

# Regulatory Analysis Form

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(1) Agency

Department of Environmental Protection

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INDEPENDENT REGULATORY  
COMMISSION

(2) I.D. Number (Governor's Office Use)

#7-407

IRRC Number:

2637

(3) Short Title

Chapter 109 – Public Notification Revisions

(4) PA Code Cite

25 Pa. Code, Chapter 109

(5) Agency Contacts & Telephone Numbers

Primary Contact: Michele Tate, 783-8727

Secondary Contact: Kelly Jean Heffner, 787-4686

(6) Type of Rulemaking (Check One)

- Proposed Rulemaking  
 Final Order Adopting Regulation  
 Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification Attached?

- No  
 Yes: By the Attorney General  
 Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

The purpose of the proposed public notification revisions rulemaking package is to amend the Department's Safe Drinking Water regulations to strengthen the public notice requirements for imminent threat violations and situations (also known as Tier 1). The amendments will enhance the planning requirements of both the Operation and Maintenance Plan and the Emergency Response Plan sections that relate to public notification. In addition, the Department will revise the Tier 1 public notice delivery requirements for community water systems. Finally, these revisions provide additional examples of situations that community water suppliers must report to the Department within 1 hour of discovery.

***Planning Requirements for the Operation and Maintenance Plan and Emergency Response Plan:***

- Both plans include public notice elements. The revisions specify additional elements that all public water suppliers should have available in advance. The Department has amended the proposed rulemaking to require water suppliers to include procedures for repairing and replacing water mains that conform to Department and water industry standards in their Operation and Maintenance plan.

***Delivery methods for Tier 1 public notices:***

- The revisions will specify the type of delivery method that must be used based on a system's types of consumers who need to be contacted.

***"Problem Corrected" Notice:***

- The revisions now require water suppliers to issue a "problem corrected" notice that a Tier 1 violation or situation has been corrected.

***Content of abbreviated public notices:***

- The Department is now defining the minimum content elements that must be included in any Tier 1 notice that is delivered by automatic telephone dialers, TV scrollers, bullhorn announcements, or radio station news flashes.

***One-Hour Reporting:***

- The Department is including additional examples of situations that require one hour reporting to the Department.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

The Pennsylvania Safe Drinking Water Act, 35 P.S. § 721.4(a), and sections 1917-A and 1920-A of the Administrative Code of 1929, 71 P.S. §§ 510-17 and 510-20(b).

(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

No. The PN amendments will be more stringent than EPA.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

Tier 1 public notices are required when consumers may face acute health effects if they consume the water for even a short period of time. Because of the urgency of this notice, the water suppliers are required to deliver this notice as soon as possible, but no later than twenty-four hours. There are a few problems with the current Tier 1 public notification requirements because the mandatory content elements of a public notice exceed the capacity of the delivery systems that can be used to satisfy the twenty-four hour delivery timeframe. Additionally, the current regulations allow the water suppliers to select one or more delivery options instead of mandating certain forms of delivery. Water suppliers must rely on broadcast media (i.e. radio or TV) to issue a Tier 1 notice to comply with the twenty-four hour delivery timeframe, unless systems are small enough to directly deliver the Tier 1 notice by hand to their residents. Unfortunately, the media often abbreviate the public notice because it is too long and does not fit their own time slots. As a result, the public receives an incomplete notice. The revisions will outline the minimum elements that must be used in an abbreviated public notice and require water suppliers to post the entire notice on a website or record it on a telephone line so consumers can get the entire notice if they wish. To address the problem that not all consumers are watching TV or listening to their radios to receive this important notice, the revisions are mandating **direct** delivery to each service connection by hand delivery, e-mail, or automatic telephone dialing systems based upon the type of the water system. To reach transient and nontransient users, the revisions mandate that community water suppliers also use broadcast media such as radio or TV. By mandating both forms of delivery, water suppliers will inform more people.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

Failure to promulgate these revisions will mean that fewer consumers may be notified during an imminent threat violation or situation.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

All 10.5 million Pennsylvanians who drink water that is delivered by a community water system may benefit at some time. Additionally any nontransient and transient consumers may also benefit from this regulation. However, this benefit will only occur during an imminent threat situation and will only affect the population of users of the water system that is experiencing the imminent threat violation or situation.

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

The amendments are not expected to produce any adverse impacts.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

All community water systems ( $\approx$  2,106 community water systems) and all nontransient noncommunity water systems ( $\approx$  1,200 nontransient noncommunity water systems) will be required to comply with the regulation.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List

the persons and/or groups who were involved, if applicable.

The draft proposed rulemaking was submitted to the Small Water Systems Technical Assistance Center (TAC) Advisory Board for review and discussion on May 18, 2006, July 12, 2006, and November 16, 2006. Comments and recommendations were received from the TAC Board on November 21, 2006 and were incorporated into the proposed rulemaking. The final form rulemaking was presented to the TAC Board for review and discussion on June 24, 2008, July 29, 2008, and August 21, 2008. Comments were received from TAC Board on July 16, 2008 and September 26, 2008 and were incorporated into the final rulemaking.

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

Compliance costs to implement the direct delivery requirements for Tier 1 notices will increase for many of the community water systems, except those that continue to use hand delivery as a mechanism to provide direct public notification. The greatest increase in cost will be incurred by systems that choose to contract for or purchase an automatic telephone dialing system to provide public notification. These costs will vary based on system size, how many calls a system anticipates making during the year, and the service plan features that a water system purchases. In 2008, the Department gathered new cost data regarding purchasing or contracting for automatic telephone dialing services from five vendors.

**Estimates for Purchasing an automatic dialing system – 1 vendor quote**

Only one vendor provided costs for purchasing an automatic telephone dialing system. Initial/setup costs range from \$9800 - \$29100. Service and Maintenance Agreement costs vary based on whether a water system purchases a standard or a premium agreement.

<b>Initial/setup includes software, installation and training</b>	<b>Service and Maintenance Agreements</b>
\$9800-29,100	<b>Standard</b> (Service and Maintenance support between 8-5 Mon-Friday) = 20% of system cost
\$9800 – 29,100	<b>Premium</b> (Service and Maintenance support 24/7) = 25% of system cost + 2500.00

**Contracted service with an automatic dialing system provider – 5 vendor quotes**

One vendor charges an annual subscription fee that includes implementation, training, service, maintenance, updates, calling time and support. The other vendors include various fee structures for initial set-up, annual maintenance (also known as subscriptions), and different service options such as “Per call” or “Unlimited calling” plans. The other feature that may increase the cost was geo-calling which allows the water system to send a notice to a sub-group of the entire water system. One vendor did indicate that water systems could collaborate with other systems to get a “group cost” that may be cheaper than an individual system cost. In order to compare the costs between vendors, the Department will provide a scenario below. The scenario will relate to a water system that is required to contact 10,000 households. It reflects the cost for issuing a single Tier 1 notice and the associated “Problem Corrected” notice during the first year.

**Scenario:**

A water system is required to send one call to issue a Tier 1 notice to the entire system of 10,000 households during the first year. The call contains a 30-second message. A second call is made as a “Problem Corrected” notice which is also 30 seconds in length.

According to the five vendors surveyed, the cost range for the first year for the scenario above ranged from \$2,980 to \$26,700 for a “Per Call” service plan. The cost range for the first year for the scenario above for an “Unlimited Calls” Plan ranged from \$7,000 to \$10,000.

Based on how many households and how many calling events (Tier 1 PN and non-emergency events) a water supplier anticipates making within a year, every water supplier will need to determine when it becomes cost effective to purchase an “Unlimited calling” plan instead of a “Per call” plan. Water systems may be able to negotiate prices with vendors.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any

legal, accounting or consulting procedures which may be required.

See answer to item 17 above.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures which may be required.

State costs are not expected to substantially increase or decrease.

(20) In the table below, provide an estimate of the fiscal savings and cost associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
<b>Total Savings</b>	0	0	0	0	0	0
<b>COSTS:</b>						
Regulated Community		\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
<b>Total Costs</b>	0	\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*	\$0 -\$33,250*
<b>REVENUE LOSSES:</b>						
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
<b>Total Revenue Losses</b>	0	0	0	0	0	0

(20a) Explain how the cost estimates listed above were derived.

\*Systems choosing to retain the use of hand delivery as a mechanism to provide public notification will not incur additional costs as a result of this regulation. The upper end of the cost range reflects the maximum amount of costs for a water system serving 475,000 households to contract for service with an automatic dialing system provider for the first year, assuming two 30-second calls are made to each household.

See answer to item 17 above for more details.

State costs are not expected to substantially increase or decrease.

(20b) Provide the past three year expenditure history for programs affected by the regulation.

Program	FY 2005	FY 2006	FY 2007	FY 2008
Environmental Protection Operations (160-10381)	\$87,897,000	\$89,847,000	\$98,582,000	\$102,149,000
Environmental Program Management (161-10382)	\$37,049,000	\$36,868,000	\$39,909,000	\$41,800,000

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

The benefits of improving the delivery methods for Tier 1 notices outweigh the costs by preventing consumers from getting ill if they are not adequately informed to take specific actions during a Tier 1 situation. For instance, if consumers need to boil their water and they don't get that message and fail to take that action; they may ingest microorganisms that could make them ill. Providing increased protection of public health outweighs the cost of implementing direct public notice delivery methods.

(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

No nonregulatory alternatives were considered.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

No alternative regulatory schemes were considered.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

Yes. All the provisions are more stringent than federal standards.

(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

This regulation will be more stringent than those adopted by all of the other 49 states. Pennsylvania will not be placed at a competitive disadvantage because this regulation only impacts public water systems.

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

The amendments will be incorporated into the existing language of 25 Pa Code Chapter 109. Other than this incorporation, the amendments should not affect any existing or proposed regulations of DEP or any other state agency.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

It is not anticipated that public meetings or hearings will be required.

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

The revisions address planning and delivery requirements. As a result, some changes to forms, reports and other paperwork are expected.

(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

The amendments should have no effects on one particular group relative to another since it will apply to most of Pennsylvania's population.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

The amendments are targeted for promulgation during 2009 except for the Tier 1 PN delivery requirements. The Department is recommending a one-year compliance period for the Tier 1 PN delivery requirements. This compliance period will afford water suppliers the opportunity to plan and budget for automatic telephone dialing systems. If approved, water systems will not be required to implement the Tier 1 PN delivery requirements under 109.408(d) until 12 months after the effective date of this final rulemaking. Approvals resulting from the amendments will be obtained in accordance with the procedures and schedules of both the amendments and currently existing regulations.

(31) Provide the schedule for continual review of the regulation.

The amendments will be reviewed in accordance with the Sunset Review Schedule published by the Department.

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Copy below is hereby approved as to form and legality.  
Attorney General

By: \_\_\_\_\_  
(Deputy Attorney General)

DATE OF APPROVAL \_\_\_\_\_

Check if applicable  
Copy not approved. Objections attached.

Copy below is hereby certified to be true and  
correct copy of a document issued, prescribed or  
promulgated by:

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION  
ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-407

DATE OF ADOPTION December 16, 2008

BY John Hanger

TITLE JOHN HANGER  
ACTING CHAIRPERSON

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality  
Executive or Independent Agencies

BY Andrew C. Clark

DATE OF APPROVAL **JAN 16 2009**

(Deputy General Counsel)  
(~~Chief Counsel - Independent Agency~~)  
(~~Strike inapplicable title~~)

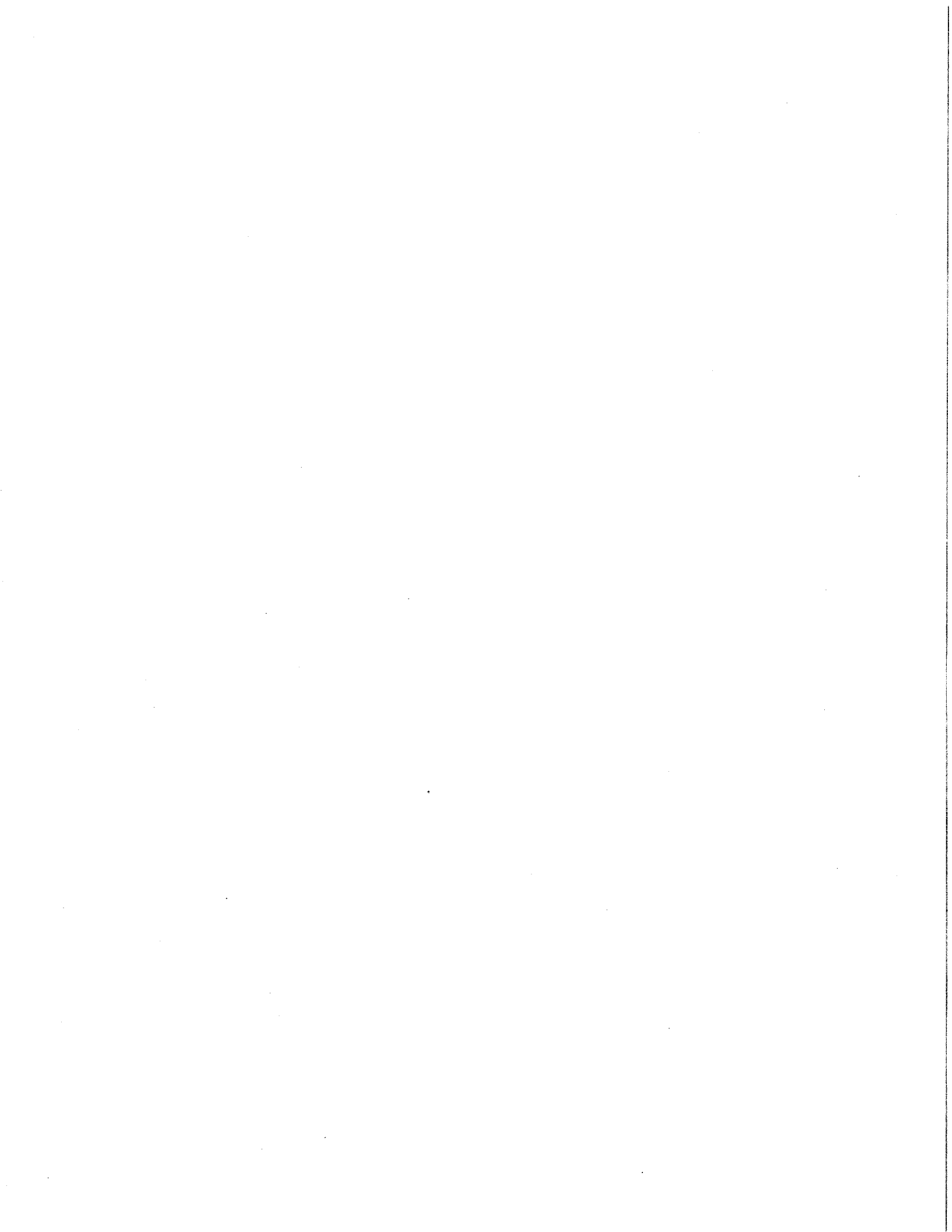
Check if applicable. No Attorney General Approval  
or objection within 30 days after submission.

**NOTICE OF FINAL RULEMAKING**

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ENVIRONMENTAL QUALITY BOARD**

**Drinking Water Public Notification Revisions**

*25 Pa. Code, Chapter 109*





**Notice of Final Rulemaking  
Department of Environmental Protection  
Environmental Quality Board  
(25 Pa. Code, Chapter 109)  
(Safe Drinking Water)  
(Chapter 109 – Public Notification Revisions)**

**Order**

The Environmental Quality Board (Board) by this order amends 25 Pa. Code, Chapter 109 (relating to Safe Drinking Water). The amendments strengthen the public notice requirements for imminent threat violations and situations (also known as Tier 1). The amendments enhance the existing planning requirements of both the Operation and Maintenance Plan and the Emergency Response Plan sections that relate to public notification. The amendments revise the delivery requirements of Tier 1 public notices for community water systems. Finally, these revisions provide additional examples of situations that community water suppliers must report to the Department within 1 hour of discovery.

This order was adopted by the Board at its meeting of December 16, 2008.

**A. Effective Date**

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

**B. Contact Persons**

For further information, contact R. Barry Greenawald, Chief, Division of Operations Monitoring and Training, P.O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 772-4018, or Marylou Barton, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This final-form rulemaking is available electronically through the DEP Web site (<http://www.depweb.state.pa.us>).

**C. Statutory Authority**

The final-form rulemaking is being made under the authority of Section 4 of the Pennsylvania Safe Drinking Water Act (35 P.S. § 721.4), which grants the Board the authority to adopt rules and regulations governing the provision of drinking water to the public, and Sections 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20).

#### **D. Background and Purpose**

The purpose of the amendments is to strengthen the public notice requirements for imminent threat violations and situations (also known as Tier 1). The amendments will enhance the existing planning requirements of both the Operation and Maintenance Plan and the Emergency Response Plan sections that relate to public notification. The amendments will revise the delivery requirements of Tier 1 public notices for community water systems. Finally, these revisions provide additional examples of situations that community water suppliers must report to the Department within 1 hour of discovery.

#### **E. Summary of Comments and Responses on the Proposed Rulemaking and Changes to the Proposed Rulemaking**

§ 109.407(a)(6) *Violation categories and other situations requiring a public notice.*

The Independent Regulatory Review Commission (IRRC) and commentators were concerned about the word “probable emergency situation” because it was unclear when water systems were required to deliver a public notice. Public notice is required when an emergency situation has occurred. IRRC suggested that the Department limit the term “probable emergency situation” to Section 109.707 which relates to planning for probable emergencies within a water supplier’s Emergency Response Plan. Consequently, the word “probable” was deleted from this paragraph.

§ 109.407(a)(9) *Violation categories and other situations requiring a public notice.*

This paragraph was added to be consistent with Federal requirements.

§ 109.407(b)(1) (2) and (3) *Definition of public notice tiers.*

These paragraphs were amended to revise “form, manner, and frequency of notice” to “categories, timing and delivery” to be consistent with the rest of Subchapter D.

§ 109.407(c)(4) *Public notice recipients.*

IRRC commented that the Department needed to include paragraph (2) with the 109.707(a) citation. This paragraph was amended to add the paragraph citation of (2) to 109.707(a).

§ 109.407(d) *Additional requirements.*

This paragraph was amended as a result of adding new text under 109.702(a)(3) and renumbering the remaining items.

§ 109.408(a)(7) *General violation categories and other situations requiring a Tier 1 public notice.*

IRRC and commentators were concerned about the word “probable emergency situation” because it was unclear when water systems were required to deliver a Tier 1 public notice. A Tier 1 public notice is required when an emergency situation has occurred. IRRC suggested that the Department limit the term “probable emergency situation” to Section 109.707 which relates to planning for probable emergencies within a water supplier’s Emergency Response Plan. Consequently, the word “probable” was deleted from this paragraph.

§ 109.408(b)(5) *Timing for a Tier 1 public notice.*

This paragraph was amended to clarify that the water supplier’s corrective actions must be completed and approved by the Department before the “problem corrected” public notice is issued. This revision was made as a result of the comments the Department received.

§ 109.408(c) *Delivery of a Tier 1 public notice prior to [the date that is 12 months after the effective date of adoption of this final rulemaking package] .*

IRRC and commentators requested that the Department provide a compliance period for the Tier 1 PN delivery requirements so that water suppliers could research their options, plan and budget accordingly and implement the new requirements. This subsection was modified in order to retain existing language that allows for an extended compliance period for systems that will be installing automatic telephone dialing systems. All systems must comply with the existing language under 109.408(c) until 12 months after the effective date of this final rulemaking.

§ 109.408(d) *Delivery of a Tier 1 public notice beginning on [the date that is 12 months after the effective date of adoption of this final rulemaking package] .*

IRRC and commentators requested that the Department provide a compliance period for the Tier 1 PN delivery requirements so that water suppliers could research their options, plan and budget accordingly and implement the new requirements. This subsection was amended to include the new Tier 1 public notice delivery requirements that become effective 12 months after the effective date of adoption of this final rulemaking package. This revision was made as a result of the comments the Department received.

IRRC and commentators requested that the Department clarify that water suppliers may limit the public notice to contact consumers who are affected by a Tier 1 event instead of notifying all persons served. Consequently, this subsection was amended to reference the existing language that allows delivery of Tier 1 notices to be limited to persons served by the affected area if:

- the supplier has a violation in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system, and
- the supplier receives permission from the Department.

§ 109.408(d)(1) *Delivery of a Tier 1 public notice.*

Commentators requested that the Department remove the population categories and allow all community water systems the option of any form of direct delivery of a Tier 1 public notice.

EPA requested that the Department reorganize the language regarding the delivery of an abbreviated message to subparagraph (iii) since automatic telephone dialing systems require abbreviated messages. Under subparagraph (iii), IRRC requested that the Department require water suppliers to provide the entire public notice on a dedicated telephone line because not all consumers had access to the Internet. The Department made this revision and presented it to the Department's Small Systems Technical Assistance Center Advisory Board (TAC) during their June 24, 2008 meeting. However, the TAC Board requested the Department to allow water suppliers the choice of posting the entire message on a website because delivering this notice through a dedicated telephone line would be unrealistic and impractical. In deference to the regulated community, the Department is allowing water suppliers the choice to either post the entire public notice on a website or record it on a dedicated telephone line.

A commentator requested clarification about whether noncommunity water systems had to use broadcast media under 109.408(d)(2). This paragraph was revised to address the comments the Department received by:

- Removing the population categories for community water systems. This change will enable community water systems serving any population to use a variety of direct delivery methods, as long as the Tier 1 public notices are delivered within the 24 hour delivery time frame.
- Reorganizing the language regarding the delivery of an abbreviated message to subparagraph (iii) since automatic telephone dialing systems require abbreviated messages. The Department chose to provide water suppliers the options under clauses (A) through (C) of how to provide the entire public notice when an abbreviated notice is used. The language under clauses (A) through (C) is the proposed language.
- Specifying under paragraph (2) that community water systems are the type of public water systems that need to provide notice to appropriate broadcast media such as radio or television.

§ 109.408(d)(3) *Delivery of a Tier 1 public notice.*

This paragraph was revised to add hand delivery and electronic mail as direct delivery options for noncommunity water systems.

§ 109.409(a)(1) *Tier 2 public notice – categories, timing, and delivery of notice.*

This paragraph was amended to revise “form, manner, and frequency of notice” to “categories, timing and delivery” to be consistent with the rest of Subchapter D.

§ 109.409(a)(4) *Tier 2 public notice – categories, timing, and delivery of notice.*

This paragraph was added to allow the Department to require a Tier 2 public notice for violations or situations associated with chronic health effects or persistent violations.

§ 109.410(a)(1) *Tier 3 public notice- categories, timing and delivery*

This paragraph was amended to revise “form, manner, and frequency of notice” to “categories, timing and delivery” to be consistent with the rest of Subchapter D.

§ 109.411(b) *Abbreviated notice.*

This paragraph was amended to provide the new citation (d)(1)(iii) under 109.408.

§ 109.412(b) *Special notice of the availability of unregulated contaminant monitoring results.*

This subsection was amended to revise “form and manner” to “delivery” and revise “form, manner, and frequency of notice” to “categories, timing and delivery” to be consistent with the rest of Subchapter D.

§ 109.413(a) and (b) *Special notice for nitrate exceedances above MCL by noncommunity water system, where granted permission by the Department.*

This subsection was amended to revise “form and manner” to “delivery” and revise “form, manner, and frequency of notice” to “categories, timing and delivery” to be consistent with the rest of Subchapter D. The §109.408 citation was amended to include delivery requirements before and after the compliance period for delivery of Tier 1 public notices.

§ 109.415(1) *Notice by the Department on behalf of the public water system.*

This paragraph was amended to provide the Department flexibility in delivering public notice on behalf of the public water system.

§ 109.701(a)(3)(iii) *One-hour reporting requirements.*

IRRC, commentators and the TAC Board were concerned about the word “probable emergency situation” because it appeared that water systems were to report

situations that may become emergencies as well as actual emergencies. Consequently, this subparagraph was revised to delete the phrase “a probable emergency situation” and retain existing language which includes “circumstances exist which may adversely affect the quality or quantity of drinking water.”

§ 109.701(a)(3)(iii)(F) *One-hour reporting requirements.*

IRRC and commentators requested that the Department refine the definition of chemical overfeed to target events that pose serious threats and will adversely affect the quality or quantity of drinking water. To further define a chemical overfeed, this clause was amended to read: “an overfeed of a drinking water treatment chemical that exceeds a published maximum use value, such as the National Sanitation Foundation’s maximum use value for that treatment chemical, as applicable.”

§ 109.701(a)(3)(iii)(G) *One-hour reporting requirements.*

IRRC and commentators requested that the Department refine the definition of “negative water pressure in any portion of the distribution system” to target events that pose serious threats and will adversely affect the quality or quantity of drinking water. Commentators recommended that the Department add the language “where there is known contamination or a high risk of contamination” to target events that pose serious threats to the public. Consequently, this clause was amended to read: “a situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of known contamination or a water supplier suspects a high risk of contamination.”

§ 109.701(a)(3)(iii)(H) *One-hour reporting requirements.*

A commentator requested that the Department further define the requirement to report a lack of resources that affect operations. Consequently, this clause was amended to read: “A lack of resources that adversely affect operations, such as staff shortages, notification by the power utility of planned lengthy power outages or imminent depletion of treatment.

§ 109.702(a)(3) *Operation and Maintenance Plan.*

This paragraph was amended to require community water suppliers to add procedures for repairing and replacing water mains that conform to DEP and water industry standards to their Operation and Maintenance plan. This revision was made as a result of a comment the Department received.

§ 109.707(a)(2) *Emergency Response Plan.*

IRRC recommended that the Department include local emergency coordinators as contact persons in a water supplier’s emergency response plan. Consequently, the

Department revised this paragraph to add “appropriate” to the list of contact persons. Each water supplier can determine if there is a local emergency coordinator that should be included in the contact list.

§ 109.707(a)(2)(ii) *Emergency Response Plan.*

IRRC requested that the Department include listing local public officials as contact persons in a water supplier’s emergency response plan. Furthermore, the TAC Board recommended that the Department specify that the local public officials are within a water supplier’s service area. Consequently, this subparagraph was amended to include key public officials within a water supplier’s service area under the list of contact persons that water suppliers need to contact for each probable emergency situation.

§ 109.707(a)(2)(iv) *Emergency Response Plan.*

The TAC Board recommended that the Department revise the term “sensitive subpopulations” to “facilities within a water supplier’s service area.” Consequently, this subparagraph was amended to revise the term “sensitive subpopulations” to “facilities within a water supplier’s service area.” The Department included social service agencies to enlist the aid of other agencies in delivering a public notice to persons that may have special needs.

§ 109.707(c) *Emergency Response Plan.*

A commentator requested that the Department require water suppliers to update their emergency response plan whenever there are changes to communication procedures or contact information and include a date of last update on the plan. Consequently, this subsection was amended to require water suppliers to update their emergency response plan as necessary to reflect changes to the communication procedures and contact information under (a)(2) and record the date when they update their plan each year.

**F. Benefits, Costs and Compliance**

**Benefits**

The strengthened public notice requirements for imminent threat violations and situations (also known as Tier 1) will provide greater health protection for the public. Specifically, the amendments requiring direct delivery of Tier 1 notices and delivery by broadcast media to transient and nontransient users should improve the delivery rate of public notification during an imminent threat situation. The Commonwealth has a compelling state interest in providing strengthened public notification during imminent threat situations. As a result of this rulemaking, more people will know what actions they need to take to avoid adverse health effects from a Tier 1 violation or situation.

The requirement for water suppliers to keep public notice templates and EPA contaminant fact sheets onsite will assist water suppliers with meeting Tier 1 public notice requirements within the 24 hour timeframe. Water suppliers can use the

information found on the EPA contaminant fact sheets to provide more information to consumers who call about the Tier 1 event.

The Department is providing more examples of situations that require community water suppliers to report to the Department within 1 hour of discovery. This consultation should provide greater assistance to both the water industry and the public.

### **Compliance Costs**

Compliance costs to implement the direct delivery requirements for Tier 1 notices will increase for some of the community water systems. The greatest increase in cost will be incurred by systems that contract for notification services or directly purchase an automatic telephone dialing system. In 2008, the Department gathered new cost data regarding purchasing or contracting for automatic telephone dialing services from five vendors. These costs will vary based on system size, how many calls a system anticipates making during the year, and the service plan features that a water system purchases. The following scenario is provided to provide a cost range for a "Per Call" service plan and an "Unlimited Calls" plan. The scenario will relate to a water system that is required to contact 10,000 households. It reflects the cost for issuing a single Tier 1 public notice and the associated "Problem Corrected" public notice during the first year.

#### **Scenario:**

A water system is required to send one call to issue a Tier 1 notice to the entire system of 10,000 households during the first year. The call contains a 30-second message. A second call is made as a "Problem Corrected" notice which is also 30 seconds in length.

According to the five vendors surveyed, the estimated cost range for the first year for the scenario above ranged from \$2,980 to \$26,700 for a "Per Call" service plan. The estimated cost range for the first year for the scenario above for an "Unlimited Calls" Plan ranged from \$7,000 to \$10,000. Based on how many households and how many calling events (Tier 1 PN and non-emergency events) a water supplier anticipates making within a year, every water supplier will need to determine when it becomes cost effective to purchase an "Unlimited calling" plan instead of a "Per call" plan. Water systems may be able to negotiate prices with vendors.

### **Compliance Assistance Plan**

The proposed revisions address additional planning and delivery requirements. The Department will provide educational, technical and compliance assistance through newsletters, guidance documents, training sessions and surveillance activities.



## **Paperwork Requirements**

The proposed revisions address additional planning and delivery requirements. As a result of this final rulemaking, the Department will be making modifications to existing forms, reports and other paperwork.

### **H. Sunset Review**

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

### **I. Regulatory Review**

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on September 11, 2007, the Department submitted a copy of the notice of proposed rulemaking, published at 37 Pa.B.5158, to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on \_\_\_ (blank) \_\_\_, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on \_\_\_ (blank) \_\_\_ and approved the final-form regulations.

### **J. Findings of the Board**

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated there under at *1 Pennsylvania Code* §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at 37 PaB. 5158 on September 22, 2007.
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

**K. Order of the Board**

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department of Environmental Protection, 25 *Pennsylvania Code*, Chapter 109, are amended to read as set forth in Annex A.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This order shall take effect immediately.

BY:  
JOHN HANGER  
Acting Chairman  
Environmental Quality Board

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 109. SAFE DRINKING WATER

Subchapter D. PUBLIC NOTIFICATION

§ 109.407. General public notification requirements.

(a) *Violation categories and other situations requiring a public notice.* A public water supplier shall give public notice for the following circumstances:

\* \* \* \* \*

(6) Occurrence of a waterborne disease outbreak, as defined in § 109.1 (relating to definitions), or other [waterborne] [~~probable~~] emergency situation as defined in § 109.701(a)(3)(iii) (relating to reporting and recordkeeping) that adversely affects the quality or quantity of finished water and has a significant potential to have serious adverse effects on human health as a result of short-term exposure.

\* \* \* \* \*

(9) OTHER VIOLATIONS OR SITUATIONS DETERMINED BY THE DEPARTMENT TO REQUIRE A PUBLIC NOTICE UNDER THIS SUBCHAPTER.

\* \* \* \* \*

(b) *Definition of public notice tiers.* Public notice requirements are divided into three tiers, to take into account the seriousness of the violation or situation and any potential adverse health effects that may be involved.

(1) *Tier 1 public notice.* Required for violations and situations specified in subsection (a) with significant potential to have serious adverse effects on human health as a result of short-term exposure. General violation categories and other situations requiring a Tier 1 public notice are specified in § 109.408(a) (relating to Tier 1 public notice—~~[form, manner and frequency of notice]~~CATEGORIES, TIMING AND DELIVERY).

(2) *Tier 2 public notice.* Required for all other violations and situations in subsection (a) with potential to have serious adverse effects on human health. General violation categories and other situations requiring a Tier 2 public notice are specified in § 109.409(a) (relating to Tier 2 public notice—~~[form, manner and frequency of notice]~~ **CATEGORIES, TIMING AND DELIVERY**).

(3) *Tier 3 public notice.* Required for all other violations and situations in subsection (a) not included in Tier 1 and Tier 2. General violation categories and other situations requiring a Tier 3 public notice are specified in § 109.410(a) (relating to Tier 3 public notice—~~[form, manner and frequency of notice]~~ **CATEGORIES, TIMING AND DELIVERY**).

(c) *Public notice recipients.*

\* \* \* \* \*

(4) If a community water system has a Tier 1 violation, the water supplier shall also notify ~~[key public officials]~~ **additional recipients** as designated in the community water system's emergency response plan under § 109.707(a)~~(2)~~ (relating to emergency response plan).

\* \* \* \* \*

**(d) Additional requirements. Community water systems shall comply with the planning requirements specified under § 109.702(a)~~(6)~~ (7) (relating to operation and maintenance plan) and § 109.707.**

§ 109.408. Tier 1 public notice--~~[form, manner and frequency]~~ **categories, timing and delivery** of notice.

(a) *General violation categories and other situations requiring a Tier 1 public notice.* A public water supplier shall provide Tier 1 public notice for the following circumstances:

\* \* \* \* \*

(7) Occurrence of a waterborne disease outbreak, as defined in § 109.1 (relating to definitions), or other ~~[waterborne]~~ ~~[probable]~~ emergency **situation as defined in § 109.701(a)(3)(iii) (relating to reporting and recordkeeping)** that adversely affects the quality or quantity of the finished water **[including, but not limited to, the following:] and has a significant potential to have serious adverse effects on human health as a result of short-term exposure.**

**(i) Failure or significant interruption in key water treatment processes.**

(ii) A natural disaster that disrupts the water supply or distribution system.

(iii) A chemical spill or unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination.]

\* \* \* \* \*

(b) *Timing for a Tier 1 public notice.* A public water supplier shall do the following:

\* \* \* \* \*

**(5) Provide a public notice THAT THE TIER 1 VIOLATION OR SITUATION HAS BEEN CORRECTED, as soon as possible, but no later than 24 hours after THE CORRECTIVE ACTIONS HAVE BEEN COMPLETED AND the notice is approved by the Department[, that the Tier 1 violation or situation has been corrected].**

(c) *{ Form and manner } { ~~Delivery~~ } of a Tier 1 public notice PRIOR TO \_\_\_\_\_ . **(EDITOR'S NOTE: THE BLANK REFERS TO A DATE 12 MONTHS AFTER THE EFFECTIVE DATE OF ADOPTION OF THIS FINAL RULEMAKING.)** The { form and manner } { ~~delivery methods~~ } used by a public water supplier shall fit the specific situation and shall be reasonably designed to reach residential, transient and nontransient users of the water system. To reach all persons served, a water supplier shall use, { at a minimum, one or more of } { ~~as appropriate to the type and size of the water system,~~ } the following forms of delivery:*

(1) { Appropriate broadcast media, such as radio or television. } { ~~Community water systems.~~ }

**(i) Systems serving 3,300 or fewer persons shall provide public notice to each service connection using one or more of the following forms of direct delivery:**

**(A) Hand delivery.**

**(B) Electronic mail.**

**(C) Another form of direct delivery approved in writing by the Department.**

**(ii) Systems serving 3,301 or more persons shall provide public notice to each service connection using one or more of the following forms of direct delivery:**

~~(A) Automatic telephone dialing systems or other best available technology.~~

~~(B) Electronic mail.~~

~~(C) Another form of direct delivery approved in writing by the Department.~~

~~(iii) In addition to providing public notice to each service connection under subparagraph (i) or (ii), public water systems that also serve transient and nontransient service connections shall provide notice using appropriate broadcast media, such as radio and television.~~

~~(iv) If a public water supplier delivers an abbreviated notice in accordance with § 109.411(b) (relating to content of a public notice), the public water supplier shall also provide the entire public notice under this section in one of the following ways:~~

~~(A) Posted on a website.~~

~~(B) Recorded on a dedicated phone line.~~

~~(C) Another method approved in writing by the Department. }~~

[(2) { Posting of the notice in conspicuous locations throughout the area served by the water system. } ~~{ Noncommunity water systems. Noncommunity water systems shall provide notice to transient and nontransient consumers using one or more of the following forms of delivery:~~

~~(i) Posting the notice in conspicuous locations throughout the area served by the water system.~~

~~(ii) Another form of delivery approved in writing by the Department. }~~

{ (3) Hand delivery of the notice to persons served by the water system.

(4) Another delivery method approved in writing by the Department. }

(d) DELIVERY OF A TIER 1 PUBLIC NOTICE BEGINNING ON .  
(EDITOR'S NOTE: THE BLANK REFERS TO A DATE 12 MONTHS AFTER THE  
EFFECTIVE DATE OF ADOPTION OF THIS FINAL RULEMAKING.) THE  
DELIVERY METHODS USED BY A PUBLIC WATER SUPPLIER SHALL FIT  
THE SPECIFIC SITUATION AND SHALL BE REASONABLY DESIGNED TO  
REACH RESIDENTIAL, TRANSIENT AND NONTRANSIENT USERS OF THE  
WATER SYSTEM. TO REACH ALL PERSONS SERVED IN ACCORDANCE

WITH § 109.407(c), A WATER SUPPLIER SHALL USE, AS APPROPRIATE TO THE TYPE OF THE WATER SYSTEM, THE FOLLOWING FORMS OF DELIVERY IDENTIFIED UNDER PARAGRAPHS (1) – (3).

(1) COMMUNITY WATER SYSTEMS SHALL PROVIDE PUBLIC NOTICE TO EACH SERVICE CONNECTION USING ONE OR MORE OF THE FOLLOWING FORMS OF DIRECT DELIVERY:

(i) HAND DELIVERY.

(ii) ELECTRONIC MAIL.

(iii) AUTOMATIC TELEPHONE DIALING SYSTEMS OR OTHER BEST AVAILABLE TECHNOLOGY. IF A PUBLIC WATER SUPPLIER DELIVERS AN ABBREVIATED NOTICE IN ACCORDANCE WITH § 109.411(b) (RELATING TO CONTENT OF A PUBLIC NOTICE), THE PUBLIC WATER SUPPLIER SHALL ALSO PROVIDE THE ENTIRE PUBLIC NOTICE UNDER THIS SECTION IN ONE OF THE FOLLOWING WAYS:

(A) POSTED ON A WEBSITE.

(B) RECORDED ON A DEDICATED PHONE LINE.

(C) ANOTHER METHOD APPROVED IN WRITING BY THE DEPARTMENT.

(iv) ANOTHER FORM OF DIRECT DELIVERY APPROVED IN WRITING BY THE DEPARTMENT.

(2) IN ADDITION TO PROVIDING PUBLIC NOTICE TO EACH SERVICE CONNECTION UNDER PARAGRAPH (1), COMMUNITY WATER SYSTEMS THAT ALSO SERVE TRANSIENT AND NONTRANSIENT SERVICE CONNECTIONS SHALL PROVIDE NOTICE USING APPROPRIATE BROADCAST MEDIA, SUCH AS RADIO AND TELEVISION.

(3) NONCOMMUNITY WATER SYSTEMS SHALL PROVIDE PUBLIC NOTICE TO TRANSIENT AND NONTRANSIENT CONSUMERS USING ONE OR MORE OF THE FOLLOWING FORMS OF DELIVERY:

(i) HAND DELIVERY.

(ii) ELECTRONIC MAIL.

(iii) POSTING THE NOTICE IN CONSPICUOUS LOCATIONS THROUGHOUT THE AREA SERVED BY THE WATER SYSTEM.

**(iv) ANOTHER FORM OF DELIVERY APPROVED IN WRITING BY  
THE DEPARTMENT.**

§ 109.409. Tier 2 public notice--**[form, manner and frequency]** **categories, timing and delivery** of notice.

(a) *General violation categories and other situations requiring a Tier 2 public notice.* A public water supplier shall provide Tier 2 public notice for the following circumstances:

(1) All violations of the primary MCL, MRDL and treatment technique requirements in Subchapter B, G or K (relating to MCLs, MRDLs or treatment technique requirements; system management responsibilities; and lead and copper), except where a Tier 1 notice is required under § 109.408 (relating to Tier 1 public notice—**[form, manner and frequency]** **CATEGORIES, TIMING AND DELIVERY** of notice) or when the Department determines that a Tier 1 notice is required. The tier assignment for fluoride is not incorporated by reference. Under § 109.202(d) (relating to MCLs, MRDLs or treatment technique requirements), a public water system shall comply with the primary MCL for fluoride of 2 mg/L. As such, a public water supplier shall provide Tier 2 public notice for violation of the primary MCL for fluoride.

\* \* \* \* \*

**(4) OTHER VIOLATIONS OR SITUATIONS DETERMINED BY THE  
DEPARTMENT TO REQUIRE A TIER 2 PUBLIC NOTICE, TAKING INTO  
ACCOUNT POTENTIAL CHRONIC HEALTH IMPACTS AND PERSISTENCE OF  
THE VIOLATION.**

\* \* \* \* \*

§ 109.410. Tier 3 public notice--**[form, manner and frequency]** **categories, timing and delivery** of notice.

(a) *General violation categories and other situations requiring a Tier 3 public notice.* A public water supplier shall provide Tier 3 public notice for the following circumstances:

(1) Monitoring violations under Subchapter C or K (relating to monitoring requirements; and lead and copper), except when a Tier 1 notice is required under § 109.408 (relating to Tier 1 public notice—**[form, manner and frequency]** **CATEGORIES, TIMING AND DELIVERY** of notice) or where the Department determines that a Tier 2 notice is required.

\* \* \* \* \*

(c) **[Form and manner]** **Delivery** of a Tier 3 public notice. A public water supplier shall provide the initial notice and any repeat notices in a form and manner that is reasonably designed to reach all persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water



system, but the public water supplier shall, at a minimum, meet the following requirements:

\* \* \* \* \*

**§ 109.411. Content of a public notice.**

(a) *Elements of a public notice.* When a public water system is required to give public notice under this subchapter, each public notice **[shall] must** include the following elements:

\* \* \* \* \*

(3) Any potential adverse health effects from the violation or situation, including the standard language under subsection **[(d)] (e)(1)** or (2), whichever is applicable.

\* \* \* \* \*

(10) A statement to encourage the notice recipient to distribute the public notice to other persons served, using the standard language under subsection **[(d)] (e)(3)**, **[where] when** applicable.

(b) **Abbreviated notice. If automatic telephone dialing systems, TV scrollers, bullhorn announcements or radio station news flashes are used to deliver an abbreviated notice in accordance with § 109.408[(e) (1) (ii) or (iii) (3)](d)(1)(iii) (relating to tier 1 public notice--categories, timing and delivery of notice), the abbreviated notice must include, at a minimum, the following elements:**

**(1) A description of the violation or situation, including the contaminants of concern, and (as applicable) the contaminant levels.**

**(2) Whether alternative water supplies should be used.**

**(3) What actions consumer should take, including when they should seek medical help, if known.**

**(4) A telephone number or website address, or both, where consumers can obtain the entire notice.**

**[(b)] (c) \* \* \***

\* \* \* \* \*

**[(c)] (d) \* \* \***

\* \* \* \* \*

~~[(d)] (e)~~ \* \* \*

**§ 109.412. Special notice of the availability of unregulated contaminant monitoring results.**

\* \* \* \* \*

(b) ~~{Form and manner}~~ **DELIVERY** of a special notice. The ~~{form and manner}~~ **DELIVERY** of the public notice shall follow the requirements for a Tier 3 public notice prescribed in § 109.410 (relating to Tier 3 public notice—~~{form, manner and frequency}~~ **CATEGORIES, TIMING AND DELIVERY** of notice). A public water system may use an annual report or CCR to notify persons served by the system of the availability of the results of the sampling as long as the requirements under § 109.410(d) are met. The notice shall also identify a person and provide the telephone number to contact for information on the monitoring results.

**§ 109.413. Special notice for nitrate exceedances above MCL by noncommunity water systems, where granted permission by the Department.**

(a) *Timing for a special notice.* A noncommunity water system granted permission by the Department in writing in accordance with 40 CFR 141.11(d) (relating to maximum contaminant levels for inorganic chemicals) to exceed the nitrate MCL shall provide notice to persons served according to the requirements for a Tier 1 notice under § 109.408(a) and (b) (relating to Tier 1 public notice—~~{form, manner and frequency}~~ **CATEGORIES, TIMING AND DELIVERY** of notice).

(b) ~~{Form and manner}~~ **DELIVERY** of a special notice. Noncommunity water systems granted permission by the Department in writing to exceed the nitrate MCL in accordance with 40 CFR 141.11(d) shall provide continuous posting of the fact that nitrate levels exceed 10 mg/L and include the potential health effects of exposure, according to the requirements for a Tier 1 notice delivery under § 109.408 **(c)(2) AND (d)(3)** and the content requirements under § 109.411 (relating to content of a public notice).

**§ 109.415. Notice by the Department on behalf of the public water system.**

(a) If a public water supplier fails to give notice to the public as required by this subchapter, the Department may perform this notification on behalf of the supplier of water and may assess costs of notification on the responsible water supplier.

~~{(1) Public notice given by the Department on behalf of the public water system. If the Department gives the public notice required by this subchapter on behalf of the public water supplier, the Department will comply with this subchapter.}~~

~~[(2)]~~ (b) Public water system responsibilities when public notice is given by the Department. If the Department gives public notice, the public water supplier remains responsible for ensuring that the requirements of this subchapter are met.

\* \* \* \* \*

## Subchapter G. SYSTEM MANAGEMENT RESPONSIBILITIES

### § 109.701. Reporting and recordkeeping.

(a) *Reporting requirements for public water systems.* Public water systems shall comply with the following requirements:

\* \* \* \* \*

(3) [*Compliance report*] *One-hour reporting requirements.* A public water supplier shall report the circumstances to the Department within 1 hour of discovery for the following violations or situations:

\* \* \* \* \*

(iii) [~~Circumstances exist~~][~~A probable emergency situation~~] which may adversely affect the quality or quantity of drinking water including, but not limited to [, the]:

(A) The occurrence of a waterborne disease outbreak[, a].

(B) A failure or significant interruption in key water treatment processes[, a].

(C) A natural disaster that disrupts the water supply or distribution system[, or a].

(D) A chemical spill [or].

(E) An unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination.

(F) An overfeed of a drinking water treatment chemical THAT EXCEEDS A PUBLISHED MAXIMUM USE VALUE, SUCH AS NATIONAL SANITATION FOUNDATION'S MAXIMUM USE VALUE, AS APPLICABLE.

(G) A situation that causes a [negative] LOSS OF POSITIVE water pressure in any portion of the distribution system WHERE THERE IS

**EVIDENCE OF CONTAMINATION OR A WATER SUPPLIER  
SUSPECTS A HIGH RISK OF CONTAMINATION.**

**(H) A lack of resources that ADVERSELY affect operations, such as staff shortages, notification by the power utility of planned lengthy power outages or imminent depletion of treatment chemical inventories.**

\* \* \* \* \*

**§ 109.702. Operation and maintenance plan.**

(a) A community water supplier shall develop an operation and maintenance plan for the community water system. The operation and maintenance plan **[shall] must generally** conform to the guidelines contained in the Department's *Public Water Supply Manual* and **[shall]** contain at least the following information:

\* \* \* \* \*

**(3) PROCEDURES FOR REPAIRING AND REPLACING WATER MAINS THAT CONFORM TO THE DEPARTMENT AND WATER INDUSTRY STANDARDS.**

~~{(3)}~~ **(4)** \* \* \*

~~{(4)}~~ **(5)** \* \* \*

~~{(5)}~~ **(6)** \* \* \*

~~{(6)}~~ **(7) [A public] Public notification [program including appropriate advance preparations, such as public] elements in accordance with Subchapter D (relating to public notification) that include:**

**(i) Public** notice templates[, an].

**(ii) EPA contaminant fact sheets, when available.**

**(iii) An** explanation of appropriate methods of delivery [and a designation of public notice recipients for each tier type] **of public notice in accordance with Subchapter D**[].

~~{(7)}~~ **(8)** \* \* \*

~~{(8)}~~ **(9)** \* \* \*

~~{(9)}~~ **(10)** \* \* \*

~~{(10)}~~ (11) \* \* \*

~~{(11)}~~ (12) \* \* \*

~~{(12)}~~ (13) \* \* \*

~~{(13)}~~ (14) Date of last update.

\* \* \* \* \*

(c) The community water supplier shall review and update the operation and maintenance plan [shall be reviewed and updated] as necessary to reflect changes in the operation or maintenance of the water system. The plan [shall] MUST be [bound and placed]:

(1) Placed in secure locations which are readily accessible to the water system's personnel[, and shall be presented].

(2) Presented upon request to the Department.

\* \* \* \* \*

### § 109.707. Emergency response plan.

(a) A community water supplier shall develop a plan for the provision of safe and adequate drinking water under emergency circumstances[, and submit the plan to the Department for approval by December 8, 1985]. The emergency response plan [shall] must generally conform to the guidelines contained in the Department's *Public Water Supply Manual*, as applicable, and [shall] contain at least the following [information]:

(1) [Identification of probable emergency situations, including, but not limited to, those specified in § 109.701(a)(3)(iii) (relating to reporting and recordkeeping), and alternative solutions to respond to situations including how the system will maintain its ability to provide service in the event of contamination or an outage of one or more of its sources of supply. Consideration shall be given to providing reserve capacity according to § 109.609 (relating to reserve capacity and finished water storage).] Organization table. An organization table that includes a prioritized list of names and contact numbers of persons in charge of the water system during an emergency.

(2) [Procedures for communications and coordination with the local emergency management organization.] Communication procedures and contact information. For each probable emergency situation, including, but not limited to, those specified in

§ 109.701(a)(3)(iii) (relating to reporting and recordkeeping), a list OF APPROPRIATE contact persons and phone numbers for the following groups of people:

(i) ~~[Local]~~ emergency management agencies within a water system's jurisdiction.

(ii) KEY PUBLIC OFFICIALS WITHIN A WATER SUPPLIER'S SERVICE AREA.

~~[(iii)]~~ (iii) Government agencies including, but not limited to the Department, Public Utility Commission, Department of Health, ~~[Department of Energy], Department of Public Welfare and Pennsylvania Department of Agriculture.~~

~~[(iii)]~~ (iv) ~~[Sensitive subpopulations]~~ FACILITIES WITHIN A WATER SUPPLIER'S SERVICE AREA, including, but not limited to hospitals, schools, day-care facilities, nursing homes, SOCIAL SERVICE AGENCIES, industrial and commercial users.

~~[(iv)]~~ (v) Media.

~~[(v)]~~ (vi) Equipment and chemical suppliers.

(3) Means of communication. A list containing the following:

(i) Types of communication equipment.

(ii) Types of communication for public notification.

(4) Summary description of the system. A list containing the following:

(i) Location of pertinent operational information.

(ii) Source information.

(iii) Treatment information.

(iv) Finished water storage.

(5) Assessment of available resources. A list containing the following:

(i) Mutual aid agreements.

(ii) Emergency water supply equipment that includes procedures for providing reserve capacity according to § 109.609 (relating to reserved

capacity and finished water storage) or an approved alternative water supply.

(iii) Power supply equipment.

(iv) Repair equipment.

(v) Vehicles and construction equipment.

(vi) Spare equipment.

(6) Corrective actions for probable emergency situations. A list containing the following:

(i) Probable emergency situations including, but not limited to, those specified in § 109.701(a)(3)(iii).

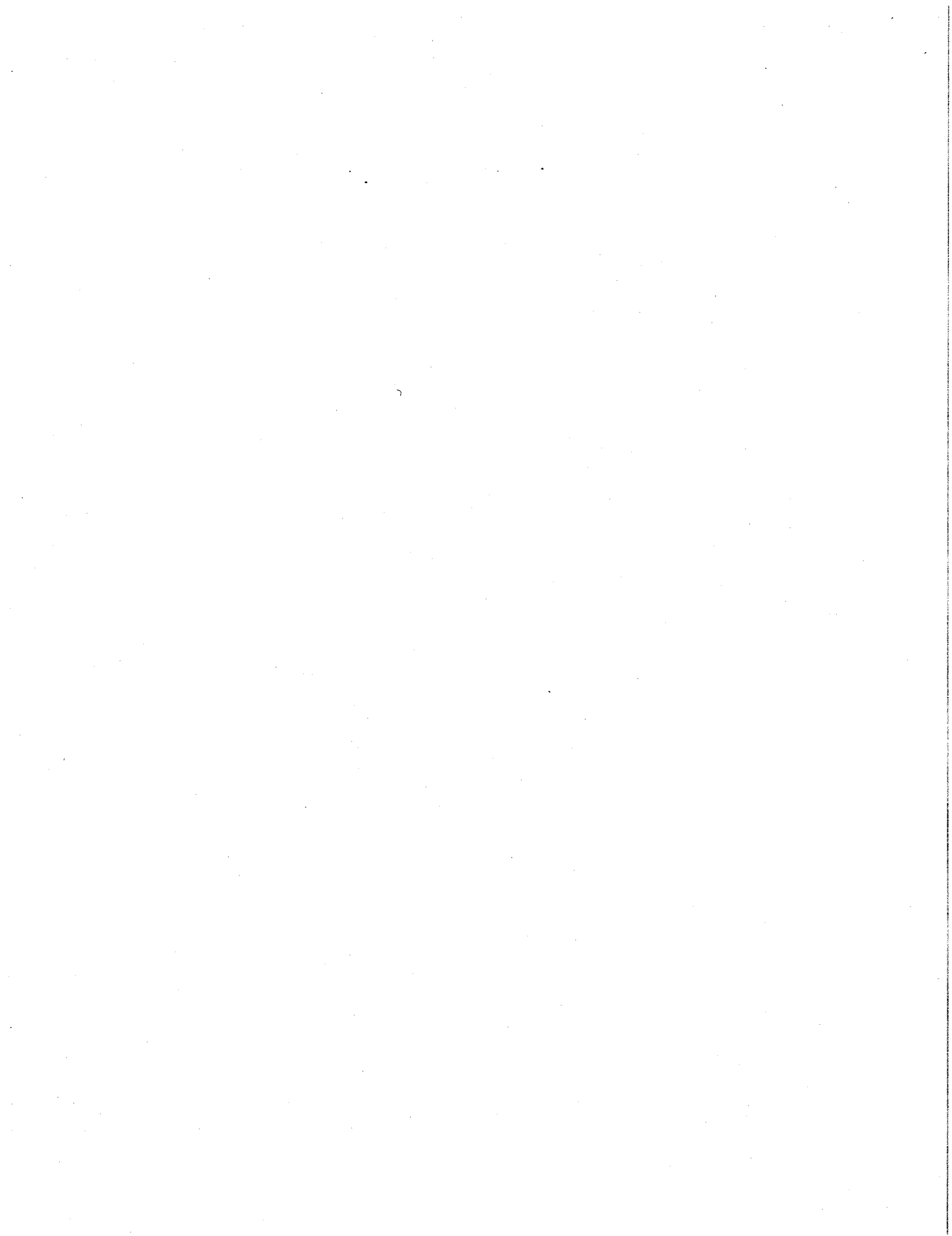
(ii) Corrective actions for each probable emergency situation.

(b) The [plan shall be kept on file in a readily accessible location by the public water supplier] community water supplier shall implement the emergency response plan when necessary.

(c) The community water supplier shall review and update the plan [shall be reviewed and updated] at least annually AND AS NECESSARY TO REFLECT CHANGES TO COMMUNICATION PROCEDURES AND CONTACT INFORMATION UNDER SUBSECTION (a)(2). THE COMMUNITY WATER SUPPLIER SHALL RECORD THE DATE OF UPDATE ON THE PLAN. The plan must be:

(1) Placed in secure locations which are readily accessible to the water system's personnel.

(2) Presented upon request to the Department.





**CHAPTER 109 PUBLIC NOTIFICATION REVISIONS  
COMMENT AND RESPONSE DOCUMENT**

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## COMMENTS AND RESPONSES

1. **Comment:** Regarding D. Background and Purpose, Delivery methods for Tier 1 public notices, the last line of that section states, "To reach people who are transient and nontransient users, the proposed rulemaking also requires suppliers to use broadcast media such as radio or TV." (emphasis added)

However, this change was made to: §109.408(c)(2) Noncommunity water systems. Noncommunity water systems shall provide notice to transient and nontransient consumers using one or more of the following forms of delivery:

- (i) Posting the notice in conspicuous locations throughout the area served by the water system.
- (ii) Another form of delivery approved in writing by the Department.

This change does not appear to require broadcast media be used for notifications by noncommunity water systems. It simply makes it an option.

If this is what is meant, the statement in the "Background and Purpose" section should be revised to eliminate any confusion or improper application of requirements.

(1)

**Response:** DEP agrees with this comment and will revise the language under D. Background and Purpose to include the term "community" to clarify that noncommunity water systems are not required to use broadcast media.

2. **Comment:** For systems that have individual entry points that can be isolated from each other, each entry point should be treated as a "system" to avoid unnecessary notifications. (2)

**Response:** Chapter 109.407(c)(2) currently allows water suppliers to limit distribution of the public notice to only persons served by a portion of the system which is out of compliance if the violation does not impact the entire system.

3. **Comment:** Not all breaks would create a negative pressure, for small systems having one or two people out could constitute a "staff shortage". It should be up to the system to determine when an emergency exists. (2)

**Response:** DEP agrees with this comment that a system is responsible for determining when an emergency exists that affects its operations.

4. **Comment:** For one hour notifications to DEP – what is the after-hours number to call and is there a required response time for DEP to get back to the system? (2)

**Response:** Each DEP region has a 24/7 telephone number that is posted on the regional website. Water suppliers should use this number for after-hours notification.

For the Southcentral Regional office, the telephone number is: 1-877-333-1904. Each DEP region has an answering service that pages an Emergency Response Duty Officer immediately upon receiving the initial call. The Emergency Response Duty Officer determines what response is needed as a result of the initial call. There is no required response time for DEP; however, the Emergency Response Duty Officer in each region typically returns the original phone call promptly.

5. **Comment:** There are several issues regarding the dial-up system which we believe make it ineffective as a tool for one hour notification:
- More and more people are moving to cell phones only. They are reluctant to use their minutes on this type of call – especially if it will not affect their area.
  - Customers who have unlisted phone numbers and who refuse to give them out cannot be reached.
  - Many people already have the solicitation blocker which requires that you press 1 #. Is a dial up system able to do this?
  - Many people work during the day and the message will likely go to an answering machine, where they may or may not listen to the message.
  - The cost of a dial up system would be passed on to consumers and, if required, they should be made aware of the cost and that it is a requirement of DEP. (2)

**Response:** DEP agrees that there are unique issues related to autodialing systems because many people rely solely on cellular telephone service. However, an autodialing system is currently the best available technology that is capable of meeting the 24 hour direct delivery timeframe to each service connection and one that can deliver a recorded message to people who are not at home. When purchasing or contracting for autodialing services, water suppliers will need to thoroughly research the specifications of the autodialing system to determine that it will meet their unique needs. Water suppliers should educate their customers about the cost of complying with drinking water regulations and how they will receive notification during emergency situations.

6. **Comment:** In addition to the notification message, the supplier is required to issue a clear message. Too many messages, of any type, will desensitize the recipient, especially if they receive messages about problems that will not affect them. (2)

**Response:** DEP agrees that too many messages could desensitize the recipient. However, most people would appreciate a “problem corrected” notice so that they are informed that the emergency no longer exists. Chapter 109.407(c)(2) currently allows water suppliers to limit distribution of the public notice to only persons served by a portion of the system which is out of compliance if the violation does not impact the entire system. Therefore, water suppliers do not have to issue notices to people who are not impacted by the emergency.



7. **Comment:** Constant notifications will undermine people's confidence in the competence of the system. It is important to notify people whenever necessary but not to overwhelm them with unnecessary messages. (2)

**Response:** See Response #6.

8. **Comment:** Our water meters are read by touch pad. On average it takes one minute per household. Door to door notifications would be the same which would indicate that the comparison of costs is not applicable to all systems. (2)

**Response:** DEP's cost comparisons for the hand delivery method (door to door) represent an average cost because each system has a unique geography and density that will influence the cost. DEP used an estimate of delivering a notice in two minutes. If systems are capable of delivering a notice in less time, their costs should be less than DEP's estimate.

9. **Comment:** Notifications through the media (radio and television) and door-to-door would be the most effective method of one hour notification for real water emergencies. It may be possible to enlist the assistance of volunteer fire companies and/or the police for these efforts in a genuine emergency. (2)

**Response:** DEP agrees that water suppliers should consider enlisting volunteers to hand deliver the Tier 1 public notice. Water suppliers are encouraged to use any combination of direct delivery methods to ensure notification within 24 hours.

10. **Comment:** A general public notice through a notice enclosed with a billing or municipal newsletter could alert residents that, in the event of a power outage, water (and sewer) pumps could be affected if the system does not employ the use of generators. (2)

**Response:** DEP does not agree that providing a general public notice regarding a power outage with a billing or newsletter is an adequate response. If the power outage falls under the probable emergency situation, then direct notice must be issued to all persons served within 24 hours.

11. **Comment:** Based on past water supply incidents, it became strikingly evident that the status quo means of issuing public notice for an imminent threat situation was not designed to ensure that bill paying customers as well as individuals who might consume contaminated water, such as tenants, visitors, patrons of facilities served by a system with an imminent threat violation or situation, etc., received vital information in a timely manner. (3)

**Response:** DEP agrees and appreciates the commentator's support for strengthening the delivery requirements.

12. **Comment:** We are faced with a growing choice of communications options and a highly mobile society that picks and chooses from those options. With the availability of cable and/or satellite television and radio, personal music playing devices, etc., many individuals don't watch local television programs or listen to local radio stations. As a result, even if a local television station would read or scroll a public notice on-air continuously, very few individuals might be watching and receive the information in a timely manner. In addition, many people are choosing to use a cellular telephone and not pay for a wired telephone in their home or apartment. Therefore, obtaining telephone numbers for individuals using a cell phone, as their only method of communication, could be difficult if the individuals do not volunteer to share that information with their public water supplier. (3)

**Response:** DEP agrees that getting cell phones numbers could be difficult. The Department is currently designing educational information about the different types of public notification and why it is so important to provide water suppliers with a telephone line for Tier 1 public notices. The Department will make this educational information available to water suppliers and encourage them to use the materials when they are soliciting telephone numbers from their customers.

13. **Comment:** The proposed rulemaking in my opinion represents a significant improvement over the current regulatory requirements and addresses serious shortcomings in the federal regulations upon which the current requirements are based. Even the proposed rulemaking will not guarantee that everyone served by a public water system experiencing an imminent threat situation will be contacted, but I expect that the revisions if adopted as written will result in many more people being contacted than in the past. At the time the current federal regulations were promulgated, they represented a number of improvements over what they replaced, but they did not anticipate the explosion of communications options that currently exist and the federal regulations depended on local television and radio stations, which more people used at that time, to get the important information out to the citizens. (3)

**Response:** DEP appreciates the commentator's support.

14. **Comment:** The requirement to report, within one hour, a chemical overfeed, without any specific conditions, provisos, or limitations, is excessive and onerous to both the water supplier and to PA DEP. As proposed, this example will result in water suppliers calling DEP for increased chemical feed rates that are part of normal treatment operations. DEP should better define or clarify this requirement to report a chemical overfeed that results in an MCL/MRDL exceedance, or a situation that poses a health threat to the population served. (4)

**Response:** DEP agrees that the chemical overfeed situation needs further description in the regulations. DEP intends to add the following language to 109.701(a)(3)(iii)(F) to read: "An overfeed of a drinking water treatment chemical that exceeds a published maximum use value, such as National Sanitation Foundation's maximum

use value, as applicable.” This overfeed level serves as the trigger for one-hour notification to DEP. Additionally, the Department is working on developing acute risk levels for the most common drinking water treatment chemicals. These acute levels would be used to determine when a Tier 1 PN is necessary. This information will be added to the PN guidance when available.

15. **Comment:** Under 109.701(a)(3)(iii)(H), the requirement to report a lack of resources that affect operations... should be better defined and clarified. DEP should clarify this example to require one hour notification for resource issues that could result in failure or significant interruption of the water treatment process. (4)

**Response:** DEP agrees that 109.701(a)(3)(iii)(H) needs further description in the regulations. The Department intends to add the following language to 109.701(a)(3)(iii)(H) to read: “A lack of resources that adversely affect operations, such as staff shortages, notification by the power utility of planned lengthy power outages, or imminent depletion of treatment chemical inventories.”

16. **Comment:** While the National Association of Water Companies (NAWC) share the concerns expressed by the Technical Assistance Center for Small Systems (TAC) Board regarding the costs associated with implementing an automatic dialing system, both organizations believe that its inclusion is an acceptable compromise to more costly proposals. However, it is important to note that even an automatic telephone dialing system cannot guarantee 100 percent notification. The use of automatic telephone dialing systems, hand delivery, broadcast media and websites should be considered a reasonable effort to notify residents of a Tier 1 situation. (5)

**Response:** DEP appreciates the commentator’s support regarding automatic telephone dialing systems. DEP agrees that using a variety of delivery methods would satisfy the requirement under 109.408(d) that states “the delivery methods shall be reasonably designed to reach residential, transient and nontransient users of the water system.”

17. **Comment:** Several operators have asked when the one-hour reporting requirement begins. NAWC recommends that the Department amend the language regarding one hour reporting under 109.701(a)(3) to include the phrase “after a preliminary assessment of conditions.” (5) (7) (15) (19) (20)

**Response:** The one-hour notification requirement under 109.701(a)(3) is intended to bring DEP into the decision-making process at the earliest indication of a problem. The one-hour notification requirement begins when a water supplier discovers that one or more of the violations or situations listed in 109.701(a)(3) exist. DEP does not think it is necessary to revise the existing language. Rather, DEP will create guidance that illustrates when one-hour notification is required. For example, DEP will explain that it is appropriate for water suppliers to determine why an alarm has sounded prior to notifying DEP. Did the alarm malfunction, or has water quality been adversely

impacted? If water quality is fine and the alarm simply malfunctioned, then notification to DEP would not be required.

18. **Comment:** The NAWC and TAC have expressed concern over how the Department intends to handle main breaks, with respect to situations requiring one-hour reporting to the Department, and the issuance of a boil water advisory to the public. Tier 1 notices should be limited to situations where there is known contamination or a high risk of contamination. Requiring notice of every main break is not necessary and the NAWC doesn't want an influx of notices involving "less serious" situations to drown out those notices that are potentially serious or adverse situations. We are also concerned that the issuance of precautionary boil water advisories for every main break; particularly those where no back-siphoning into the main occurred, will diminish customer confidence or desensitize the public to such notices. (5) (7) (9) (12) (13) (19) (20) (21)

**Response:** DEP will clarify 109.701(a)(3)(iii)(G) to read: "a situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water supplier suspects a high risk of contamination" This additional phrase should limit the one-hour reporting requirement to those situations that are associated with a risk to public health.

19. **Comment:** This proposed rulemaking presents an opportunity for harmonization between the Department and the Public Utility Commission (PUC) with respect to public notification procedures. The NAWC strongly recommends that both agencies work together to create one unified standard to reduce confusion among public water suppliers and their customers. (5)

**Response:** DEP agrees that one unified standard, where appropriate, would reduce confusion for the public water suppliers that are also regulated by the PUC. However, not all requirements can or should be standardized. DEP is primarily charged with protecting public health, whereas, the PUC oversees the effectiveness of utility service. It is appropriate for triggers and required actions for public health protection to be more stringent.

20. **Comment:** We find the proposed rules to be consistent with the Federal requirements; and where the rules are more stringent, we applaud the Department and the Board for the innovative approaches taken. We recognize and support the need for prompt and creative ways to reach the public in this ever-changing technological era. (6)

**Response:** DEP appreciates the commentator's support and has retained this approach in the final rule.

21. **Comment:** While the Water Utility Council (WUC) shares the concerns expressed by the Technical Assistance Center for Small Systems (TAC) Board regarding the costs associated with implementing an automatic dialing system, we favor its

inclusion over more costly proposals. However, it is important to note that even an automatic telephone dialing system cannot guarantee 100 percent notification. The use of automatic telephone dialing systems, hand delivery, broadcast media and websites should be considered a reasonable effort to notify residents of a Tier 1 situation. (7)

**Response:** See Response #16.

22. **Comment:** WUC recommends the inclusion of a six-month compliance period to allow water systems time to implement an automatic dialing system. Implementation of such a system may require budget amendments, new capital project authorizations or possible rate increases, and negotiations with vendors, including possible shared-service agreements with other systems or municipalities. (7) (19)

**Response:** DEP agrees that water suppliers may need additional time to come into compliance with the Tier 1 PN delivery requirements. Water suppliers may need additional time to research their options, plan and budget accordingly, and implement any necessary changes. This is especially true for those systems that will need to implement automatic telephone dialing systems. Regarding the new Tier 1 public notice direct delivery requirements, DEP will amend the regulation to establish an effective date of one year after the date of promulgation in the *PA Bulletin*.

23. **Comment:** I strongly agree with the PA-AWWA Water Utility Council and NAWC position that the proposed guidance unnecessarily treats every main break as a Tier 1 violation and that Tier 1 notice should be limited to situations where there is a known contamination or high risk of contamination. The Tier 1 public notice "trigger criteria" under 25 Pa. Code §109.408.(a) for circumstances (1-7) are "occurrence-based" and initiated upon a "known or confirmed" violation of a MCL, MRDL, or treatment technique. §109.408(a)(8) of the Tier 1 public notice references "Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the Department on a case-by-case basis." Without available causative information, a situation resulting in negative pressure should not be assumed to have "significant potential" or high risk for serious adverse health effects and should be based on a confirmed occurrence rather than "potential" to occur. Knowing the circumstances and confirming the type and level of risk of a negative pressure event is critical to the decision to initiate a Boil Water Advisory which is microbial in nature, vs. Do Not Drink or Do Not Use Notices which are chemical in nature. Proper health effects language also cannot be applied without first confirming that a contamination has occurred. A "blanket" boil water advisory for all negative pressure events promotes a false sense of security without knowing the actual nature of the potential contamination. Due to the high frequency and relatively low risk of contamination, negative pressure events should not be subject to general boil water advisories without substantiated cause. Elevating a negative pressure event to a Tier 1 level should be made on confirmed risk information, and require consultation with DEP on a case-by-case basis. This approach will engage DEP and avoid potential notification violations, reduce the

number of unwarranted boil water advisories, and limit public notification to the seriousness of the risk, regaining customer confidence. (8)

**Response:** See Response #18, 26 & 73.

24. **Comment:** The strengthened public notice requirements for imminent threat violations and situations will help utilities to get their messages out to customers in a more direct manner through the use of a telephone dialing system. However, it should be recognized that utilities will bear significant cost increases as a result of this requirement. Some small and medium-sized utilities may resort to deferring planned maintenance or capital improvements in order to meet this requirement, unless financial assistance is made available. Alternatively, utility customers may face rate increases to cover the ongoing, annual costs associated with this requirement. A more rigorous cost-benefit analysis is recommended to determine if alternative cost-effective methods are available to achieve similar or greater public health benefits. Lehigh Valley Water Suppliers (LVWS) notes that utilities will still be required to use traditional notification methods such as media broadcasting, door-to-door posting and website posting in order to reach transient populations. LVWS also notes that it is not possible to guarantee 100 percent notification, as some customers will not be reachable by phone or other methods. These factors should be included in a more rigorous cost-benefit analysis. (9) (15)

**Response:** A more rigorous cost-benefit analysis is not possible because costs are system-specific and will vary based on the options or features that a system elects to satisfy their specific needs. However, the Department did gather 2008 cost estimates from automatic telephone dialing service providers and compiled this data on Attachment 1 which is located at the end of this document. Regarding the affordability concerns, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each individual system. DEP agrees that using a variety of delivery methods would satisfy the requirement under 109.408(d).

25. **Comment:** The very broad cost estimates provided by PA-DEP offer minimal usefulness to utilities that will need to prepare new budgets or professional service authorizations as a result of these revisions. Likewise, some economies may be gained through the use of utility partnerships or combined service contracts. Therefore, given these unknown factors, a compliance period of six months is recommended to allow utilities to refine cost estimates, prepare new budgets, allocate costs, pursue partnerships, and review available technology. (9)

**Response:** See Response # 22, 24, & 28.

26. **Comment:** The Pittsburgh Water & Sewer Authority (PWSA) has one concern under 109.701(a)(3)(iii)(G) which states “a situation that causes a negative water pressure in any portion of the distribution system.” PWSA included the following quote from USEPA Issue Paper “The Potential for Health Risks from Intrusion of Contaminants into the Distribution System from Pressure Transients”:

“Many States have requirements to maintain minimum distribution system pressures based on conventional pressure recorder data. It would be inappropriate, and possibly impractical to apply the same guidelines to data collected by electronic pressure loggers. ... There is insufficient data to indicate whether pressure transients are a substantial source of risk to water quality in the distribution system.”

The USEPA Issue Papers mention various situations which could cause negative pressure transients affecting distribution areas, both locally and miles away from such occurrences. With such wide geographic variability where negative pressure can affect a distribution system, high-speed pressure data loggers would have to be placed within every hydrant to accurately determine if a situation “causes a negative water pressure” as mentioned in the proposed rule. Pressure sensors, loggers, and an associated SCADA system alarm for each node would cost from \$1,000 to \$3,000 and the PWSA have over 8,000 hydrants. Such an endeavor would be very impractical, expensive, and difficult to maintain. Without such equipment installed throughout the distribution system (the current circumstance for the PWSA and most public water suppliers, the finalization of this particular proposed rule will require public water distribution system owners to conservatively report to DEP within one hour of every fire fighting operation, water line break, water line repair, flushing operation, pump start, pump stop, valve opening, valve closing, etc... This would be an impractical endeavor, straining already limited resources from both public water distributors as well as from DEP. Prior to 2001, 109.707(a) stated that adverse affects of water “quantity” would require an immediate notification to DEP. Thus at that time, the State required any adverse change (positive or negative) or loss of pressure to be reported to DEP. However the rule has since been deleted, as proposed and adopted on July 17, 2001. The PWSA would appreciate the EQB’s/DEP’s consideration that the currently proposed 109.701(a)(3)(iii)(G) will yield many of the concerns similar to those from the past deleted 109.707(a) rule. USEPA’s Issue Papers suggest that pressure transients risk to water quality is unsubstantiated, and that any risk can be minimized by using mitigation techniques such as effective disinfectant residual. In addition to this, the PWSA believes that backflow prevention programs and better public awareness of backflow problems will effectively minimize any risk. (10)

**Response:** Regarding the language that appeared in 109.707(a) prior to 2002, the language was not deleted from Chapter 109. Rather it was moved to 109.701(a)(3)(iii) when the PN Rule was amended in 2002. Chapter 109 has always required water suppliers to notify DEP when circumstances exist which may adversely affect the quality or quantity of drinking water.

DEP will clarify 109.701(a)(3)(iii)(G) to read: “a situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water suppliers suspects a high risk of contamination.” DEP will not be requiring water systems to install pressure sensors,

loggers, and an associated SCADA system alarms. Rather, DEP will rely on water suppliers to determine when a loss of positive pressure situation **also** shows evidence of contamination (i.e., discoloration, taste, odor) or suppliers suspect there may be a high risk of contamination that would enter their distribution system. An example of this type of situation would be a main break in the same trench with a leaking sewer pipe.

27. **Comment:** I believe hand delivery should be included in the methods for public notification for systems serving 3,301 or more persons. (11)

**Response:** DEP agrees to include hand delivery as an option for all systems, regardless of their population size. In the final regulation, DEP will be eliminating the population categories. The revised language will be: Community water systems shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology or another form of direct delivery approved in writing by the Department. Community water systems can use any direct delivery methods so long as the notice is provided to consumers within 24 hours.

28. **Comment:** The autodialer that would need to be purchased by Ambler Borough is estimated to cost \$30,000.00 plus installation. The cost associated with this equipment would present a financial hardship to Ambler Borough since there are no funds in the current Borough budget to purchase and install this device. (12, 13)

**Response:** Regarding the cost of obtaining autodialing services, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each system. Water suppliers should explore all their options for providing PN. In the final regulation, DEP will be including hand delivery as an option for all systems, regardless of their population size. DEP will also be eliminating the population categories. The revised language will be: "Community water system shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology, or another form of direct delivery approved in writing by the Department. For those systems that must use autodialers to reach their consumers within 24 hours, DEP is amending the final regulation to give systems up to a year to research the options, purchase the technology, and begin implementation.

29. **Comment:** The Office of Consumer Advocate requests that DEP require public water suppliers to give callers an option to talk with a live person if they have questions about a recorded public notice. (14)

**Response:** DEP disagrees with making this a requirement for all water suppliers using an abbreviated message. Many water systems are operated by a single person, where the top priority is responding to the emergency and correcting the problem.



However, DEP will encourage water suppliers who have staff available to respond to customer calls to consider this suggestion as an option.

30. **Comment:** The OCA requests that DEP require water suppliers to include both a telephone number and a website address in abbreviated Tier 1 notices, unless no website is available. (14)

**Response:** DEP disagrees with making the telephone number a mandatory requirement because the number of calls that a system would receive may overwhelm the phone lines and create frustration for consumers who get a "busy signal."

31. **Comment:** The OCA requests that DEP include the date of last update to their emergency response plans. The OCA also requests that DEP require water suppliers to update emergency response plans whenever there are changes to communication procedures or contact information. (14)

**Response:** DEP agrees with both comments and will revise 109.707(c) to read: "The community water supplier shall review and update the plan at least annually and as necessary to reflect changes to communication procedures and contact information under (a)(2). The water supplier shall record the date of last update in the emergency response plan."

32. **Comment:** The Northampton Borough Municipal Authority (NBMA) has cost concerns related to implementing an automatic telephone dialing system.

- Compiling list of telephone numbers for all customers.
- Cost to continuously update and maintain the telephone list.
- Annual subscription cost that must be paid to vendors.
- Will any public funding be available to assist in financing this expense. (15)

**Response:** See Response #24 & 28.

33. **Comment:** A compliance period must be defined to allow water systems to implement an automatic dialing system. NBMA recommends a twelve month period to allow water systems to set budgets appropriately, negotiate with vendors, compile telephone listings, pursue possible cost saving opportunities by shared-service agreements with other water systems or municipalities. (15) (24)

**Response:** See Response #22.

34. **Comment:** A situation that causes a negative water pressure in any portion of the distribution system. This situation could be related to any system leak or water main break, shutting down of a pump, etc. Industry experience has shown that most of these instances do not result in a Tier 1 condition and therefore notification should be limited to known situations of contamination or high risk circumstances. The "Decision Tree" introduced by PADEP is a helpful standard to provide guidance but should be further evaluated to guarantee its effectiveness. (15)

**Response:** See Response #18, 26 & 73.

35. **Comment:** The proposed rule substitutes a reference to §109.701(3)(iii) in place of specific conditions listed in §109.408. In §109.701(3)(iii)(G), the proposed rule adds: “A situation that causes a negative water pressure in any portion of the distribution system.” Water suppliers in Pennsylvania probably experience between 10,000 and 20,000 events every year that could fall into the category covered by §109.701(3)(iii)(G). Under the proposed rule, these would require notification to the Department within one hour of each event. Very few, if any, of these events meet the criteria in §109.408(a)(7) for a Tier 1 event that “adversely affects the quality or quantity of the finished water and has a significant potential to have serious adverse effect on human health as a result of short-term exposure.” Aqua only recently saw the draft “Policy for Issuing and Removing Water Supply Warnings.” To the extent that this document reflects how the proposed rule might be implemented, the proposed rule and the policy document should travel together through the public review and comment process. In theory, events covered by §109.701(3)(iii) of the proposed rule would be evaluated by the water utility in consultation with the DEP regional office in accordance with the policy document, and a decision would be made as to whether each case constituted a Tier 1 event and what notification might be appropriate. The section of the 9/27/07 draft policy document on “negative pressure situations” suggests that the drafters might not have fully appreciated the implications of the proposed rule change in §109.408 and §109.701(3)(iii)(G) and issues like the impracticality of isolating every service line during an outage or the conundrum of a 1-hour notification decision resting on test results that require 48 hours to obtain. It is important that any public notification message be calibrated to the potential risk. As drafted, the rule and implementing policy are likely to result in Tier 1 designation and public notice requirements (heretofore reserved for real threats to public health) being applied inappropriately to circumstances that present little to no risk. Repeated notices to boil water or avoid use, subsequently followed in a day or two by “all clear” notices, will create both an unwarranted level of concern about the safety of the public water supply and an unjustified complacency about future warnings. (16)

**Response:** See Response #18, 26 & 73.

36. **Comment:** The Pennsylvania Public Utility Commission (PUC) regulations, under 52 Pa. Code §67.1, provide that a utility shall “notify the Commission by telephone within one hour after a preliminary assessment of conditions reasonably indicates that there is an unscheduled service interruption...” The same regulation also provides a threshold for these notifications where there is an unscheduled service interruption affecting 2,500 customers or 5 percent of a utility’s total customers, whichever is less, in a single incident of six or more projected consecutive hours. We would like to see some latitude in the notification requirement in the proposed rule or the implementing policy document to recognize that an unconfirmed report or automated alarm signal

might not constitute awareness of a potential Tier 1 event, and a utility's response should be reasonably calibrated to the potential severity of any event. (16) (17) (23)

**Response:** The one-hour notification requirement under 109.701(a)(3) is intended to bring DEP into the decision-making process at the earliest indication of a problem. The one-hour notification requirement begins when a water supplier discovers that one or more of the violations or situations listed in 109.701(a)(3) exist. DEP does not think it is necessary to revise the existing language. Rather, DEP will create guidance that illustrates when one-hour notification is required. For example, DEP will explain that it is appropriate for water suppliers to determine why an alarm has sounded prior to notifying DEP. Did the alarm malfunction, or has water quality been adversely impacted? If water quality is fine and the alarm simply malfunctioned, then notification to DEP would not be required.

DEP agrees that one unified standard, where appropriate, would reduce confusion for the public water suppliers that are also regulated by the PUC. However, not all requirements can/should be standardized. DEP is primarily charged with protecting public health, whereas, the PUC oversees the effectiveness of utility service. It is appropriate for triggers and required actions for public health protection to be more stringent.

37. **Comment:** No method of public notification is perfect. Available technologies are evolving, as are public expectations. We suggest that in §109.408(c)(1) of the proposed rule instead of two separate lists (i) and (ii) depending on system size, the lists should be combined and the requirement should be that a utility, in consultation with the Department, employ a method of direct delivery of notification appropriate for the affected area and the circumstances, including one or more of the listed delivery methods or another form of direct delivery approved by the Department. This flexibility would foster commitment by the utilities and regulators alike to continuously improve public notification procedures. (16)

**Response:** In the final regulation, DEP will be eliminating the population categories. The revised language will be: "Community water system shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology or another form of direct delivery approved in writing by the Department." Chapter 109.407(c)(2) currently allows a public water system to limit distribution of the public notice to only persons served by a portion of the system which is out of compliance. Chapter 109.408(d) addresses all delivery methods used for Tier 1 public notices whether they are system-wide notices or limited distribution notices. In the final regulations, under §109.408(d), DEP will add the phrase "in accordance with §109.407(c)" to clarify that reaching "all persons served" can be those persons served by a portion of the system which is out of compliance, if a limited distribution is appropriate.

38. **Comment:** The new regulations unnecessarily treat every water main break as a potential Tier 1 violation. The water industry's experience has shown that most main breaks do not allow contamination to enter the distribution system through back-flow by back-pressure, or back-siphonage and are not a health concern. Tier 1 notice should be limited to situations in which there is known contamination or a high risk of contamination. In its present form, the proposed new regulations will require water utilities to issue many more boil water advisories (BWA's) for a myriad of conditions that are part of daily routine operations of a water distribution system. Specifically regarding incidences of negative pressure, this is unnecessary, because in the vast majority of those instances, no real public health hazard exists. In actual practice, there have been no documented cases of people getting sick from occasional instances of negative pressure or from routine water main breaks, as long as there is sufficient disinfectant residual in the piping system. The regulation is attempting to fix a health hazard that does not exist. More frequent BWA's will cause more unnecessary fear and confusion for the public, and will completely undermine public confidence in the quality of their drinking water. Water utilities work hard to build up a solid reputation for reliable, high quality service that we deliver to our customers on a 24/7 basis. Once that public confidence is lost, it would be extremely difficult, if not altogether impossible, to win it back. With frequent issuances of BWA's for negative pressure situations, or routine water main breaks, or fire hydrant usage, a new norm would be established in the public mindset that the quality of the water supply is generally unreliable and cannot be trusted on a regular basis. This is just not true about the public water supply in the state of Pennsylvania, as we are already a very heavily regulated industry with an excellent compliance record for health and safety. Notification to DEP of every water main break is impractical and unnecessary. Breaks occur – and timely repairs completed without incident – on a routine basis around the clock as a normal part of the operations of all water distribution systems. Rather, it should be only the “out of the ordinary” water main breaks that impact a large number of customers over a long period of time that should require notification. Specifically regarding the subject of water main breaks, we still have the following questions regarding the proposed regulations:

1. Will every water main break require sampling, or only those ones that require DEP contact? It is impractical to expect large numbers of customers to have to wait for the water to be turned back on after an emergency water main break repair, while waiting for sampling results to come back from the lab.
2. Will every contact with DEP initiate a BWA? The decision tree indicates that an assessment will be conducted and then a determination made, which sounds like a subjective process without firm criteria. Too many BWA's will undermine public confidence in the water supply.
3. Why should curb boxes be shut in all instances? In practice, curb boxes are not routinely turned off when responding to a water main break. This is unnecessary in situations with no contamination risk and would be quite time consuming. It would further divert the repair crew away from the primary job of repairing the break. Also, this requirement is completely impractical when the ground is

covered with snow and ice for long periods of time, and/or during the night, when the curb boxes cannot be found easily.

Another unfortunate result of BWA's that are issued too frequently for situations that are part of normal, routine operations of a water system is that the public will eventually tune out the warnings and will think we are "crying wolf," so to speak, when a real emergency might exist, like an overfeed of a hazardous chemical or some other truly dangerous situation that we want the public to really pay attention to. We as an industry should be required to warn the public only about real problems if we want them to respond, rather than desensitizing the public with an overabundance of warnings that will collectively become almost meaningless. In conclusion, we also have a point of agreement regarding the proposed method of public notification. Situations involving real hazards to the public health via the public water supply that would require BWA's or "Do Not Use" or "Do Not Consume" orders are, fortunately, quite rare in the public water supply industry in the state of Pennsylvania. For such true emergencies, we are in favor of using the best available technology to notify the impacted customers in the fastest, most efficient way possible. New autodialing software is now readily available that will give a water utility the capability to place several thousand phone calls, if necessary, in a short period of time to customers' cell phones and/or home phones to warn them about a problem that they should be made aware of. Public notification that is limited to only TV, radio, newspapers, and websites will, in reality, not reach all impacted customers as expeditiously as phone calls will. In such true emergencies, response time is the critical element. (17)

**Response:** See Response #18, 26 & 73. Regarding the draft guidance document issues, DEP will consider these issues when we revise the document and it will be available for public comment when it is published.

39. **Comment:** In Section 109.707, we support that the Emergency Response Plan should require an annual review and update instead of annual drills and testing. (17)

**Response:** DEP appreciates the commentator's support and has retained this approach in the final rule.

40. **Comment:** Lehigh County Authority (LCA) supports the enhancement of public notification procedures. LCA also supports a consistent, industrywide approach to developing operating and emergency response plans, and recommends that the Pennsylvania Department of Environmental Protection (PA-DEP) ensure these standards are aligned with the U.S. Environmental Protection Agency and National Incident Management System. LCA also recommends that PA-DEP provide assistance for utilities to comply with these standards, such as the development of templates and an online "clearinghouse" for the contaminant fact sheets and other resources that are required. (18)

**Response:** DEP appreciates the commentator's support and has retained this approach in the final rule. See Response #59.

41. **Comment:** The definition for “probable emergency situations” is proposed to be revised to include “A situation that causes a negative water pressure in any portion of the distribution system.” This language encompasses a wide range of possible situations, many of which will not adversely affect the quality or quantity of drinking water LCA provides to its customers. Situations that generate a water pressure alarm through existing monitoring systems include well pump failures, fire hydrant usage, power surges, and many other situations that are unlikely to adversely impact drinking water quality. Main breaks may not trigger a pressure alarm, however. Many such alarms occur during non-business hours and are handled remotely through laptop connections to LCA’s system from a technician’s home. Requiring notice to PA-DEP within one hour of receiving such an alarm would significantly increase LCA’s overtime payroll costs as each alarm is addressed and then reported to PA-DEP. In effect, this reporting requirement will significantly increase the number of after-hours notifications LCA makes to PA-DEP, many times for situations that will not adversely affect the quality or quantity of drinking water LCA provides to its customers. Further refinement of this requirement is necessary to ensure that only those situations that actually impact the quality or quantity of drinking water are reported to PA-DEP. In addition, LCA recommends further review of the proposed requirement to issue Boil Water Notices during situations that cause negative water pressure in any portion of the distribution system. LCA is concerned that the requirement will treat all water main breaks as Tier 1 violations regardless of actual risk to consumers. Tier 1 notices should be limited to situations that absolutely affect the quality or quantity of finished water and have a significant potential to have serious adverse effects on human health as a result of short-term exposure. Few main breaks will meet these criteria. For systems that experience a higher incidence of leaks, customers may become desensitized to the frequent issuance of Boil Water Advisories and “problem corrected” notices, which detracts from the serious nature of a Tier 1 public notice. (18)

**Response:** See Response #18, 26 & 73.

42. **Comment:** The costs utilities will bear to meet the requirements of this rule revision are significant, and the decision about which auto-dialing system to implement requires research and time. Each auto-dialing system offers unique features and capabilities that must be paired up with the utility’s existing customer database structure and cost threshold. Partnerships among water utilities will bring cost-savings to each partner, but time is required to allow utilities to develop agreements among partnering utilities. For these and many other reasons, a generous compliance period is recommended along with financial assistance for smaller utilities that may not be able to bear the annual cost associated with an auto-dialing system. (18)

**Response:** See Response #22 & 44.

43. **Comment:** The North Wales Water Authority (NWWA) shares the concerns of the entire water industry in Pennsylvania regarding the costs and ongoing system

maintenance associated with implementing an "opt-in" notification system so that customers can request to be contacted by method of choice (telephone, email, pager, cell phone, text message, or personal device) in the event of a situation. It is also important to note that even these sophisticated systems do not guarantee 100 percent notification. (19)

**Response:** See Response #22 & 44.

44. **Comment:** Under Section 109.408(a)(ii)(A) of the proposed regulation, one option for delivery of a Tier 1 public notice is by automated telephone. There are a number of issues that must be evaluated prior to considering this mode of delivery, specifically the cost of obtaining and implementing such a system and the extent to which a public water supplier will be required to notify customers that refuse to provide their telephone numbers (e.g., unlisted numbers) or use cell phones exclusively. Furthermore, maintaining an up-to-date phone bank may be burdensome and costly on the public water supplier. (20)

**Response:** Regarding the cost of obtaining autodialing services, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each system. In the final regulation, DEP will be eliminating population categories and including hand delivery as an option for all systems. The revised language will be: "Community water system shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology or another form of direct delivery approved in writing by the Department." DEP recommends that water suppliers send an official notice to customers who refuse to provide a telephone number. This notice should provide the TV and radio stations that will provide a Tier 1 notice since the water supplier cannot deliver the notice directly to the service connection. See also #22.

45. **Comment:** Although Section 109.408(c) of the current regulation provides that delivery of a Tier 1 public notice is required to be given to "all persons served," this portion of the regulation should also be reviewed, particularly in light of the proposed regulation. It is unclear whether "all persons served" requires that notice be given to all customers of the public water supplier or, rather, only to those affected by the situation giving rise to the notice. The Authority suggests that notice should only be given to those persons affected by the particular situation (e.g., if a portion of a distribution system is affected by an event giving rise to the notice requirement, a separate, isolated part of the distribution system unaffected by the event should not likewise be subject to the notice requirement). The Authority is concerned that continued notification to customers that are not affected by a particular event will trigger undue alarm and may cause such customers to ignore a future notification if a situation arises which actually requires that action be taken. (20)

**Response:** Chapter 109.407 (c)(2) currently allows a public water system to limit distribution of the public notice to only persons served by a portion of the system

which is out of compliance. Chapter 109.408(d) addresses all delivery methods used for Tier 1 public notices whether they are system-wide notices or limited distribution notices. Under 109.408(d), DEP will add the phrase "in accordance with 109.407(c)" to clarify that reaching "all persons served" can be those persons served by a portion of the system which is out of compliance; if a limited distribution is appropriate.

46. **Comment:** The proposed regulation states that rulemaking will go into effect upon final-form publication in the Pennsylvania Bulletin. The City understands that the TAC board will vote on this in April and if passed, publication will soon follow. It would appear that there has been an inadequate amount of time provided to research and purchase a system or contract with a service provider that not only meets the requirements of the proposed regulation but also best suits other possible needs of the City. Amber alerts, severe weather notifications, street closings, terrorism and hostage situations, fires, school threats, etc are just a few other uses that an automatic dialing service may offer the City. To purchase a system prematurely without exploring all of its possible benefits would be a poor utilization over very scarce City resources. The Preamble of the Notice of Proposed Rulemaking indicates that "the proposed revisions address additional planning and delivery requirements. As a result, financial assistance should not be necessary." However the document also states "The greatest increase in costs will be incurred by systems serving more than 3,300 people and will be associated with costs for contracting services for or purchasing an automatic telephone dialing system." After hosting demonstrations from two separate dialup system vendors, Allentown is anticipating paying at least \$25,000 annually to comply with the rule. Immediate implementation of this rule, as mentioned above would present a major budgetary burden to the City's water fund budget. This mid-year expenditure would require funding be diverted from some other program such as the capital improvement program that was set in place for upkeep of the water facility's treatment equipment. The City is of the opinion that the legislation should be amended with an implementation date of 2009 rather than immediately after publication to provide time for proper municipal budgetary protocol and procedures. The time required to build a customer phone number database is also a factor that should be considered when determining the implementation period for the legislation. Some dialup service providers offer the service of populating the phone number database for their clients but usually at an additional cost which increases the initial contract amount. Phone number data-bases that are populated by the service provider typically only provide information on landlines or very limited data on cell phone numbers. With the populous moving more toward mobile phone use, this may present a significant challenge to municipalities attempting to develop an accurate phone database and consequently when attempting to notify their customers of a problem. (21)

**Response:** See Response #22 ,28 & 44..

47. **Comment:** Allentonians are exceedingly diversified in their ethnicity; the rule does not take into consideration the fact that our residents may not all speak English. This must also be considered when choosing a vendor because not all companies offer



bilingual messaging. The rule does not offer guidance or direction on this situation.

(21)

**Response:** DEP is not mandating that water suppliers choose an automatic dialing system that has a capability of providing non-English translation of their Tier 1 public notice. However, if a water supplier has a non-English speaking population, the supplier may choose to contract with an automatic telephone dialing system provider that has the capability of providing a translated message.

48. **Comment:** In systems serving populations of more than 100,000 people, the number of calls that must be made to meet the requirements of the regulation is alarming. The legislation does not take into account the fact that local phone company switches may not have the capacity to handle hundreds of simultaneous calls thus preventing a portion of the calls from reaching the customers. (21)

**Response:** DEP agrees that local phone company switch capacities will have an impact on whether a large water system can meet the 24-hour delivery timeframe. DEP suggests that large water systems consider employing another form of direct delivery such as e-mail or FAX in addition to automatic telephone dialing systems if local phone switches don't have sufficient capacity.

49. **Comment:** There is no mention as to the way systems must follow-up reporting after calls have been launched. Must the water provider keep records of such attempts? If so, this may alter the scope of what vendors can and cannot offer. (21)

**Response:** DEP has not mandated follow-up reporting for automatic telephone dialing systems. However, water systems would benefit from documenting that their service connections were called. Vendors offer various types of reports and each water system should determine which type of report suits their needs.

50. **Comment:** In order to trigger Tier 1 public notice, circumstances must exist such that there is (1) an occurrence of a waterborne disease or probable emergency situation that (2) adversely affects the quality or quantity of the finished water *and* has a significant potential to have serious adverse effects on human health as a result of short-term exposure.

The new term "probable emergency situation" is not sufficiently defined. Section 107.701(3)(iii) is identified as the provision providing a definition for "probable emergency situation." This section does not provide a definition; this section provides a list of circumstances which may adversely affect the quality or quantity of drinking water. As discussed below, in Section B, these circumstances do not necessarily adversely affect the quality or quantity of drinking water.

PWD supports the concept that acute or short-term exposure to drinking water quality contaminants should be included in any emergency review. PWD has practiced this approach to water quality emergencies for many years. The proposed revisions do

not adequately define when the emergency notices are triggered. The given definition of “probable emergency situation” provides examples of situations that *may* adversely affect the water quality or quantity; but, there is no definition of what constitutes an “adverse affect” to determine whether a particular “probable emergency situation” “adversely affects” water quality and quantity. There has been some reference to future work that the PADEP is conducting to develop policy definitions. If this is correct, these definitions need to be reviewed and addressed before, not after, public comment is closed on the Rule. The public is unable to understand and apply the Rule requirements without the supporting background definitions and specifications.

Further, a utility must determine whether there is a significant potential of a serious adverse effect on human health from short-term exposure. The proposed regulations do not define “adverse effect” and do not provide guidance to determine what constitutes “serious.” Finally, the water utility must determine what would be considered a “significant potential.” On a national basis, there has not been a risk assessment done of the conditions specified herein to provide scientifically valid support for assumed adverse effects (such as during a loss in pressure or a water main break).

The revisions require more definition to avoid excessive public notification that damages public trust. PWD would embrace the opportunity to work with PADEP and other Pennsylvania water utilities to develop guidelines to clarify the circumstances that trigger Tier 1 public notice. (22)

**Response:** Chapter 109.701(a)(3) covers one-hour reporting requirements for all types of situations, not just Tier 1 situations. For example, under 109.701(a)(3)(ii), water suppliers are required to report to DEP within one hour when a sample result requires the collection of check samples. This is not a Tier 1 situation; but DEP requires one-hour notification for this event. Since the term “probable emergency situation” under 109.701(a)(3)(iii) is causing concern, DEP will be deleting this term during final rulemaking and returning to the existing language which is: “circumstances exist which may adversely affect the quality or quantity of drinking water including, but not limited to, those specified under (A) through (H).”

51. **Comment:** In the Pennsylvania Bulletin Proposed Rulemaking, the Department explains, “The Department is including a few more examples of situations that require 1-hour reporting to the Department. These situations include: an overfeed of a drinking water treatment chemical; a situation that causes a negative pressure in the distribution system; and a lack of resources that affect operations, such as staff shortages, notification by the power utility of planned lengthy power outages or imminent depletion of treatment chemical inventories.” As proposed, the effort to incorporate additional situations of imminent threats to water supplies is vague and over-inclusive.

As drafted, Section 109.701 demands 1-hour reporting to the Department of situations “which *may* adversely affect the quality or quantity of drinking water (emphasis

added).” The listed situations may or may not adversely affect water quality or quantity. In fact, the proposed additional circumstances occur frequently with no impact on the quality or quantity of Philadelphia’s water supply. There exists no background data or published reports to support the assumptions being made in this notice.

Section 109.701(a)(3)(iii)(F) identifies “An overfeed of a drinking water treatment chemical,” as a probable emergency situation which may adversely affect the quality or quantity of drinking water. Water treatment chemicals are overfed everyday. Whenever the process flow is reduced, the treatment chemical doses are changed for the lower flow. For a minute or so, during the adjustment, chemicals are technically overfed. Occasionally, chemical feed equipment fails and overfeeds a chemical. PWD facilities are equipped with monitoring and alarm systems that alert operations staff who take corrective actions. Neither of these day to day situations impact water quality. PWD’s facilities have redundant monitoring techniques to check for chemical feed. It is not an overfeed that should trigger PADEP notification, but PWD’s inability to manage an overfeed that should trigger 1-hour notification. In extreme circumstances, a chemical overfeed can have an adverse affect on drinking water. In such situations only, water utilities should be required to comply with strict one-hour report provision. (22)

**Response:** DEP agrees that the chemical overfeed situation needs further description in the regulations. DEP intends to add the following language to 109.701(a)(3)(iii)(F) to read: “An overfeed of a drinking water treatment chemical that exceeds a published maximum use value such as, National Sanitation Foundation’s maximum use value, as applicable.” Additionally, DEP is working on establishing acute levels for the most common drinking water treatment chemicals. The acute levels will be used as the trigger level for Tier 1 public notification because these levels represent acute health risks to the public.

52. **Comment:** Section 109.701(a)(3)(iii)(G) identifies, “A situation that causes a negative water pressure in any portion of the distribution system,” as a probable emergency situation which may adversely affect the quality or quantity of drinking water. Changes in pressure are expected and system designs account for them. Events that could cause significant pressure reductions include: valve closures, fire hydrant operations, sudden large customer demands, pump shut downs (scheduled and emergency) and main breaks. Water quality is typically not impacted with a change in pressure unless some other hazardous condition exists. In fact, Philadelphia Water Department (PWD) maintains a cross connection control program to prevent backflow hazards in the distribution system. We recognize that certain backflow contamination could present a significant health risk to the public.

There is no conclusive evidence that pressure loss or main breaks in and of themselves have an unacceptable public health risk associated with them (see Appendix A). Notification requirements and guidelines have historically been focused on scientifically defensible water quality issues. There is no study that has of

yet shown that pressure loss or main breaks in and of themselves create real public health risk.

Methods to sample, test, analyze, monitor and report water quality parameters have been studied, debated, standardized and regulated with great scrutiny for decades. Unfortunately the same rigorous review has not been performed for the hydraulic performance of the distribution system. To include pressure as an indicator of distribution system performance and trigger for notification requirements opens a new field that requires some of the same review and standardization. Since distribution systems were designed primarily to convey water developing guidelines and standards for hydraulic performance would be a valuable first step before including it as a reportable parameter.

PWD agrees with the Department that early consultation with the Department will improve human health protection in situations where an imminent threat exists. On the other hand, PWD does not support any regulations that may increase threat to public health by unnecessarily stretching the Department's resources, sensitizing Department responders to overfeed reports, and improperly deploying utility resources to address overfeeds. Requiring one-hour reporting for frequent non-threatening situations will result in excessive notification, which will flood the Department's response resources with immaterial reports that will serve to confound the Department's ability to identify and respond to actual imminent threats. Further, a one-hour reporting requirement improperly diverts the utilities' priority from focusing on system performance to calling the Department in order to avoid a violation for late notification. Finally, advances in risk communication have not been displayed in this change in regulation. Since 9-11 especially, there have been advances made in the application of risk communication techniques. Prior to emergency public notification, for example, there should be public education as to how to receive and respond to such communication. Also, boil water alerts and other messages have not been tested. These are being used but no studies have been done to determine their effectiveness as well as their cost to the communities. This requirement continues to rely on messages and methods that have not been well advanced nor well studied. (22)

**Response:** DEP intends to clarify 109.701(a)(3)(iii)(G) to read: "a situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water supplier suspects a high risk of contamination." This additional phrase should limit the one-hour reporting requirement to Tier 1 situations that are associated with a risk to public health. By clarifying this phrase, water suppliers will not be reporting less serious situations, issuing unnecessary public notices, and customers should not get desensitized to receiving a public notice. The proposed guidance document will reflect this clarification.

DEP will not be requiring water systems to install pressure sensors, loggers, and an associated SCADA system alarms. Rather, DEP will rely on water suppliers to

determine when a loss of positive water pressure situation **also** shows evidence of contamination (i.e., discoloration, taste, odor) or suppliers suspect there may be a high risk of contamination that would enter their distribution system. An example of this type of situation would be a main break in the same trench with leaking sewer pipe.

DEP agrees that water suppliers should educate their customers on how to receive and respond to Tier 1 public notices. DEP is currently designing educational information about the different types of public notification and why it is so important to provide water suppliers with a telephone line for Tier 1 public notices. The Department will make this educational information available to water suppliers and encourage them to use the materials when they are soliciting telephone numbers from their customers.

53. **Comment:** PWD appreciates the Department's requirement of prompt notification of imminent threats to water safety. PWD recognizes the many benefits associated with consultation with the Department during emergency situations. As proposed, notification "within one hour of discovery" is vague and unreasonable. "Discovery" is not a precise moment in time; during an investigation of a possible problem, several "discoveries" are made. The Department should adopt regulations that specify a more definable time upon which the one hour notification period begins. The Public Utility Code provides that a utility "shall notify the Commission by telephone within one hour after a preliminary assessment of conditions reasonably indicates that there is an unscheduled service interruption..." 52 Pa. Code § 67.1. The Department could adopt consistent regulations requiring, "A public water supplier shall report the circumstances to the Department within 1 hour of discovery, **AFTER A PRELIMINARY ASSESSMENT OF CONDITIONS**, for the following violations or situations." This would ensure prompt notification of threats without resulting in excessive false reports and excessive violations for late notice. (22)

**Response:** See Response #17.

54. **Comment:** No method of public notification can ensure that every user will be notified in time to avoid exposure in every real water supply contamination event. PWD commends the Departments identification and discussion of feasibility of the many public notification delivery methods. Due to the variety of methods, variety of communities, and variety of water utilities within Pennsylvania, PWD suggests a more utility specific assignment of notification procedures. Individual utilities should be able to best assess their situation and identify the best method of communicating with their community. Water utilities should be permitted to submit a Public Notice Delivery Plan to be approved by the Department instead of trying to draft a regulation with sufficient flexibility. (22)

**Response:** DEP agrees that each utility will face unique challenges in delivering Tier 1 public notices within the 24-hour delivery timeframe. Under Section 109.408, all community and noncommunity water systems have the ability to obtain approval for their methods of delivery. DEP needs to include forms of direct delivery in

regulation for those systems that may need guidance in how to accomplish direct delivery methods.

55. **Comment:** We feel the proposed language should not be approved in its current form. The proposed description of a Tier 1 violation would cause more damage than help. Increased "Boil Water Advisories" (BWA) and other notices will leave our customers in a quandary, not knowing when a real emergency exists. Water providers would be viewed as "crying wolf". We agree with the use of today's technology if a public notification is necessary due to a legitimate cause for concern. We don't believe every negative pressure incident creates a threat to the public health and safety and a Tier 1 categorization of those events is unnecessary. The reputation of PA's water utilities would suffer irreparable damage if the proposed language is approved. (23)

**Response:** See Response #18, 26 & 73.

56. **Comment:** Requiring testing on every main break would result in a minimum service interruption of 48 hours due to the incubation period for bacteria testing. (23)

**Response:** DEP used AWWA Standard C651 "Disinfecting Water Mains" Section 4.7 Disinfection Procedures When Cutting Into or Repairing Existing Mains to create the disinfection question in the negative pressure decision tree of the 9/27/07 draft guidance document. The AWWA standard requires daily sampling until 2 consecutive negative samples are recorded. DEP is removing the decision tree and will create a separate guidance document that includes best management practices for repairing and replacing water mains. Both guidance documents will be published for review and comment.

57. **Comment:** The cost to implement all the proposed actions would be passed on to customers creating higher water rates with no improvement to service or water quality. (23)

**Response:** Regarding the cost of obtaining autodialing services, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each system. In the final regulation, DEP will be including hand delivery as an option for all systems and eliminating the population categories. The revised language will be: Community water system shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology or another form of direct delivery approved in writing by the Department. DEP believes that mandating direct delivery requirements to each service connection will prevent illnesses in those Tier 1 situations and improve customer service.

58. **Comment:** The current language in the regulation in the second sentence in this section states - To reach all persons served, a water supplier shall use, as appropriate to the type and size of the water system, the following forms of delivery. . . :

We recommend that the words all persons served remain consistent with the language in § 109.407 (c) (2) limiting public notice if the violation is in a portion of the distribution system to only those persons served by that portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system. We suggest using all persons affected rather than all persons served in this section. (24)

**Response:** See Response #45.

59. **Comment:** Of utmost concern is that this is another unfunded mandate. No state funding is available for this while water infrastructure need in Pennsylvania is already \$10 billion. We are concerned that some of the requirements in the proposed rulemaking place an extreme financial burden on public water utilities and their customers. Likewise, the requirement for systems serving 3,301 or more persons have few options to notify the public. If costly automatic dialing systems are one of the few options, it may preclude those systems from the ability to invest in essential capital improvements and upgrades to their systems. We recommend that state funding be available to systems to implement this requirement.

Furthermore, we suggest that the Department work with and assist the Department of General Services in adding automatic telephone dialing vendors to the state procurement system. This will aid public water suppliers in a number of ways including defraying the cost through a discounted state procurement program. (24)

**Response:** Regarding the cost of obtaining autodialing services, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each system. In the final regulation, DEP will be including hand delivery as an option for all systems and eliminating the population categories. The revised language will be: "Community water system shall provide public notice to each service connection using one or more of the following forms of direct delivery: hand delivery, electronic mail, automatic telephone dialing systems, or best available technology, or another form of direct delivery approved in writing by the Department." DEP agrees to work with the Department of General Services to encourage automatic telephone dialing vendors to become contract suppliers in their program entitled "COSTARS" which is the Commonwealth of PA's cooperative purchasing program. Local public procurement units can register to become a COSTARS member as long as they meet eligibility requirements. As a member they can access COSTARS contracts that have been awarded through the competitive bid process. See also #22 and 44.

60. **Comment:** It is unclear how reporting to the Department within one hour actually be implemented especially in the situation of non-working hours, middle of the night, early in the morning, etc. The Department should clarify in a guidance document what phone numbers are to be used for all the DEP regions at any given time.

In addition, we are in agreement with the comments offered by the Water Utility Council of the Pennsylvania Section, American Water Works Association that a public water supplier shall report the circumstances to the Department within one hour of discovery, AFTER A PRELIMINARY ASSESSMENT OF CONDITIONS, for the following violations or situations:" An opportunity should be provided to assess the situation to determine if a violation or situation requires notifying the Department. It would also be important to further clarify this aspect in the supplemental guidance that is developed. (24)

**Response:** See Response #17.

61. **Comment:** We further suggest that wording be added to subsection 109.701(a)(3)(iii) that mirrors the new language in 109.408(a)(7) to make it clear that this one-hour reporting provision pertains to situations that "have significant potential to have serious adverse effects on human health as a result of short-term exposure". (24)

**Response:** Chapter 109.701(a)(3) covers one-hour reporting requirements for all types of situations, not just Tier 1 public notice events. For example, under 109.701(a)(3)(ii), water suppliers are required to report to DEP within one hour when a sample result requires the collection of check samples. This would not require a Tier 1 public notice; but DEP requires one-hour notification for this event. The new language in 109.408(a)(7) relates to situations that require public notice.

62. **Comment:** The Municipal Authority of the Borough of West View is saddened by the thought that as a result of what appears to be "A Knee Jerk Reaction" to an isolated situation that is without precedent, that an entire industry should be called to task.

In Allegheny County, for several decades, we have been functioning under a document known as a "Drained System Protocol". This is a comprehensive document that relates to the required reporting of low pressure, main breaks, water shortages and required notifications. This document developed by the Allegheny County Health Department has served both industry and the regulatory community very well indeed.

Water purveyors can better serve the public through proactive programs that will diminish the requirement for hi-tech public notification systems that lack demonstrated reliability. The Commonwealth and DEP have been proactive by mandating Operation Certification and a closely allied requirement for continuing education units. Highly developed and professionally staffed back-flow prevention programs as well as cross-connection control programs limit the potential for system contamination as a result of main breaks, fire fighting activities and pumping operations.



In most parts of Europe, a chlorine residual is not required, with little or no consequence. As an additional barrier, utilities within the Commonwealth are required to maintain an adequate chlorine residual, which protects the distribution system against inadvertent contamination, which can possibly occur as a result of operations within the distribution system. When utilities adopt and employ the standards developed by the American Water Works Association (AWWA) the potential for wide scale system contamination is practically eliminated.

This proposed rulemaking would mandate that water purveyors throughout the Commonwealth procure and implement automated calling systems, which have not demonstrated a high degree of reliability, even the 911 systems, which are employed throughout the Commonwealth, lack reliability. Implementation of an automated notification system can unfortunately lead to general apathy among consumers who will tend to ignore continued notifications.

I contend that the implementation of protocols similar to those developed by the Allegheny County Health Department in conjunction with the cooperation of water purveyors could prove to be a very effective tool. Chemical overdoses are very infrequent at best. The fluoride overdose which has been central to this issue could be arrested by changing the feed location to the head of the plants where adequate detention time could yield appropriate response time.

The other side of the equation is training. It is essential that water personnel receive individualized training for the specific areas in which they operate and this would be far more effective and protect the public interest to a much higher degree than the implementation of expensive automated warning systems, which might yield questionable results.

In conclusion, I implore the Board to think long and hard before mandating that all utilities employ an expensive notification system with significant manpower and technology requirements. There are better alternatives. (25)

**Response:** DEP agrees that highly developed and professionally staffed back-flow prevention program as well as cross-connection control programs limit the potential for system contamination as a result of main breaks, fire fighting activities and pumping operations. DEP also agrees that when utilities adopt and employ the standards developed by the American Water Works Association (AWWA), the potential for wide scale system contamination is practically eliminated. DEP agrees that implementing statewide protocols with the cooperation of water purveyors will be an effective tool. In fact, DEP presented the Pre-draft Version for Discussion Purposes Only dated 9/27/07 of "Policy for Issuing and Removing Water Supply Warnings" to the Technical Assistance Center for Small Systems (TAC) Board on November 1, 2007. DEP received valuable comments from the TAC Board and will revise the guidance document based on their comments. DEP will also review the "Drained System Protocol" and will include appropriate information found in it into DEP's draft guidance document. However, DEP disagrees that there are better

alternatives to improving public notification in imminent threat situations. DEP believes that mandating direct delivery requirements to each service connection will prevent illnesses in imminent threat situations (Tier 1) and improve customer service.

63. **Comment:** First, what negative impacts on public health and safety occurred due to shortcomings in the current notification system under the existing regulations in Pennsylvania? What were the economic impacts? This information should accompany the final-form regulation submitted. (26)

**Response:** The Centers for Disease Control (CDC) tracks and compiles information about waterborne disease outbreaks. Nationwide, from 1920 to 2002, at least 1,870 outbreaks occurred, where the outbreak was associated with drinking water. These outbreaks were associated with 883,806 illnesses. From 2003 to 2004, 30 additional outbreaks occurred, resulting in 2,760 cases of illness and four deaths. The CDC tracks several categories of deficiencies related to the cause of each outbreak (e.g., treatment deficiencies, distribution system deficiencies). However, the agency does not track the effectiveness of public notification (PN) in terms of preventing or limiting illness.

Some information about PN can be found in individual case studies. For example, in May 2000, Walkerton, Ontario experienced a waterborne disease outbreak that caused seven deaths and more than 2,300 cases of illness. The outbreak cost Ontario taxpayers hundreds of millions of dollars. Following an investigation, several actions were identified that could/should have been taken to prevent contamination and limit the public's exposure to contaminated water. One of the actions identified was the failure to issue timely PN. PN (in the form of a boil water advisory) was delayed for seven days, and was not issued until after illness was already widespread.

In 1993, Milwaukee, Wisconsin experienced a waterborne disease outbreak that caused over 400,000 illnesses and several deaths. The total cost of outbreak-associated illness was \$96.2 million: \$31.7 million in medical costs and \$64.6 million in productivity losses.

Anecdotal information is available through customer complaints regarding the lack of sufficient or timely notification. However, this information is not tied to the incidence of illness.

PN is most effective when consumers receive water supply warnings at the earliest indication of a problem, and take immediate actions. The proposed revisions recognize that newer technologies are available today that will allow water suppliers to get PN out quickly and effectively.

64. **Comment:** Why does this regulation need to be effective immediately upon final publication in the *Pennsylvania Bulletin*? (26)

**Response:** DEP agrees that water suppliers may need additional time to come into compliance with the Tier 1 PN delivery requirements. Water suppliers may need additional time to research their options, plan and budget accordingly, and implement any necessary changes. This is especially true for those systems that will need to implement automatic telephone dialing systems. Regarding the new Tier 1 public notice direct delivery requirements, DEP will amend the regulation to establish an effective date of one year after the date of promulgation in the PA Bulletin.

Regarding the affordability concerns, DEP encourages systems to create shared-service agreements with other systems to reduce the costs to each individual system.

65. **Comment:** Commentators expressed concern that other language in the proposed regulation expands what constitutes an emergency situation and unduly increases the frequency of reporting and public notices. The insertion of the word “probable” may further expand what constitutes an emergency and require additional reporting and notices. What is the intent? Is the Board asking water systems to report situations that may become emergencies as well as actual emergencies? How do water system operators determine the level of probability that would require reporting? Existing language already describes Tier 1 emergencies as events with significant potential to have serious adverse effects on human health. Is the word “probable” necessary in other sections beyond Section 109.707? (26)

**Response:** The one-hour notification requirement under 109.701(a)(3) is intended to bring DEP into the decision-making process at the earliest indication of a problem. During the one-hour notification, information is exchanged about the specific situation and appropriate follow-up and/or corrective actions are discussed. Follow-up/corrective actions may include collecting additional samples, taking a source off-line, optimizing existing treatment, repairing/replacing treatment equipment, flushing the distribution system, and issuing PN. Not all reportable incidents result in Tier 1 PN to the public. In some cases, emergency situations can be avoided if the appropriate corrective actions are taken quickly. In other cases, it is determined that the reportable incident involves chronic health risks, where Tier 2 PN is more appropriate.

Regarding the use of “probable”, the existing Emergency Response Plan language under 109.707(a)(1) reads: “Identification of probable emergency situations including, but not limited to, those specified in 109.701(a)(3)(iii)” which means that water suppliers currently are required to report to DEP within one hour circumstances which may adversely affect the quality or quantity of drinking water. Since the term “probable emergency situation” under 109.701(a)(3)(iii) is causing concern, DEP will be deleting this term during final rulemaking and returning to the existing language which is: “circumstances which may adversely affect the quality or quantity of drinking water including, but not limited to, those specified under (A) through (H).”

66. **Comment:** In addition to the Board, another agency is proposing revisions to its notification requirements for water utilities. On October 14, 2006, the Pennsylvania

Public Utility Commission (PUC) published a notice of proposed rulemaking to amend notification requirements specifically for water utilities. Not every water system is subject to oversight by the PUC. However, commentators encouraged the Board and DEP to work with the PUC to develop consistent notification procedures and reduce confusion and conflicts that may place duplicative and unnecessary burdens on the regulated community.

Furthermore, to assist water systems during disruptions caused by natural disasters or similar emergencies, the Board and DEP should consider consulting the Pennsylvania Emergency Management Agency (PEMA) in order to coordinate water systems' emergency response plans with PEMA as well as local emergency management agencies. PEMA and local emergency management agencies may already have contact networks in place which would assist water systems in notifying the public and with other contingencies related to emergencies. (26)

**Response:** DEP agrees that one unified standard, where appropriate, would reduce confusion for the public water suppliers that are also regulated by the PUC. However, not all requirements can or should be standardized. DEP is primarily charged with protecting public health, whereas, the PUC oversees the effectiveness of utility service. It is appropriate for triggers and required actions for public health protection to be more stringent. Regarding coordination between DEP and PUC, DEP met with the PUC in 2006 and requested that the agency coordinate the issuance of their revised policies/ guidelines with DEP's proposed public notification revisions. However, the two agencies were unable to coordinate the timelines for issuing their guidance and policies.

Regarding working with local emergency management agencies to notify the public, DEP contacted and worked with the county agencies and counter-terrorism task force groups to see if those counties who have automatic telephone dialing systems would be willing to partner with local water utilities to issue PN. Some agencies indicated that they were not interested in partnering with local water utilities because of concerns about liability.

67. **Comment:** In Subsection (c)(4), the proposed regulation directs water systems to notify "additional recipients" identified in its emergency response plan under §109.707(a)." The required contacts are listed in Section 109.707(a)(2). The citation in Section 109.407(c)(4) should be specific and refer to Section 109.707(a)(2). (26)

**Response:** DEP will revise this citation to include subparagraph (2).

68. **Comment:** Subsection (c) contains new options for delivery of Tier 1 public notices including hand delivery, electronic mail and "automatic telephone dialing systems or other best available technology." In the existing regulations, Section 109.411 sets forth content requirements for the public notice and also includes provisions in Section 109.411(c)(4) for public notices in languages other than English. However, it is unclear how these multilingual provisions would apply to new delivery options

such as electronic mail or "automatic telephone dialing systems." In addition, it is unclear what steps a water system may need to take in delivering notices to persons with disabilities. (26)

**Response:** DEP is not mandating that water suppliers choose an automatic dialing system that has a capability of providing non-English translation of their Tier 1 public notice. However, if a water supplier has a non-English speaking population, the supplier may choose to contract with an automatic telephone dialing system provider that has the capability of providing a translated message. Similarly, DEP is not mandating that water suppliers find unique ways of notifying people with hearing disabilities. However, DEP does intend to add "social services groups/agencies" to the list in 109.707(a)(2) to ensure that these groups/agencies are engaged in helping to get the word out about water supply warnings.

69. **Comment:** The second sentence of Subsection (c) begins with the phrase: "To reach all persons served..." Commentators suggested that the word "served" be replaced with "affected." This would direct public notice of emergency to the consumers that would be affected rather than all the consumers served by the water supplier. There is no need to contact consumers who are not affected and such a contact would only cause unnecessary confusion. (26)

**Response:** Chapter 109.407(c)(2) currently allows a public water system to limit distribution of the public notice to only persons served by a portion of the system which is out of compliance. Chapter 109.408(c) addresses all delivery methods used for Tier 1 public notices whether they are system-wide notices or limited distribution notices. Under 109.408(d), DEP will add the phrase "in accordance with 109.407(c)" to clarify that reaching "all persons served" may be limited to those persons served by a portion of the system which is out of compliance; if a limited distribution is appropriate.

70. **Comment:** Subsections (c)(1)(i)(C), (c)(1)(ii)(C), (c)(1)(iv)(C), and (c)(2)(ii) provide that alternative forms or methods for delivery of public notification may be approved in writing by DEP. Is there an application process that water systems use for this approval? What standards or criteria will DEP use in evaluating the applications? If the application process and review standards or criteria are set forth elsewhere in existing regulations, cross-references to those provisions should be included in this subsection. If not, then the process and criteria or standards should be included in the final-form regulation. (26)

**Response:** There is no formal application process for DEP approval of alternative forms of delivery. Water suppliers can seek DEP approval in advance for alternative forms of direct delivery by submitting their explanation of appropriate methods of delivery within their Operation and Maintenance or Emergency Response Plan. The other way to seek DEP approval would be on a case-by-case basis, during the 24-hour consultation with DEP. EPA mandates that DEP must approve alternative forms of delivery in writing, so DEP would need to approve the method(s) during a DEP on-

site visit, or DEP could FAX or e-mail the water supplier the written approval. DEP would prefer that water suppliers seek the approval for alternative direct delivery methods in advance of the actual event since DEP is required to issue a written approval. The following are the criteria that DEP will use to evaluate the method(s): Are the method(s) able to accomplish direct delivery of the Tier 1 PN to affected consumers within the required 24 hour timeframe?

71. **Comment:** Subsection (b)(4) requires that a water system's abbreviated notice include "a telephone number or website address, or both, where consumers can obtain the entire notice." In its comments, the Office of Consumer Advocate suggested that the first "or" should be changed to "and," and the phrase "or both" should be changed to "if available" because not everyone has access to the internet. Hence, a telephone number should always be provided. (26)

**Response:** DEP disagrees with making the telephone number a mandatory requirement because the number of calls that a system would receive may overwhelm the phone lines and create frustration for consumers who get a "busy signal."

72. **Comment:** In Subsection (a)(3) relating to one-hour reporting requirements, commentators suggested that the phrase "within 1 hour of discovery" should be changed to reflect language used by the PUC in its existing regulations at 52 Pa. Code § 67.1(c) The PUC provision requires telephone reporting "within one hour after preliminary assessment of conditions." In many situations, water systems may get an alarm from an unmanned facility indicating an event that may be an emergency situation. However, an operator must travel to the unmanned facility to verify whether the alarm is valid. Commentators are concerned that this existing language, combined with the new conditions defining emergency situations, will force water systems to make unnecessary calls to DEP and take other required steps before assessing whether a real emergency exists. (26)

**Response:** See response #36.

73. **Comment:** Commentators questioned the need for the new language in Subsections (a)(3)(iii)(F) and (G) relating to one-hour reporting for "an overfeed" of a chemical or "negative water pressure in any portion of the distribution system." Commentators claim there is no conclusive evidence to demonstrate that such events are a threat to public health and safety. In addition, commentators indicate that incidents involving negative water pressure and chemical overfeeds occur frequently (in excess of 20,000 times annually across the state). However, almost every incident is managed and corrected in ways that pose no threat to the water system consumers. Hence, mandating reporting and public notices in these situations is unnecessary, would cause undue alarm and confusion among consumers, and would erode public confidence in public water systems. The Board and DEP should work with all segments of the regulated community and the DEP's Technical Assistance Center for Small Systems Board to refine these provisions in the final-form regulation to precisely target events that pose serious threats and will adversely affect the quality or quantity of drinking water. (26)

**Response:** DEP contends that there is evidence that distribution system deficiencies are a threat to public health. Distribution system deficiencies include cross-connections and contamination of water mains during construction or repair. According to the CDC, from 1981 – 2002, there were 79 waterborne-disease outbreaks associated with distribution system deficiencies. These outbreaks were associated with 7,575 illnesses. From 2003 – 2004, six additional outbreaks associated with distribution system deficiencies were reported. The percent of outbreaks associated with distribution system deficiencies is on the rise. According to the National Academy of Sciences (NAS), “The distribution system is the remaining component of public water supplies yet to be adequately addressed in national efforts to eradicate waterborne disease.”

DEP agrees that not all chemical overfeed or loss of positive pressure situations are a threat to public health. DEP intends to use the input received during the public comment period to further define which situations are a threat as follows:

- Regarding chemical overfeed situations: DEP intends to add the following language to 109.701(a)(3)(iii)(F) to read: An overfeed of a drinking water treatment chemical that exceeds a published maximum use value, such as National Sanitation Foundation’s maximum use value, as applicable.
- Regarding the loss of positive pressure situations: DEP intends to clarify 109.701(a)(3)(iii)(G) to read: “a situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water supplier suspects a high risk of contamination.”

These additional phrases should limit the reportable situations to those associated with a real risk to public health. By clarifying these phrases, water suppliers will not be reporting less serious situations, issuing unnecessary public notices, and customers should not get desensitized to receiving a public notice.

74. **Comment:** Commentators referred to a guidance document or a “draft policy document” that DEP is developing in conjunction with the proposed regulation. Under the section labeled as “Section E. Summary of Regulatory Requirements” in the Preamble, it states that DEP “will be developing guidance to provide additional information about situations that require 1-hour reporting.” What types of situations will the guidance address? Any provisions in a guidance document that create a binding norm or impose a standard on water systems should be included in a regulation rather than a policy statement or guidance document. (26)

**Response:** A Pre-draft Version (for Discussion Purposes Only dated 9/27/07) of DEP’s “Policy for Issuing and Removing Water Supply Warnings” was discussed with the Technical Assistance Center for Small Systems (TAC) Board on November 1, 2007. DEP received valuable comments from the TAC Board. DEP discussed the

revisions to this policy with the TAC Board on August 21, 2008. DEP will seek official public comments when the draft document is advertised in the PA Bulletin. The guidance document is intended to support implementation of the regulations through examples of various water supply warnings. As is our practice, DEP guidance is intended to summarize existing requirements. Nothing in guidance shall affect more stringent regulatory requirements.

75. **Comment:** In Subsection (a)(2)(i) relating to communication procedures and contact information, water systems are required to have contact persons and phone numbers for “local emergency management agencies” within their jurisdiction. Does the term “local emergency management agencies” apply only to county and larger city emergency management agencies, or does it also include “local emergency coordinators” in each municipality (e.g. townships and boroughs)? (26)

**Response:** DEP’s intent was to require water suppliers to contact all emergency management agencies as appropriate. DEP’s Emergency Response Plan template includes both local and county Emergency Management agency contact names and phone numbers.

76. **Comment:** What is the process for contacting other local officials? As a result of the fluoride overfeed that affected parts of Cumberland and York counties in December 2005, press reports indicated that local government officials did not receive satisfactory notice. Under the proposed regulation, would water systems be responsible for contacting local government officials in the affected areas? An alternative would be to see if the “local emergency management agencies” already have contact networks in place for all the municipalities in their regions. (26)

**Response:** DEP will include local government officials within a water system’s jurisdiction in the final regulation.



## Attachment 1

### Estimated Costs for Automatic Telephone Dialing Services

Compliance costs to implement the direct delivery requirements for Tier 1 notices will increase for many of the community water systems. The greatest increase in cost will be incurred by systems that contract for or purchase an automatic telephone dialing system. These costs will vary based on system size, how many calls a system anticipates making during the year, and the service plan features that a water system purchases. In 2008, the Department gathered new cost data regarding purchasing or contracting for automatic telephone dialing services from five vendors.

#### Estimates for Purchasing an automatic dialing system – 1 vendor quote

Only one vendor provided costs for purchasing an automatic telephone dialing system. The costs are shown on the table below.

<b>Initial/setup includes software, installation and training</b>	<b>Service and Maintenance Agreements</b>	<b>Cost Per Call</b>
\$9800-29,100	<b>Standard</b> (Service and Maintenance support between 8-5 Mon-Friday) = 20% of system cost	System cost + cost of telephone lines ÷ number of calls made
\$9800 – 29,100	<b>Premium</b> (Service and Maintenance support 24/7) = 25% of system cost + 2500.00	System cost + cost of telephone lines ÷ number of calls made

#### Estimates for contracted service with an automatic dialing system provider – 5 vendor quotes

One vendor charges an annual subscription fee that includes implementation, training, service, maintenance, updates, calling time and support. The other vendors include various fee structures for initial set-up, annual maintenance (also known as subscriptions), and different service options such as “Per call” or “Unlimited calling” plans. The other feature that may increase the cost was geo-calling which allows the water system to send a notice to a sub-group of the entire water system. One vendor did indicate that water systems could collaborate with other systems to get a “group cost” that may be cheaper than an individual system cost. In order to compare the costs between vendors, the Department will provide a scenario and associated cost tables. The scenario

will relate to a water system that is required to contact 10,000 households. It reflects the cost for issuing a single Tier 1 notice and the associated "Problem Corrected" notice during the first year. Table 1 on page 42 lists the "Per Call" Service Plans costs for the first year. Table 2 on page 43 lists the "Unlimited Calls" Service Plans costs for the first year.

**Scenario:**

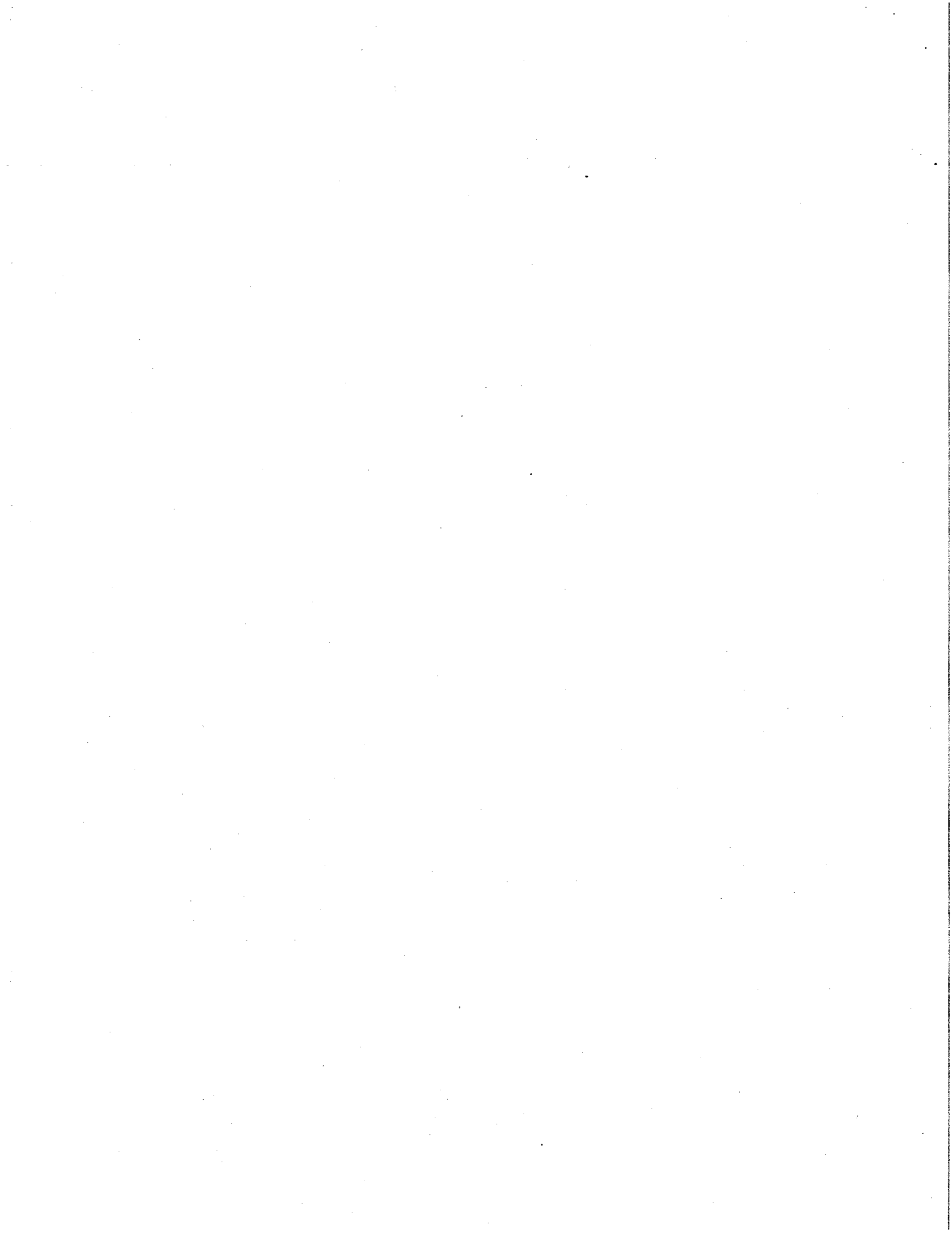
A water system is required to send one call to issue a Tier 1 notice to entire system of 10,000 households during the first year. The call contains a 30-second message. A second call is made as a "Problem Corrected" notice which is also 30 seconds in length.

TABLE 1: "Per Call" Service Plan Estimates				
Vendor	1 <sup>st</sup> Year Costs (Initial Set-up, installation and training)	Annual Costs (Subscription)	Cost Per Call	Total Costs (2 calls made to 10,000 households)
A	\$0	This vendor does not offer a "Per Call" plan. Instead, the vendor offers a single annual cost that includes implementation, training, service, maintenance, updates, calling time and support. See TABLE 2.	\$0	N/A
B	\$0	\$0	\$59/250 calls \$99/500 calls \$149/1000 calls	\$2980
C	\$7800	\$6000	\$0.12/60 sec call and \$0.06/30 sec call	\$15600
D	\$2500 for less than 50,000 population  \$5,000 for more than 50,000 population	Geo Call \$5000 (Silver Service)  Low \$5000 Volume (includes Silver 20,000 call units that don't roll over.)	\$480 per 500 call units  Calls over 20,000 units will be charged at \$.25/call.	\$26700 (includes 40 bundles of 500 pre-paid call units) \$7500
E	\$10% of annual cost or \$100.00 whichever is greater	\$0.40 per household	\$0.10/call	\$6400

**TABLE 2: "Unlimited Calls" Service Plan Estimates**

Vendor	1 <sup>st</sup> Year Costs (Initial Set-up, installation and training)	Annual Costs (Subscription)		Cost Per Call	Total Costs (10,000 households)
A	\$0	Households/Businesses	Costs	\$0	\$10,000 (single cost includes implementation, training, service, maintenance, updates, calling time and support)
		0-2000	\$5000		
		2001-6000	\$7500		
		6001-10,000	\$10000		
		10001-20000	\$15000		
		20001-30000	\$20000		
		30001-40000	\$25000		
		40001-50000	\$31250		
		50001-60000	\$37500		
		60001-70000	\$43750		
		70001-80000	\$50000		
B	\$0	\$0		Per Household Cost Up to 10000 = 0.90 10001-25000 = 0.80 25001-50000 = 0.70 50001-100000 = 0.60 100000+ = 0.50	\$9000
C	\$7800	\$6000			N/A This vendor offers a "Per Call" Plan. See TABLE 1
D	\$2500 for less than 50,000 households \$5,000 for more than 50,000 households	Households	Costs	\$0	\$7000 (Plus fees for geocoding if purchasing geocall option)
		0-50000	\$4500		
		50001 - 100000	\$9500		
		100001 - 200000	\$12500		
		200001 - 300000	\$13500		
		300001 - 400000	\$16500		
		400001 - 500000	\$17000		
		500001 - 1000000	\$24500		
E	\$10% of annual cost or \$100.00 whichever is greater	\$1.45 per household		\$0	\$15950

Based on how many households and how many calling events (Tier 1 PN and non-emergency events) a water supplier anticipates within a year, every water supplier will need to determine when it becomes cost effective to purchase an "Unlimited calling" plan instead of a "Per call" plan. Water systems may be able to negotiate prices with vendors.





Pennsylvania Department of Environmental Protection

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**P.O. Box 2063**

**Harrisburg, PA 17105-2063**

February 10, 2009

**Policy Office**

717-783-8727

Kim Kaufman, Executive Director  
Independent Regulatory Review Commission  
14th Floor  
333 Market Street  
Harrisburg, PA 17120

Re: Final-Form Rulemaking – Drinking Water Public Notification Requirements (#7-407)

Dear Mr. Kaufmann:

Pursuant to Section 5.1(a) of the Regulatory Review Act, please find enclosed a copy of a final-form rulemaking for review and comment by the Independent Regulatory Review Commission. The Environmental Quality Board (EQB) approved this final-form rulemaking at its December 16, 2008, meeting.

This final rulemaking amends the Safe Drinking Water regulations to strengthen the public notification requirements community water systems must adhere to in order to inform the public of imminent threat violations and situations (also known as Tier 1) that may impact the public health and safety of water obtained from a public water system. The amendments enhance the existing planning requirements of both the Operation and Maintenance Plan and the Emergency Response Plan sections that relate to public notification. The amendments revise the delivery requirements of Tier 1 public notices for community water systems and include additional examples of situations that community water suppliers must report to the Department within one hour of discovery.

The proposed rulemaking was published for comment in the *Pennsylvania Bulletin* on September 22, 2007, with provision for a 60-day public comment period. Twenty-six commentators provided comments on the proposed rulemaking, including the Independent Regulatory Review Commission. Several commentators expressed support for the Department's efforts to improve public notification requirements; however, the majority of the comments submitted to the Board focused on issues concerning the delivery of Tier 1 public notices, such as the costs of implementing or using auto dialing systems to provide notifications, the compilation and updating of customer phone records, and the time period the system has to come into compliance with the final rulemaking. In response to these concerns, the Department amended the rulemaking to enable community water systems serving any population to use a variety of direct delivery methods, as long as the Tier I public notices are delivered within the 24-hour delivery time frame. To accommodate the concern regarding compliance, the Department is providing a one year time period from adoption of the regulation for systems to be in compliance with the new public notification requirements.



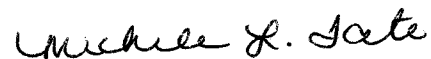




The final form rulemaking was presented to the Small Systems Technical Assistance Center Advisory Board for review and discussion on June 24, 2008. The Board submitted comments on the rulemaking, which were addressed by the Department in the final rulemaking package.

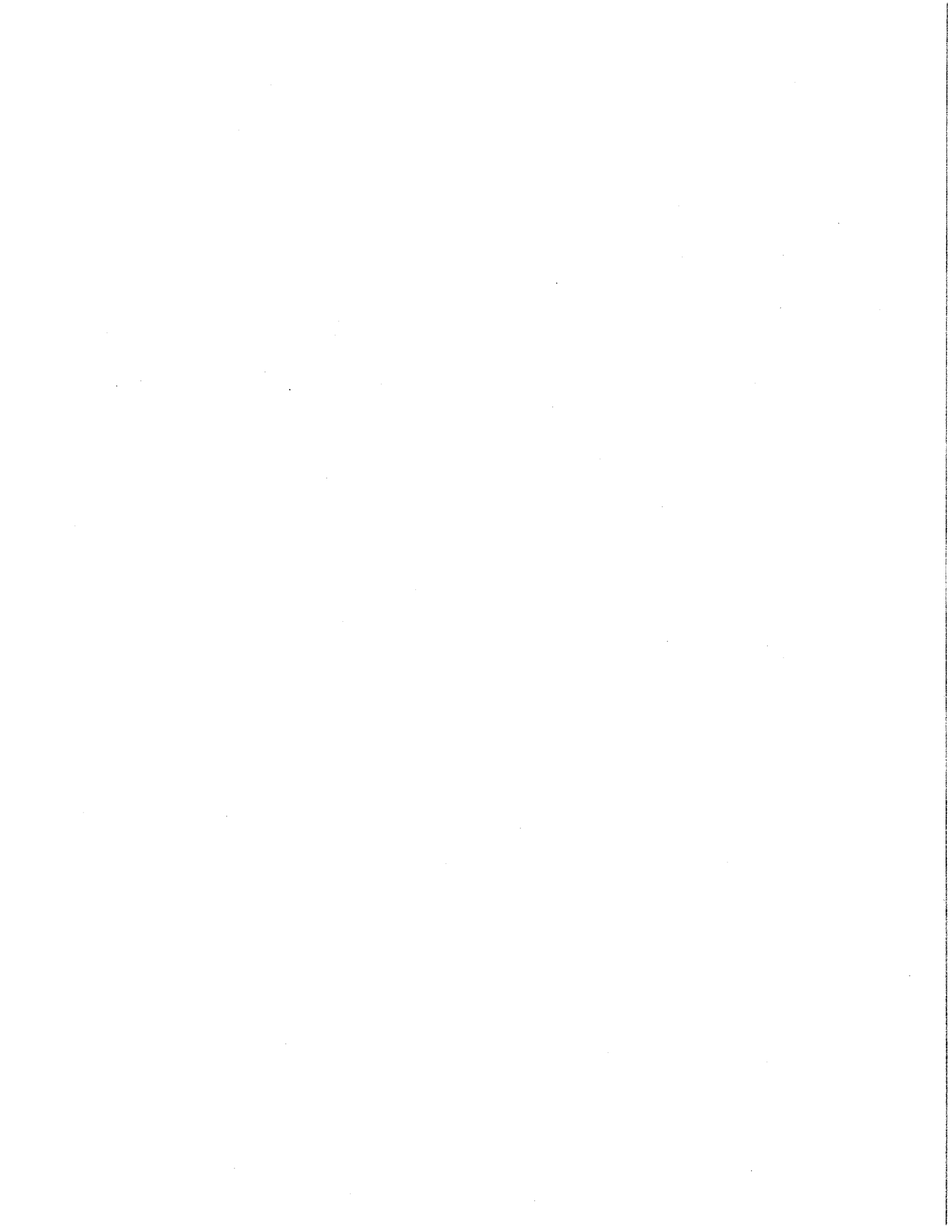
The Department will provide assistance as necessary to facilitate the Commission's review of this final-form rulemaking under Section 5.1(e) of the Regulatory Review Act. Please contact me at the number above if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Michele L. Tate".

Michele L. Tate  
Regulatory Coordinator

Enclosures





RECEIVED

**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO  
THE REGULATORY REVIEW ACT**

2009 FEB 10 PM 3:42

I.D. NUMBER: 7- 407

INDEPENDENT REGULATORY  
REVIEW COMMISSION

SUBJECT: Drinking Water Public Notification Revisions

AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

**TYPE OF REGULATION**

- Proposed Regulation
- Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
  - a.  With Revisions
  - b.  Without Revisions

**FILING OF REGULATION**

DATE	SIGNATURE	DESIGNATION
2-11-09		Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2/10/09		Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2-10-09		Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2-10-09		Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2/10/09		INDEPENDENT REGULATORY REVIEW COMMISSION
_____	_____	ATTORNEY GENERAL (for Final Omitted only)
_____	_____	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

