

2013 UPDATE

**HAMPTON ROADS
WATER QUALITY RESPONSE PLAN**

PREPARED FOR THE
DIRECTORS OF UTILITIES COMMITTEE
AND THE
HAMPTON ROADS HEALTH DISTRICT DIRECTORS

PREPARED BY THE STAFF OF THE
HAMPTON ROADS PLANNING DISTRICT COMMISSION

REPORT No. PEP 13-07



REVISED JUNE 2013

JANUARY 2000, PREVIOUSLY REVISED MARCH 2000,
AUGUST 2000, JANUARY 2002, AND FEBRUARY 2003

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DEPARTMENTS OF UTILITIES
AND THE
DEPARTMENTS OF HEALTH

PREPARED BY THE STAFF OF THE
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ABSTRACT:

The Hampton Roads Water Quality Response Plan, initially prepared in 2000, describes a regional emergency management process to protect citizens in the case of drinking water emergencies. The 2013 update of the plan provides guidance and reference information to supplement local and state emergency response efforts to a drinking water health threat in Hampton Roads. The plan is intended to help multiple agencies respond to water quality emergencies in a cohesive and synchronized manner. The plan describes a response procedure for cooperative action between emergency representatives of Hampton Roads water utilities, local health districts, and the Virginia Department of Health (VDH) in the event of a waterborne public health threat. The plan also provides for coordinated communication with the public and the media.

ACKNOWLEDGEMENTS:

The Hampton Roads Water Quality Response Plan was originally published in January 2000 (HRPDC Report No. 00-01). The HRPDC staff and the Subcommittee on Communication developed the Response Plan for the HRPDC Directors of Utilities Committee, the Directors of Hampton Roads Local Health Districts, the Virginia Department of Health (VDH) Office of Drinking Water, and the VDH Office of Epidemiology. The project was included in the Hampton Roads Planning District Commission Work Program for Fiscal Year 1999-2000, which was approved by the Commission at its Executive Committee Meeting of March 17, 1999. Revisions of the document were published in March 2000, August 2000, January 2002, and February 2003.

The 2013 Update of the Hampton Roads Water Quality Response Plan was prepared under the Hampton Roads Planning District Commission Unified Planning Work Program for Fiscal Year 2012-2013, approved by the Commission at its Quarterly Committee Meeting of April 19, 2012. Funding for this document was provided primarily by the Hampton Roads localities through the Regional Water Resources Program.

PREFACE

This document is the 2013 update of the Hampton Roads Water Quality Response Plan. The plan is intended as guidance and reference information to supplement local and state emergency response efforts to a drinking water health threat in Hampton Roads. The plan recognizes the National Incident Management System and the emergency management plans, procedures, and standards in use by Hampton Roads utilities, localities, health districts, the Virginia Department of Health (VDH), and other agencies.

The original version of the Hampton Roads Water Quality Response Plan was approved on January 19, 2000 (HRPDC Report No. 00-01). The plan describes an emergency management process to protect citizens in the case of drinking water emergencies. The plan is intended to help multiple agencies respond to water quality emergencies in a cohesive and synchronized manner. The plan describes a response procedure for cooperative action between emergency representatives of Hampton Roads water utilities, local health districts, and the Virginia Department of Health (VDH) in the event of a waterborne public health threat. The plan also provides for coordinated communication with the public and the media. The HRPDC staff and the Subcommittee on Communication developed the Response Plan for the HRPDC Directors of Utilities Committee, the Directors of Hampton Roads Public Health Districts, the VDH Office of Drinking Water, and the VDH Office of Epidemiology. Previous to this 2013 revision, the plan was updated in February 2003, January 2002, August 2000, and March 2000.

ACKNOWLEDGEMENTS

The Hampton Roads Planning District Commission (HRPDC) would like to thank the HRPDC Directors of Utilities Committee, the Hampton Roads Health District Directors, and the Virginia Department of Health, Office of Drinking Water for their contributions to the project and development of this update.

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1 INTRODUCTION

The *Hampton Roads Water Quality Response Plan*, initially prepared in 2000, describes a regional emergency management process to protect citizens in the case of drinking water emergencies. The plan is a guidance document to help multiple agencies respond to water quality emergencies in a cohesive and synchronized manner. The plan describes a response procedure for cooperative action between emergency representatives of Hampton Roads water utilities, local health districts, and the Virginia Department of Health (VDH) in the event of a waterborne public health threat. The plan also provides for coordinated communication with the public and the media.

The Hampton Roads Planning District Commission (HRPDC) maintains the plan. HRPDC staff annually updates the plan's Emergency Contact List (see Appendix A) and distributes the list and plan information to partner agencies biannually in the spring and fall. The Emergency Contact List includes the public utilities/works divisions and preventative medicine units at all Hampton Roads military installations, Hampton Roads Health Districts, VDH Offices of Epidemiology and Drinking Water, Hampton Roads water utilities, and state and federal emergency hotlines.

1.1 Purpose

The Hampton Roads region was proactive in fostering relationships between drinking water utilities and public health agencies, understanding that these connections can be leveraged toward the rapid identification and response to waterborne public health threats. The *Hampton Roads Water Quality Response Plan* was developed as a collaborative effort between the region's water utilities, health districts, and VDH to provide a means to assess potential drinking water threats by synthesizing multiple information streams, namely alerts from:

- **Utilities** using routine water sampling and analysis, specialized monitoring, and evaluations of customer alerts of water quality concerns; and
- **Health districts/departments** conducting syndromic surveillance of information such as sales of over-the-counter medication, reports from emergency medical service logs, calls to 911 centers, and calls into poison control hotlines.

The Environmental Protection Agency (EPA) Safe Drinking Water Act and the VDH regulations provide rules and guidance that the water utilities must follow to confirm and report situations that pose public health risks to the EPA, VDH, and the general public. EPA published revised Drinking Water Public Notice Regulations in 2000, clarifying the requirements for reporting water quality violations to the general public. This plan is intended to supplement those already established requirements, not to preempt the requirements.

1.2 2013 Plan Update

Since the last plan revision in 2003, utilities, localities, public health agencies, and emergency management agencies have developed considerable internal resources, procedures, and plans for emergency response in accordance with the National Incident Management System (NIMS)¹ and the Incident Command System (ICS)². The 2013 update of the *Hampton Roads Water Quality Response Plan* acknowledges existing response frameworks and is intended to serve

¹ For more information, see <http://www.fema.gov/national-preparedness/national-incident-management-system>.

² For more information, see <http://www.fema.gov/incident-command-system>.

as a guidance document for regional efforts. The information and response procedure described herein is supplemental and secondary to the internal notification, alert, and communication systems and emergency response plans and protocols currently in use by Hampton Roads utilities, localities, health districts, and state agencies.

The update/revision of the *Hampton Roads Water Quality Response Plan* is a recommended initiative in the 2012 *Hampton Roads Water and Wastewater Systems Emergency Preparedness and Response Regional Improvement Plan* (HRPDC Report No. PEP12-12). At the December 5, 2012 joint meeting of the Directors of Utilities Committee, the Local Health District Directors, and the VDH Office of Drinking Water, general support for this initiative was expressed by the group, and HRPDC staff was directed to update the plan and to distribute the emergency contact list and summary plan information in the spring and fall of each year.

The 2013 plan update includes new information on laboratory resources and internet links to updated guidance, fact sheets, and other EPA information.

1.3 Initial Plan Development and Previous Plan Updates

In response to national and local drinking water quality issues and the increased media coverage of such occurrences in the late 1990s, the HRPDC Directors of Utilities Committee, the local Health District Directors, and VDH Offices of Epidemiology and Water Programs staff recognized the need to improve communication between water purveyors and health officials. These stakeholders assumed a proactive role to improve communication processes so that actions regarding real or perceived waterborne threats to human health could be cooperatively implemented and so that accurate information could be provided to the citizens of Hampton Roads in a reasonable and timely manner.

In 1998, the HRPDC Directors of Utilities Committee and members of the local and State health departments formed a regional Subcommittee on Communication and charged the subcommittee with providing recommendations to improve regional level communication in response to water quality issues and health advisories. In 1999, an Emergency Procedures Framework was developed to address the following objectives:

- Develop a network of Utility and Public Health primary and secondary contacts;
- Assemble fact sheets on topics which cover possible events, problems, and areas of concern;
- Establish a procedure to call emergency meetings with key individuals at a predetermined central location.

This framework document developed into the *Hampton Roads Water Quality Response Plan*, which was approved on January 19, 2000 by the Hampton Roads Planning District Commission. The Subcommittee on Communication for the Directors of Utilities Committee, the Directors of the Public Health Districts and the VDH Office of Water Programs, and HRPDC staff participated in the plan's development. Revisions of the document were published in March 2000, August 2000, January 2002, and February 2003.

2 PLAN COMPONENTS

The components of the *Hampton Roads Water Quality Response Plan* provide for coordinated response across agencies and jurisdictions, as well as consistent and synchronized public and media communication. The plan describes:

- **Trigger events**, from both the utility and public health perspectives;
- **Response team** considerations and emergency contacts;
- **Response procedure**, including coordinated public and media outreach; and
- **Resources**, including information on EPA and VDH regulations, guidance, and fact sheets on waterborne health concerns.

A key component of the plan is the **Emergency Contact List** (Appendix A), which is described in Section 6, Resources. HRPDC staff annually updates and distributes the Emergency Contact List. Other components of this plan should be periodically reviewed and updated as necessary.

3 TRIGGER EVENTS

A trigger event is any situation that may result in negative human health impacts from public drinking water. Identifying the trigger event is the first step in the response process. Water utilities and health districts/departments will rely on established internal analyses and procedures to confirm if an event should trigger the response process described in this plan.

None of the trigger events listed below universally result in negative health impacts. From a water utility perspective, a trigger event may occur when there is:

- A primary treatment barrier breakdown, or
- An interruption in the routine water quality monitoring program, or
- A violation of the total coliform rule, or
- A violation of the surface water treatment turbidity standards, or
- A laboratory finding of pathogens or chemical contaminants in the finished water at levels in excess of drinking water standards, or
- A suspected or confirmed release of a contaminant in the source water or the finished water, or
- Other events that may pose a threat to human health if not corrected.

From a public health perspective, a trigger event occurs when illness or symptoms of illness in two or more persons is acquired through the consumption of or contact with drinking water. VDH's "Waterborne Illness Outbreak" guidelines³ assist local and regional health departments in identifying and reporting all waterborne associated illnesses (see Appendix B). Although not exclusively related to exposure to contaminated water, possible waterborne illnesses include but are not limited to:

- Giardiasis,
- Cryptosporidiosis,
- Gastroenteritis due to toxigenic E. Coli,
- Viral gastroenteritis,
- Hepatitis A,

³ VDH plans to update the June 1999 "Waterborne Illness Outbreak" guidelines. Contact the VDH Office of Epidemiology for more information.

- Shigellosis,
- Cyclosporiasis, and
- Cholera

Other public health-driven trigger events may include an unusual number of complaints about drinking water quality to either the water utility or the health district/department.

4 RESPONSE TEAM

Utilities and public health agencies will follow their established response plans and protocols in accordance with NIMS and ICS. The following considerations are provided for initiating a multiple-agency response:

- A response team should be assembled to evaluate a trigger event.
- The response team should consist of emergency representatives from the water utilities, VDH Offices of Epidemiology and Drinking Water, and the local health district offices. Detailed listings of primary and secondary contacts are available in Appendix A.
- For water utilities serving multiple jurisdictions and military installations, the response team should include the emergency representative from the potentially affected area(s).

5 RESPONSE PROCEDURE

Utilities and public health agencies will follow their established response plans and protocols in accordance with NIMS and ICS. The recommended elements of a multiple-agency response procedure are listed below:

- 1. A Confirmed Trigger Event Occurs.** There are internal procedures specific to the water utility and/or the health department to determine if an event should trigger this process. The applicable internal procedures must be followed to confirm a trigger event before initiating the assemblage of a response team. The confirmation of a trigger event may be guided by the following:
 - EPA fact sheet “Final Drinking Water Public Notification Regulations”⁴
 - EPA fact sheet “Drinking Water Public Notification”⁵
 - VDH guidelines “Waterborne Illness Outbreaks”⁶ (see Appendix B).

⁴ “Final Drinking Water Public Notification Regulations” Fact Sheet:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/fsfinaldwpnregulations.pdf>

⁵ “Drinking Water Public Notification” Fact Sheet:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/dwpnquicklook.pdf>

⁶ VDH plans to update the June 1999 “Waterborne Illness Outbreak” guidelines. Contact the VDH Office of Epidemiology for more information.

- 2. Assemble the Response Team.** A response team should be assembled in accordance with the emergency response plans and protocols of the agency confirming the trigger event. Appendix A lists the contact information for primary and secondary emergency representatives for each agency. Potentially, the emergency representative of the confirming agency would call the emergency contacts associated with the other team agencies. For example, the Director of Utilities or his/her representative will call the emergency contact person for the VDH Office of Drinking Water Programs and the Local Health District in the case of a water utility problem or violation. Based on a preliminary discussion, the response team would decide to hold a conference call or a meeting. The contact for the VDH Office of Drinking Water Programs should call the VDH Office of Epidemiology contact to advise her/him of the situation and arrangements. For water utilities that serve multiple jurisdictions, the water utility's representative should inform the emergency contacts of the jurisdictions and military installations potentially affected.
- 3. Evaluate the Health Implications of the Event.** Health implications will be evaluated by team agencies according to established internal procedures. The response team will discuss the incident/findings reported and all relevant information, and determine if further information is needed to analyze the event thoroughly. They will also recommend a course of action, in consideration of established response plans and frameworks. Actions may include but are not limited to:

 - Determining if the trigger event will result in a public health threat,
 - Gathering more information,
 - Determining the appropriate measures to mitigate the threat to public health,
 - Recommending a boil water advisory or other action,
 - Scheduling a multi-agency press conference to alert the public,
 - Developing a public service announcement,
 - Monitoring the incident over a period of time,
 - Determining that no action is required and that the incident does not pose a threat to public health, or
 - Coordinating and implementing a monitoring process to evaluate and modify as needed the action or response to the trigger event.
- 4. Water Utility Representative Contacts Other Hampton Roads Utilities.** Unless the response team members agree upon "no action", the Director of Utilities or his/her representative will contact the other local utilities and military public works offices within the region to advise them of the events and decisions. It is preferable to advise the Hampton Roads area contacts prior to a press conference or any public announcement. This can be accomplished through email, facsimile, or phone calls. A detailed listing of contacts is provided in Appendix A.
- 5. Local Health District Representative Contacts Other Hampton Roads Health Districts.** Unless the response team members agree upon "no action", the Director of the Local Health District or his/her representative will contact the other Local Health Districts and the military preventive medicine units within the Hampton Roads area

to advise them of the events and decisions. It is preferable to advise the other Hampton Roads Local Health Districts prior to a press conference or any public announcement. This can be accomplished through email, facsimile, or phone calls. A detailed listing of contacts is provided in Appendix A.

6. Response Team Monitors Trigger Event to Evaluate and Modify the Action/Response. Unless the response team members agree upon “no action,” the response team will be responsible for monitoring the event and for recommending modifications to the course of action. It is not the intent of this document to identify monitoring requirements. The Federal and State regulations require various levels of monitoring activities that are dependent upon the type of trigger event experienced. For events not covered by a regulatory process, the response team will agree upon the methods suitable to monitor the event. If a health advisory is issued, the response team will evaluate the data collected from the water utility, the local public health department, the VDH Waterborne Hazards Control Program⁷ and any other sources available. Some of the factors to consider in rescinding a public health advisory are the following:

- Have the source water quality indicators returned to acceptable levels?
- Are deficiencies in the treatment barriers resolved and do water quality tests support the conclusion?
- Have the finished water quality indicators returned to acceptable levels within regulatory limits?
- Does successive pathogen monitoring show acceptable results? For pathogens, any inadequacies in the detection methods used should also be considered before rescinding a public health advisory.
- Does water quality monitoring in the distribution system show acceptable results?
- Has the distribution system been sufficiently flushed with non-contaminated finished water?
- Do epidemiological surveys indicate the event is over? It should be noted that the epidemiological data is often not available until long after the event is over.

For additional assistance in determining whether to issue or rescind a public health advisory, the response team may contact the EPA Environmental Response Team (24 hours a day: 732-321-6660) and the Center for Disease Control (800-232-4636, or 24/7 Emergency Operations Center 770-488-7100).

Upon determination that the trigger event may no longer pose a human health risk, the response team will determine a suitable means for informing the public. The severity of the trigger event’s impact on public health will influence the decision regarding public notice. The response team may consider the following methods for informing the public:

- Public announcements in the press, radio, or television;
- Paid announcements in the press, radio, or television;

⁷ VDH Waterborne Hazards Control Program: <http://www.vdh.virginia.gov/epidemiology/DEE/Waterborne/>

- Joint press release and media conference;
- Direct mailing of fliers to customers; and
- Inserts or tag lines in water bills.

6 RESOURCES

6.1 Emergency Contact List

HRPDC staff annually updates the Emergency Contact List for the *Hampton Roads Water Quality Response Plan* (see Appendix A) and distributes the list and plan information to partner agencies biannually in the spring and fall. The Emergency Contact List includes the public utilities/works divisions and preventative medicine units at all Hampton Roads military installations, Hampton Roads Health Districts, VDH Offices of Epidemiology and Drinking Water, Hampton Roads water utilities, and state and federal emergency hotlines.

6.2 Laboratory Facilities

There are numerous laboratory facilities in the region that offer drinking water quality testing. The Virginia Department of General Services, Division of Consolidated Laboratory Services (DCLS) provides analytical testing services for agencies of the Commonwealth of Virginia, local government, federal agencies and other states, and evaluates and certifies laboratories for specific fields of accreditation. EPA also approves laboratories for certain drinking water analyses.

DCLS and EPA provide listings of certified and/or approved laboratories on their websites:

- Virginia Division of Consolidated Laboratory Services (DCLS) certified labs for Virginia Safe Drinking Water Program (SDWP) and Virginia Environmental Laboratory Accreditation Program (VELAP):
<http://www.dgs.virginia.gov/DivisionofConsolidatedLaboratoryServices/Services/LaboratoryCertification/tabid/508/Default.aspx>
- VELAP Accredited Commercial Laboratories (1VAC30-46) and VELAP Certified Non-Commercial Laboratories (1VAC30-45)⁸:
<http://www.dgs.virginia.gov/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>
- EPA-approved labs for the third Unregulated Contaminant Monitoring Rule (UCMR 3):
<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/laboratories.cfm>

The EPA offers additional resources to assist laboratories, water utilities, emergency responders, and other local, state, and federal agencies in coordinating responses to drinking water contamination incidents.⁹ As part of the Environmental Response Laboratory Network (ERLN),

⁸ DCLS listings of VELAP accredited commercial laboratories and VELAP certified non-commercial laboratories are available as PDFs, as well as Microsoft Excel files that allow sorting of labs by location, facility, accreditation, or analytical method:
<http://www.dgs.virginia.gov/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>

⁹ EPA's Water Security website: <http://water.epa.gov/infrastructure/watersecurity/>

the EPA established the Water Laboratory Alliance (WLA) in 2009 to provide the drinking water sector with an integrated nationwide network of laboratories with the analytical capability and capacity to respond to intentional and unintentional drinking water contamination events involving chemical, biological, and radiochemical contaminants.¹⁰ WLA resources are summarized in a virtual tool kit that contains fact sheets, guidance documents, tools, learning opportunities, and EPA contact information.¹¹

In November 2010, EPA released the final *Water Laboratory Alliance Response Plan*, which provides processes and procedures for coordinated laboratory response to water contamination incidents that may require additional analytical support and a broader response than a typical laboratory can provide. The plan is designed to work within existing Incident Command System structures and procedures to facilitate emergency laboratory support to water contamination events. During a natural disaster, terrorist event, or accident affecting the water sector, a large number of environmental samples will be generated, likely overwhelming the capacity and/or capability of any individual laboratory to provide sufficient analytical support. The plan provides a consistent approach to how water utility, state, and EPA regional laboratories should coordinate to meet the need for analytical support. The *Water Laboratory Alliance Response Plan* can be found in electronic format on the EPA website at:

<http://water.epa.gov/infrastructure/watersecurity/wla/> under WLA Tools and Resources.

6.3 Public Notices of Potential Health Risks

The Safe Drinking Water Act (SDWA) Amendments of 1996 revised the public notification provisions to better target notices for serious violations posing a short-term risk to health and to make the existing notification process less burdensome and more effective. EPA published revised public notification regulations on May 4, 2000 (see EPA fact sheet “Final Drinking Water Public Notification Regulations”¹²). The regulations are in the Code of Federal Regulations (CFR) under Chapter 40, Part 40 CFR 141, Subpart Q, beginning at section 40 CFR 141.201.¹³

EPA has specific requirements for the format and content of public notices, as well as the manner of distribution and frequency. Notices must contain the following:

- A description of the violation that occurred, including the potential health effects
- The population at risk and if alternate water supplies need to be used
- What the water system is doing to correct the problem
- Actions consumers can take
- When the violation occurred and when the system expects it to be resolved
- How to contact the water system for more information
- Language encouraging broader distribution of the notice

¹⁰ Water Laboratory Alliance (WLA): <http://water.epa.gov/infrastructure/watersecurity/wla/index.cfm>

¹¹ WLA tool kit: <http://water.epa.gov/infrastructure/watersecurity/wla/upload/epa817b12001.pdf>

¹² “Final Drinking Water Public Notification Regulations” Fact Sheet: <http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/regulations.cfm>

¹³ Public Notification Rule: <http://www.epa.gov/safewater/publicnotification>.

An example public notice from the EPA, highlighting the required elements of a public notice, is included in Appendix C and is available on EPA's website¹⁴.

EPA specifies three public notification categories, or tiers. The requirements for the timing of the public notice and the form and manner of its delivery are determined by the tier to which the violation or situation is assigned. The three tiers of public notification are summarized in Table 1.

The regulation requires the water utility to provide public notice within twenty-four (24) hours of a confirmed Tier 1 violation to all persons served by the system. The water utility is also required to consult with the VDH Office of Drinking Water on the public notice. Public notice requirements for Tier 2 and Tier 3 violations are within thirty (30) days and one (1) year respectively.

Table 1: Three Tiers of Public Notification

	Required Distribution Time	Notification Delivery Method
Tier 1: Immediate Notice	Any time a situation occurs where there is the potential for human health to be immediately impacted, water suppliers have 24 hours to notify people who may drink the water of the situation.	Water suppliers must use media outlets such as television, radio, and newspapers, post their notice in public places, or personally deliver a notice to their customers in these situations.
Tier 2: Notice as soon as possible	Any time a water system provides water with levels of a contaminant that exceed EPA or state standards or that hasn't been treated properly, but that doesn't pose an immediate risk to human health, the water system must notify its customers as soon as possible, but within 30 days of the violation.	Notice may be provided via the media, posting, or through the mail.
Tier 3: Annual Notice	When water systems violate a drinking water standard that does not have a direct impact on human health (For Example, failing to take a required sample on time) the water supplier has up to a year to provide a notice of this situation to its customers.	The extra time gives water suppliers the opportunity to consolidate these notices and send them with Annual Water Quality Reports (Consumer Confidence Reports).

For more detailed information regarding Tier 1 public notice requirements, refer to Chapter 5 of the Revised Public Notification Handbook (EPA 816-R-09-013, March 2010)¹⁵ and 40 CFR Part 141. Resources to help utilities comply with public notification requirements, including the Handbook and templates, are available at EPA's "Compliance Help" web page.¹⁶ The public notice regulation contains an appendix¹⁷ listing every violation and situation requiring public notice and the corresponding tier. The information in the appendix is summarized in Table 2.

¹⁴http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/2007_04_26_publicnotification_figure_publicnotification_requiredelementsofnotice.pdf

¹⁵ <http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/PNrevisedPNHandbookMarch2010.pdf>

¹⁶ <http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/compliancehelp.cfm>

¹⁷ Appendix A to Subpart Q of Part 141 NPDWR Violations and Other Situations Requiring Public Notice: http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/2007_04_26_publicnotification_reportruletables_publicnotification_appendicesa-b.pdf

Table 2: Violations and Situations Requiring Public Notice

Tier 1 Violations and Other Situations Requiring Notice Within 24 Hours*

- Violation of the maximum contaminant level (MCL) for total coliform, when **fecal coliform or E. coli** are present in the water distribution system, or failure to test for fecal coliform or E. coli when any repeat sample tests positive for coliform.
- Violation of the MCL for **nitrate or nitrite**, or when a confirmation sample is not taken within 24 hours of the system’s receipt of the first sample showing exceedance of the nitrate or nitrite MCL.
- Exceedance of the **nitrate MCL** (10 mg/l) by noncommunity water systems (NCWSs), where permitted to exceed the MCL (up to 20 mg/l) by the primacy agency.
- Violations of the maximum residual disinfection level (MRDL) for **chlorine dioxide** when one or more of the samples taken in the distribution system on the day after exceeding the MRDL at the entrance of the distribution system or when required samples are not taken in the distribution system.
- Violation of the **turbidity MCL** of 5 NTU, where the primacy agency determines after consultation that a Tier 1 notice is required or where consultation does not occur in 24 hours after the system learns of violation.
- Violation of the **treatment technique** (TT) requirement resulting from a single exceedance of the maximum allowable **turbidity** limit, where the primacy agency determines after consultation that a Tier 1 notice is required or where consultation does not take place in 24 hours after the system learns of violation.
- Occurrence of a **waterborne disease outbreak**, as defined in 40 CFR 141.2, or **other waterborne emergency**.
- Detection of **E. coli, enterococci, or coliphage** in a ground water source sample.
- Other violations or situations with significant potential for serious adverse effects on human health as a result of short term exposure, **as determined by the primacy agency** either in its regulations or on a case-by-case basis.

*If your system has any of these violations or situations, in addition to issuing public notice, you must initiate consultation with your primacy agency as soon as practical but within 24 hours after you learn of the violation or situation.

Tier 2 Violations and Other Situations Requiring Notice Within 30 Days**

- All violations of the **MCL, MRDL, and TT** requirements except where Tier 1 notice is required.
- Violations of **monitoring requirements where the primacy agency determines that a Tier 2** public notice is required, taking into account potential health impacts and persistence of the violation.
- Failure to comply with the terms and conditions of any variance or exemption in place.
- For ground water systems providing 4-log treatment for viruses, failure to **maintain required treatment** for more than 4 hours.
- Failure to take **corrective action** within the required timeframe or be in compliance with a state-approved **corrective action plan** and schedule for a **fecal indicator-positive ground water source sample** under the Ground Water Rule.
- Failure to take **corrective action** within the required timeframe or be in compliance with a state-approved **corrective action plan** and schedule for a **significant deficiency** under the Ground Water Rule.
- Special public notice for repeated failure to conduct **monitoring for Cryptosporidium** (40 CFR 141.211).

**If you exceed the maximum allowable turbidity level, as identified in Appendix A to Subpart Q of 40 CFR Part 141, you must consult with your primacy agency as soon as practical but no later than 24 hours after learning of the violation.

Table 2: Violations and Situations Requiring Public Notice (continued)

Tier 3 Violations and Other Situations Requiring Notice Within 1 Year
<ul style="list-style-type: none"> • Monitoring violations, except where Tier 1 or Tier 2 notice is required or the primacy agency determines that the violation requires a Tier 2 notice. • Failure to comply with an established testing procedure, except where Tier 1 notice is required or the primacy agency determines that the violation requires a Tier 2 notice. • Operation under a variance granted under section 1415 or exemption granted under section 1416 of the Safe Drinking Water Act. • Availability of unregulated contaminant monitoring results. • Exceedance of the secondary maximum contaminant level for fluoride (community water systems only).
<p>Source: EPA Office of Water, Revised Public Notification Handbook (EPA-816-R-09-013), March 2010 http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/PNrevisedPNHandbookMarch2010.pdf</p>

6.4 Fact Sheet Resources

The National Primary Drinking Water Regulations provide primary standards to protect public health by limiting contaminants in drinking water. The EPA provides an alphabetical listing of regulated contaminants with hyperlinks to detailed fact sheets:

<http://water.epa.gov/drink/contaminants/index.cfm>.

Utilities may utilize other fact sheets for targeted public outreach, depending on local needs. Additional fact sheets may be cooperatively developed for use by all partner agencies and appended to this plan.

6.5 Cross Education

Cross education between the water utilities and the health departments improves the understanding of topics of mutual interest and helps ensure public health and safety. Cross education occurs primarily during the semi-annual meetings of the Directors of Utilities Committee, the Health District Directors, and VDH. The emphasis of cross education will be on topics identified by the Committee as areas that will improve the agencies' ability to communicate with each other and the public, including technical and regulatory issues. The format for delivery of cross education may vary; agency representatives may provide presentations or the group may hold roundtable discussions of new information or emerging regulatory requirements. Cross education may also take place during special meetings or seminars and at various locations throughout the region.

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APPENDIX A

WATER QUALITY RESPONSE PLAN EMERGENCY CONTACT LIST

The Hampton Roads Planning District Commission (HRPDC) staff maintains the Water Quality Response Plan Emergency Contact List, which includes the public utilities/works divisions and preventative medicine units at all Hampton Roads military installations, Hampton Roads Health Districts, VDH Offices of Epidemiology and Drinking Water, Hampton Roads water utilities, and state and federal emergency hotlines. The Emergency Contact List is for official use only and is excluded from the public copy of this plan.

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APPENDIX B

VDH GUIDELINES FOR WATERBORNE ILLNESS OUTBREAKS

The VDH document “Waterborne Illness Outbreaks” (June 1999) provides guidance regarding the process for executing an epidemiological survey for suspected waterborne pathogens. This document is for use by public health departments and is excluded from the public copy of this plan. Phone numbers have been updated by HRPDC to reflect those current as of June 2013. For more information, contact the Virginia Department of Health, Office of Epidemiology.

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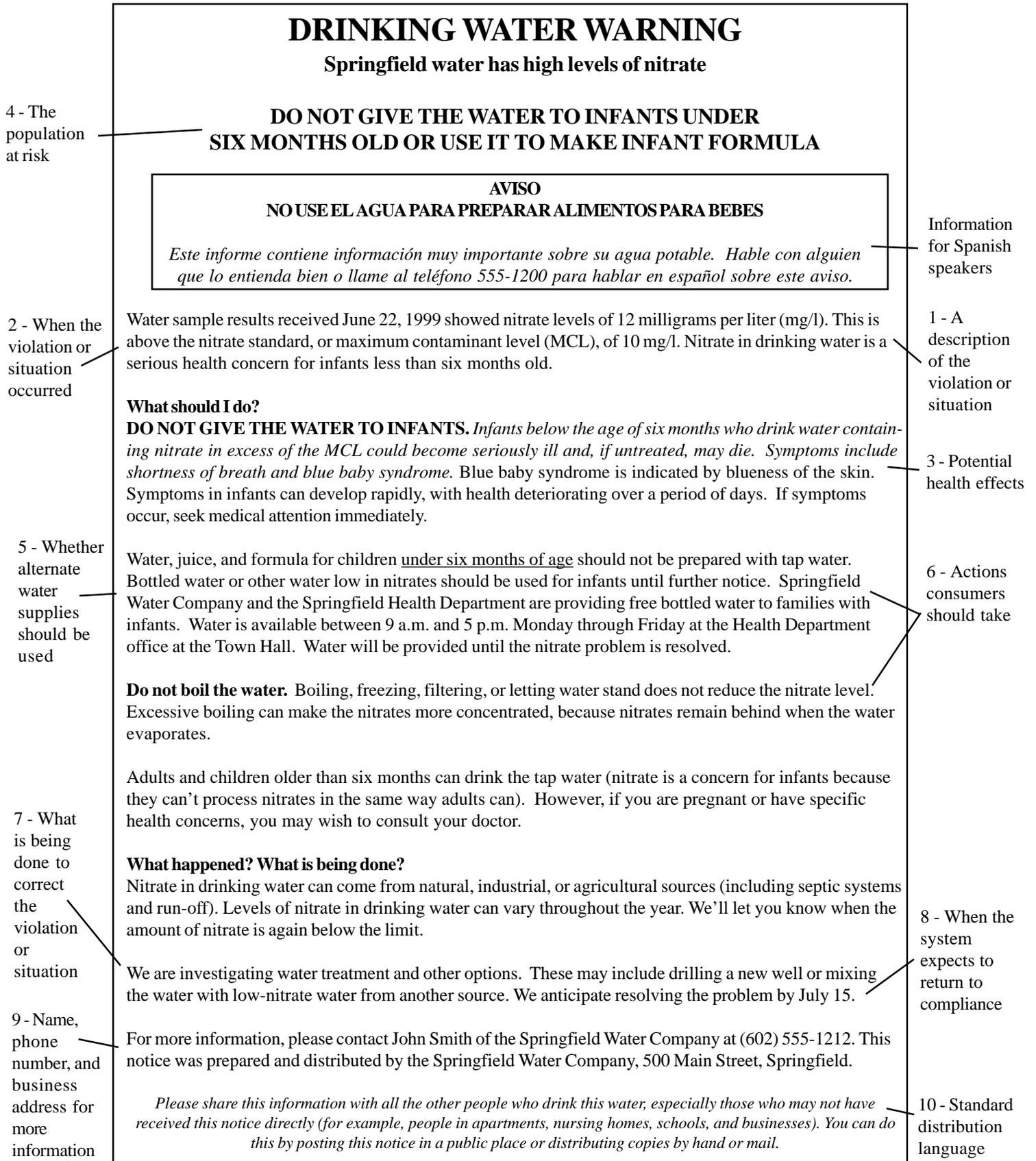
APPENDIX C

REQUIRED ELEMENTS OF A PUBLIC NOTICE

The Safe Drinking Water Act (SDWA) Amendments of 1996 revised the public notification provisions to better target notices for serious violations posing a short-term risk to health and to make the existing notification process less burdensome and more effective. The most recent version of the Public Notification Rule can be found at <http://www.epa.gov/safewater/publicnotification>. EPA has specific requirements for the format and content of public notices, as well as the manner of distribution and frequency. An example public notice from the EPA, highlighting the required elements of a public notice, is included in herein and is available on EPA's website: http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/upload/2007_04_26_publicnotification_figure_publicnotification_requiredelementsofpnotice.pdf.

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Figure 1: The Required Elements of a Public Notice



4 - The population at risk

2 - When the violation or situation occurred

5 - Whether alternate water supplies should be used

7 - What is being done to correct the violation or situation

9 - Name, phone number, and business address for more information

Information for Spanish speakers

1 - A description of the violation or situation

3 - Potential health effects

6 - Actions consumers should take

8 - When the system expects to return to compliance

10 - Standard distribution language

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