

**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.

Initial/setup includes software, installation and training	Service and Maintenance Agreements	Cost Per Call
\$9800-29,100	Standard (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	Premium (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	1st 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 (Silver Service) \$5000 Low Volume Silver \$5000 (includes 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 st 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	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		

	50,000 households	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.