1) Assign SMEs to provide public health advice and consultation for water quality concerns, formal public health risk assessments (PHRA), and risk communication support as requested or required.

(2) Appoint two SMEs to serve as the NAVMCPUBHLTHCEN representatives to the CNIC WQOC staff.

(3) Maintain and update references (a), (g), and (h).

(4) Act as course curriculum model manager to deliver and update PMA CANTRAC course as required by current education and training processes.

(5) Appoint drinking water SME(s) to the Navy's overseas sanitary survey teams as the medical lead surveyor acting as a representative for BUMED, as per reference (e).

(6) As the executive agent for Defense Occupational and Environmental Health Readiness System (DOEHRS), and per reference (g), provide DOEHRS-industrial hygiene (IH) and DOEHRS-environmental health (EH) initial and sustainment training, and ongoing technical support to ensure water system surveillance water data is entered into the applicable system.

d. Commander, Navy Medicine Regions must:

(1) Provide direct drinking water program oversight for all Navy and Marine Corps installations within their respective areas of responsibility (AOR). Non-Budget Submitting Office 18 medical assets must coordinate all drinking water program matters to the applicable Navy Medicine Region.

(2) Appoint, in writing, preventive medicine representatives (i.e., EH officer or preventive medicine officer) to serve as the PMA on the applicable Navy Regional Water Quality Board (RWQB) within their AOR. Navy Medicine Region PMA must liaison with and provide direct support to the Navy Medicine Region and installation PMA within their AOR.

(3) Audit or conduct assessment of installation medical drinking water programs within the AOR every 3 years. When possible, inspections should be performed in conjunction with safety and occupational health management evaluations preferably 12-18 months prior to Navy's overseas sanitary surveys.

e. <u>Regional PMA must</u>:

(1) Provide public health advice and consultation to the applicable Navy Medicine Region commanders on health aspects of drinking water quality per references (a) through (c).

(2) Advise designated regional public works, environmental, and installation stakeholder's on health aspects of drinking water public notifications and assist with risk communication as needed. Review all draft public notices prior to public release per reference (c).

(3) Participate in the Navy's overseas drinking water Environmental Protection Agency Sanitary Surveys and regional conference calls within designated Navy Region.

(4) Complete the Navy Drinking Water Program Preventive Medicine Authority (PMA) course (B-322-1073) and maintain a thorough knowledge of references (a) through (p) within 4 months of assignment. The PMA CANTRAC training certificate is valid for a maximum of 5 years. At the end of the 5-year period, recertification is required.

f. Medical Treatment Facilities COs and Officers in Charge must:

(1) Appoint, in writing, a preventive medicine representative (i.e., EH officer, preventive medicine officer, independent duty corpsman, or preventive medicine technician) to serve as the installation PMA.

(2) Provide situational reports concerning drinking water quality concerns to the NAVMCPUBHLTHCEN and the applicable Navy Medicine Region.

g. Installation PMA must:

(1) Provide public health advice and consultation to the installation CO and public works on health aspects of drinking water quality per references (a) through (c) and (f).

(2) Advise installation CO when water consumption may present health risks, to include recommending alternate water sources for human ingestion when indicated. Provide situational reports to the applicable Navy Medicine Region and NAVMCPUBHLTHCEN per reference (p). Reference (p) is available at <u>https://www.med.navy.mil/sites/nmcphc/Documents/program-and-policy-support/Navy-Policy-on-Drinking-Water-Exceedances-14-Oct-16.pdf</u>. The installation CO has final authority and ultimate responsibility for drinking water quality. The PMA does not have the authority to declare water fit for human consumption (FFHC), per reference (b).

(3) Advise the installation on health aspects of a public notice and assist with risk communication.

(4) When appropriate participate on the Installation Water Quality Board (IWQB) as public health advisor to the installation CO to ensure timely decisions on all public health issues related to drinking water.

(5) Consult NAVMCPUBHLTHCEN immediately in the event of a Navy exceedance of a drinking water maximum contaminant level (MCL), action level, health advisory, or other issued drinking water quality standards in the United States and overseas, per reference (p).

(6) Develop, maintain, and execute a public health drinking water surveillance plan per reference (a).

(7) Complete the Navy Drinking Water Program Preventive Medicine Authority (PMA) course (B-322-1073) and maintain a thorough knowledge of references (a) through (p) within 4 months of assignment. The PMA CANTRAC training certificate is valid for a maximum of 5 years. At the end of the 5-year period, recertification is required.

(8) Enter drinking water program medical surveillance in DOEHRS-IH-EH, as per reference (h).

(9) Participate in Navy or Environmental Protection Agency drinking water sanitary surveys as appropriate.

5. <u>Definitions</u>. Terms used in this instruction are defined in enclosure (1).

6. <u>Regulations and Policy</u>

a. It is DON's policy all Navy and Marine Corps public water systems be operated and maintained to comply with Federal and State laws and regulations as well as Department of Defense (DoD) and DON policy. References (i) §141-144 and 146, (j), and (k) establish drinking water laws and regulations for the United States and its Territories. Drinking water compliance monitoring requirements ashore are established by references (b), (f), and (i) §141.201-211.

b. Per reference (b), CNIC is the executive agent for drinking water quality matters for all Navy Shore facilities and installations worldwide, and as such, serves as the single point of contact for water systems that provide drinking water to installation personnel. BUMED is a supporting agent. Per references (b), (e), (f), and (j), installations are required to execute a compliance monitoring program using certified laboratories. Laboratory accreditation and methodology certification must be in compliance with reference (b). Only water quality data from accredited laboratories using certified methodologies outlined in references (b) and (e) must be used by the medical authority when rendering an opinion regarding a drinking water supply's fitness for human consumption.

c. Afloat: Reference (h) provides specific guidance for medical surveillance of the ship's water system, including the requirement for periodic halogen and coliform bacteria testing by the ship's medical department. Vessels needing technical assistance for drinking water quality health concerns should contact the cognizant Navy Environmental and Preventive Medicine Unit and the NAVMCPUBHLTHCEN.

d. Field: Reference (1) provides general instructions and detailed technical guidance and recommendations for the sanitary control and public health surveillance of land-based field water supplies. It establishes military field water standards applicable to drinking water, including short- and long-term Tri-Service field water quality standards.

e. Other water source requirements (i.e., bottled water, bulk water, vending machines). DoD bottled water source approval is per reference (m) which provides a worldwide directory listing of approved bottled water manufacturers. Reference (n) provides standards governing the sanitary design and construction of food and beverage vending machines and related dispensing equipment and incorporates the requirements of the Food and Drug Administration model food code which is available at https://www.fda.gov/Food/GuidanceRegulation/RetailFood/Protection/FoodCode/ucm391534.htm. Reference (n) is available at http://www.afdo.org/resources/Documents/Committee%20Reports%202016-2017/water%20/vending%20machine.pdf.

7. Drinking Water Quality Standards

a. References (j) and (k) executed per references (b) and (f), establish drinking water quality standards for DON public water systems in the United States and its Territories.

b. Per authority in reference (k), the respective Host Nation final governing standards set forth water quality standards. Where final governing standards have not been issued, the overseas environmental baseline guidance document applies per reference (k) available at <u>https://www.cnic.navy.mil/content/dam/cnic/sac/pdfs/N45/2017%20Envirnmental%20Files/Over</u> <u>seas_Environmental_Baseline_Guidance_Document.pdf</u>. References (c) through (e) provide additional water quality standard policy for Navy overseas installations falling under the primary enforcement authority of CNIC and are part of the Navy overseas drinking water program.

8. Public Notification

a. Per references (b), (f), and (q), installation CO is responsible to advise all consumers via public notification alerts when a water quality standard is not met. All Navy and Marine Corps installations are required to report such drinking water discrepancies to their higher echelon commands, as per references (b) and (f). For locations within the Navy's overseas drinking water program, the IWQB and RWQB structure must be utilized for notifications.

b. Upon discovering an exceedance of primary drinking water, MCLs, or a drinking water issue has the potential to threaten public health, the installation must determine the proper response to the exceedance, to include public notification, per references (e), (i) §141.201-211, and (q). Reference (o) provides technical guidance for preparing public notifications, including the mandatory health effects language. Reference (o) is available at https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1006ROA.txt.

c. Per reference (b), BUMED is required to provide public health advice and consultation in the preparation of draft public notifications prepared by public works. Accordingly, the installation PMA, under the direction of the regional PMA, NAVMCPUBHLTHCEN, and BUMED Safety and Occupational Health (BUMED-M44), will provide such assistance.

9. <u>PHRA</u>

a. A PHRA is a scientifically defensible process conducted by a multidisciplinary team of SMEs at NAVMCPUBHLTHCEN. It uses a weight of evidence approach and typically includes hazard identification and characterization, toxicity assessment, exposure assessment and risk characterization.

b. Per reference (e), upon exceedance of primary drinking water, MCL or a drinking water issue that has the potential to threaten human health at U.S. Navy drinking water systems, Navy installations must consult with the installation PMA. When this consultation requires a PHRA, the PMA must consult with the NAVMCPUBHLTHCEN and copy the regional PMA prior to advising the IWQB. Examples of situations where the PMA would consult with NAVMCPUB-HLTHCEN include, but are not limited to, contamination of the overseas drinking water systems

by unregulated substances (i.e., no MCL established) or where the installation CO has determined the drinking water is not FFHC and requests an evaluation for other consumptive uses (i.e., cooking, food preparation, oral hygiene, dishwashing, bathing, showering, and hand washing).

c. As is the practice for water systems in the United States, PHRAs should be infrequent and are interim assessments not intended to delay or defer maintenance or repair to drinking water systems for purposes of compliance with applicable regulations and delivering water that is FFHC.

d. PHRAs do not include every instance of an installation's drinking water violation public notice of (i.e., MCLs treatment techniques, monitoring and testing, etc.) issued by the installation CO. Follow public notification procedures per references (b), (f), and (k).

e. The PHRA will be based on submission of valid installation compliance monitoring and other data (i.e., certified laboratory results), as specified by NAVMCPUBHLTHCEN, and include the installation's plan of action to address the violation.

10. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned for the standard subject identification codes (SSIC) 1000, 2000, and 4000 through 13000 series per the records disposition schedules located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx. For SSIC 3000 series dispositions, please refer to part III, chapter 3, of Secretary of the Navy Manual 5210.1 of January 2012.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact your local records manager or the DON/AA DRMD program office.

11. <u>Review and Effective Date</u>. Per OPNAVINST 5215.17A, BUMED Healthcare Operations (BUMED-M3) will review this instruction annually on the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 5 years, unless revised or cancelled in the interim, and will be reissued by the 5-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

12. <u>Information and Management Control</u>. The reports required in paragraphs 4f(2), 4g(2), and 8a are exempt from reports control per SECNAV M-5214.1 of December 2005, part IV, paragraphs 7j and 7k.

C. FORREST FAISON III

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via the Navy Medicine Web site, <u>http://www.med.navy.mil/directives/Pages/BUMEDInstructions.aspx</u>.

DEFINITIONS

1. <u>Acute Health Effect</u>. An immediate (i.e., within hours or days) adverse health effect that may result from exposure to certain drinking water contaminants (i.e., pathogens).

2. <u>Budget Submitting Office 18</u>. BUMED is the corporate headquarters activity for all commands of the Navy Medical Department. This function encompasses virtually all aspects of policy implementation and management responsibility for the provision of healthcare support to the operational forces of the Navy and eligible beneficiaries under Title 10 U.S. Code.

3. <u>Certified Laboratory</u>. Per references (b), (e), (f), and (k), installations are required to execute a compliance monitoring program using certified laboratories. Laboratory accreditation and methodology certification must be in compliance with reference (b) and (e). Only water quality data from accredited laboratories using certified methodologies outlined in references (b) and (e) must be used by the medical authority when rendering an opinion regarding a drinking water supply's fitness for human consumption.

4. <u>Final Governing Standards</u>. Country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or specific management practices with which DoD command must comply. Final governing standards are developed using the Overseas Environmental Baseline Guidance Document (OEBGD) unless the OEBGD is inconsistent with applicable Host Nation environmental standards or standards under applicable international agreements and these other applicable standards provide more protection to human health and the environment. In the case of inconsistency, the more protective standard is normally used to establish the final governing standards unless a specific international agreement with the Host Nation establishes a different standard applicable to U.S. installations and commands.

5. <u>FFHC</u>. Water that is safe for drinking, cooking, bathing, showering, dishwashing, and maintaining oral hygiene.

6. <u>IWQB</u>. Overseas installations will establish IWQB. Standing members are the Public Works Officer, the Installation Environmental Program Manager (lead point of contact) and representatives from all applicable installation Public Works Business Lines (Utilities and Facilities and Environmental), the Operator in Responsible Charge for Treatment and Distribution, a representative from local PMA, and the Installation Public Affairs Office. These are required members only, other ad hoc members may be added as needed. The IWQB will be chaired by the installation CO, not a designee. The IWQB manages the Installation Drinking Water Program and reports to the RWQB for all drinking water matters.

7. <u>Medical Treatment Facility</u>. From The U.S. Public Health Service Commissioned Corps Glossary (2014). Includes military healthcare, hospitals and clinics, and those facilities under contract with the Government to provide healthcare services for members of the uniformed Services.

8. <u>OEBGD</u>. A set of objective criteria and management practices the DoD develops per reference (n), to protect human health and the environment, per Executive Order 12088 available at <u>http://www.archives.gov/federal-register/codification/executive-order/12088.html</u>.

9. <u>Public Health Surveillance of Drinking Water Quality</u>. The ongoing, systematic collection, analysis, and interpretation of water quality data performed to protect public health. Medical surveillance of drinking water is complimentary to the water quality compliance function of public works or water supplier. It does not remove or replace the responsibility of public works or water supplier to ensure that a water supply meets compliance monitoring requirements to confirm water quality standards are maintained. It includes an installation written drinking water surveillance plan per the guidance found in Appendix A of reference (a).

10. <u>Public Notification</u>. A required advisory for a public water system to be distributed to affected consumers when the water system has violated a MCL preventive medicine or other regulations. The notice advises consumers what precautions, if any, that should be taken to protect their health. Mandatory health effects language per reference (m), must be included in a public notification.

11. <u>PMA</u>. The EH officer, preventive medicine officer, preventive medicine technician, or independent duty corpsman assigned in writing who is to provide drinking water public health advise and consultation. When overseas, they are members of the installation and RWQB who provide drinking water quality public health advice and consultation.

12. <u>RWQB</u>. Each Navy region overseas or with overseas installations must establish a Navy RWQB. The RWQB will be chaired by the regional commander (not a designee). Standing members are the regional N4 and N45, representatives from the region N45 environmental office, all applicable NAVFAC Public Works Business Lines (Utilities and Facilities and Environmental), Navy Medicine Region PMA, Region Public Affairs office, and region counsel. These are required members only, other ad hoc members may be added as needed. The RWQB oversees installation programs and ensures compliance and consistency but does not have program primacy. The RWQB reports to the WQOC for all drinking water matters.

13. <u>Sanitary Survey</u>. An on-site review of the water sources, facilities, equipment, operation, maintenance, and medical surveillance program of the public water system for the purpose of evaluating the adequacy of all elements for producing, monitoring, and distributing safe drinking water.

14. <u>WQOC</u>. The Navy WQOC is the overall governing body for the overseas ashore drinking water program and reports on a regular basis to the Navy Executive Agent, CNIC. The CNIC N4, Director of Facilities and Environmental, permanently chairs the WQOC. Standing members include representatives from CNIC and Naval Facilities Engineering Command Headquarters Environmental and Facilities and Public Works, BUMED Headquarters,

NAVMCPUBHLTHCEN, NAVFAC Atlantic and Pacific, and NAVFAC Engineering and Expeditionary Warfare Center. The WQOC convenes on a regular basis, determines overseas drinking water overarching policies, makes associated decisions and actions, and enforces policy requirements under the direction of the Navy Executive Agent for overseas drinking water ashore.