

February 6, 2006

**ENSURING THE SECURITY AND AVAILABILITY
OF POTABLE WATER AT VHA FACILITIES**

1. PURPOSE: This Veterans Health Administration (VHA) Directive establishes policy requiring that VHA facilities implement measures to ensure the security and the availability of potable water (hereafter, “drinking water” and “potable water” are used interchangeably) at VHA facilities.

2. BACKGROUND

a. The September 11, 2001, terrorist attacks and the series of hurricanes in 2004 and 2005 focus the need to safeguard drinking water supplies and ensure a continued supply of safe drinking water at VHA facilities.

b. Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act in 2002, mandated that water utilities serving more than 3,300 people take specific actions to improve water security, including the performance of vulnerability assessments, implementation of security enhancements, and development of emergency response plans. VHA facilities are not specifically covered by the act; however, conducting vulnerability assessments, implementation of security enhancements and development of emergency response plans ensure that VHA facilities will be able to maintain safe and healthful drinking water in the event of natural and man made disasters and other emergencies. VHA facilities must remain in operation after natural or man made disasters and other emergencies, to provide patients, staff, and the public with safe and healthful drinking water.

c. The Department of Homeland Security designated the Environmental Protection Agency (EPA) as the lead agency for protecting drinking water and its infrastructure. In this capacity, EPA asked the Inspectors General of the President’s Council on Integrity and Efficiency member agencies, including the Department of Veterans Affairs (VA), to review Federal facility water supply sources and steps taken by facilities to both ascertain drinking water infrastructure vulnerabilities and respond to terrorist acts. In 2003, VHA provided information regarding VHA facilities to the VA Office of Inspector General (OIG). VA OIG reviewed this information and issued an audit report that included findings and recommendations on the status of water system security at VHA facilities.

d. This Directive addresses the OIG recommendation that VHA establish standardized criteria for its facilities to use in implementing measures to enhance water supply security. It also addresses actions VHA facilities must take to reduce problems associated with a reduction in, or interruption in, the availability of water supply during natural and man made disasters and other emergencies.

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3. POLICY: VHA policy requires that VHA facilities take action to implement water supply security measures to reduce the likelihood of an interruption or reduction in water supply during natural and man made disasters and other emergencies.

4. ACTION

a. **Under Secretary for Health.** The Under Secretary for Health (10) is responsible for ensuring that VHA facilities take steps necessary to enhance water supply security, as well as develop emergency management plans to ensure an uninterrupted water supply in the event of natural and man made disasters and other emergencies.

b. **Deputy Under Secretary for Health for Operations and Management.** The Deputy Under Secretary for Health for Operations and Management (10N) is responsible for:

(1) Issuing guidance and policies related to water supply security.

(2) Maintaining an uninterrupted water supply in the event of natural and man made disasters and other emergencies.

(3) Ensuring that the design and construction of new and major renovation of VHA facilities conform to the VA's Sanitary Design Manual for Hospital Projects and successor design manuals, as well as industry-based standards, as applicable.

c. **Director, Safety and Technical Services.** The Director, Safety and Technical Services (10NB) is responsible for overall program management of VHA efforts related to the security of VHA facilities' water supply systems and the maintenance of an uninterrupted water supply in the event of natural and man made disasters and other emergencies.

d. **Veterans Integrated Service Networks (VISN) Directors.** VISN Directors are responsible for ensuring that VHA facilities:

(1) Conduct vulnerability assessments to determine the breadth and scope of water supply system security issues at each facility for which they are responsible.

(2) Develop plans that address implementation of water supply system security enhancements required by this Directive, as well as appropriate enhancements identified by the facility vulnerability assessments.

(3) Ensure that funds are made available to each facility so that measures needed to enhance water supply system security at the facility and to maintain an uninterrupted water supply at the facility in the event of natural and man made disasters and other emergencies are implemented in a timely and appropriate manner.

(4) Ensure that water supply system security and emergency measures to maintain an uninterrupted supply of potable water are included in VHA facilities' Green Environmental Management System (GEMS) Program.

e. **VHA Facility Directors**

(1) Directors at VHA facilities that produce their own water (e.g., potable water is obtained from VA-owned or operated wells or surface water sources), treat drinking water on site, or store water supplied by municipal or other suppliers in water towers and similar storage facilities must:

(a) Conduct a vulnerability assessment of the facility's potable water supply. A suggested reference to use in conducting a vulnerability assessment is "Security Vulnerability Self-Assessment Guide for Small Drinking Water Systems," developed by the Association of State Drinking Water Administrators National Rural Water Association, May 30, 2002. *NOTE: This document is available at <http://www.epa.gov/safewater/dwa/pdfs/vulnerability.pdf>.*

(b) Include water supply system security and emergency measures to maintain an uninterrupted supply of potable water in the facility's GEMS Program.

(c) Develop facility-specific policy, guidance, and Standard Operating Procedures (SOPs) addressing water supply system security and measures to ensure an uninterrupted safe and healthful supply of potable water during natural and man made disasters and other emergencies.

(d) Coordinate facility's efforts regarding water supply system security and maintenance of an uninterrupted supply of potable water during natural and man made disasters and other emergencies with Federal, state and local officials. *NOTE: The purpose of this coordination is to ensure that the VHA facility's efforts appropriately complement the efforts of Federal, state and local officials.*

(e) Develop a plan to prioritize and implement needed water supply system security measures identified in the VHA facility vulnerability assessment.

(f) Install a lockable fence and/or other device that limits access to water towers, wells, surface water sources, water treatment facilities, and/or pumping facilities. Access must be restricted to authorized staff.

(g) Include water towers, water treatment plants, pump stations, wells, and surface water supplies in routine security checks conducted by VHA facility police and others responsible for security services.

(h) Ensure that water towers, wells, surface water sources, water treatment facilities, and/or pumping facilities are:

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1. Capable of remaining in operation after natural disasters including earthquakes, hurricanes, floods, etc.;
2. In compliance with both Seismic Design Requirements, H-18-8, and Natural Disasters Non-Structural Resistive Design (formerly CD-54); and
3. Protected by physical barriers from damage by vehicles.
 - (i) Review water security measures that require construction projects, including Non-Recurring Maintenance (NRM) projects, in conjunction with other VHA operational needs and appropriately include such construction projects in VHA facility budget requests. **NOTE:** *For security measures that require a project, a project application must be prepared and submitted to the VISN with other capital/infrastructure needs.*
 - (j) Implement security measures for which the cost is not significant (e.g., does not require a NRM or construction project) by June 1, 2006.
 - (k) Implement measures that involve only the changing or development of the facility policy and procedures by June 1, 2006.
- (2) Directors at VHA facilities that use chemicals to treat drinking water, including gaseous chlorine for disinfection are responsible for:
 - (a) Implementing a SOP to verify the identification of persons delivering chemicals used to treat drinking water.
 - (b) Storing gaseous chlorine in a secure (locked) room or building that meets Occupational Safety and Health Administration (OSHA) and other applicable safety requirements.
 - (c) Implementing procurement procedures that reduce the need to store excessive amounts of gaseous chlorine.
 - (d) Evaluating the feasibility of switching from gaseous chlorine to sodium hypochlorite or similar disinfecting agent.
 - (e) Developing SOPs to address the security, storage, and safe utilization of other chemicals used in water treatment.
- (3) All VHA facility Directors, regardless of whether the facility produces its own water or obtains water from municipal or any other sources, are responsible for:
 - (a) Periodically testing the drinking water obtained from all sources, including facility wells, any other on-site source, and municipal and/or other suppliers, to ensure that the drinking water meets Federal, state and local regulatory requirements and the limitations related to contamination.

1. Testing must be conducted at least every 6 months, or more frequently if either required by Federal, state and local requirements or needed to otherwise ensure continued potability of the facility's drinking water.

2. Testing procedures must conform to EPA and state standards applicable to the testing of drinking water.

(b) Addressing the following in the facility emergency management plans as they relate to a loss of, or a reduction in, the amount of drinking water available and degradation of drinking water quality:

1. Timely acquisition (e.g., quick ship contract(s)) for bottled water, disinfection supplies and sterile water for use in medical procedures in case an emergency situation arises). **NOTE:** *Water needs to be delivered or available in various size containers to meet drinking, washing, and other demands.*

2. An assessment of the critical and non-essential needs of patients and staff for potable water, as well as the need for water for non-potable purposes, such as toilet flushing, cleaning, etc.

3. The storage of, and other logistical requirements of maintaining, an adequate supply of potable water on site that reasonably meets the needs of patients and staff during natural and man made disasters and other emergency situations.

4. SOPs that address patient and staff needs related to personal hygiene, including methods to reduce the amount of non-potable water needed during natural and man made disasters and other emergency situation. **NOTE:** *This includes the use of waterless devices, such as "bath in a bag" and portable toilet systems.*

5. On site storage of an adequate supply of specialized water, such as de-ionized water for laboratory equipment or reverse osmosis for dialysis, as well as identification of emergency sources of specialized water.

6. How the VHA facility will work with local officials to ensure that the facility is given a high priority for the restoration of services, including affecting needed repair to the municipal water system that supplies water to the facility.

7. Contracting for water tanker suppliers to ensure availability and delivery of potable water during emergencies.

8. Laundry needs and capabilities, along with consideration of alternative laundry sources.

9. An emergency repair contract to affect repair or replacement of the drinking water system.

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10. Water sources to support essential fire safety, heating, air conditioning and other essential infrastructure systems to allow critical functions to remain in operation during an emergency or natural disaster.

11. An evaluation of VHA facility capabilities for water supply alternatives to total dependency on public water supplies, including internal pressure systems, wells, and other means to establish uninterrupted water supply.

f. **Director, Center for Engineering and Occupational Safety and Health (CEOSH).** Director, CEOSH, is responsible for:

(1) Promoting best practices related to drinking water system security, and

(2) Ensuring an uninterrupted supply of potable water during natural and man made disasters and other emergency situations by:

(a) Updating the Emergency Management Program Guidebook and other guidebooks in the Safety Guidebook series, as appropriate.

(b) Developing and managing information technology and web-based information services related to water system security and emergency management, related to ensuring an uninterrupted supply of potable water during man made and natural disasters and other emergency situations.

5. REFERENCES

a. "Security Vulnerability Self-Assessment Guide for Small Drinking Water Systems," developed by the Association of State Drinking Water Administrators National Rural Water Association, May 30, 2002. This document is available at <http://www.epa.gov/safewater/dwa/pdfs/vulnerability.pdf>

b. U.S. EPA Internet site (<http://cfpub.epa.gov/safewater/watersecurity/index.cfm>)

c. VHA Emergency Management Program Guidebook (March 2005), available at the CEOSH website: <http://vaww.ceosh.med.va.gov/>.

d. VA After Action Report 2004 – Hurricanes Charley, Frances, Ivan, and Jeanne.

e. Natural Disasters Non-Structural Resistive Design (formerly CD-54).

f. Seismic Design Requirements, H-18-8.

6. FOLLOW-UP RESPONSIBILITY: The Deputy Under Secretary for Health for Operations and Management (10N) is responsible for the contents of this Directive. Questions may be directed to the Director, Safety and Technical Services (10NB) at (202) 273-5844.

7. RESCISSIONS: None. This VHA Directive expires February 28, 2011.

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