

AWWA's Comments To The Homeland Security Advisory Committee

The American Water Works Association (AWWA) would like to thank the Homeland Security Advisory Committee (HSAC) for this opportunity to provide comments on what we believe are several critical water security research issues. First, as background, over 8,000 drinking water utilities (the ones serving greater than 3,300 people) were mandated under the Bioterrorism Act to conduct vulnerability assessments and then, to develop or revise their emergency response plans based on findings from the vulnerability assessment. This mandate has been completed, and now utilities are confronted with the challenge of prioritizing the implementation of security improvements identified in the vulnerability assessments in already fiscally constrained environment. For this reason, utilities need better information from the federal government to assist their decision-making.

AWWA believes that the HSAC's mission is too tightly defined by providing input only to the Environmental Protection Agency (EPA), and some specifically defined liaison is needed to the Department of Homeland Security (DHS). Additionally, it is not clear how EPA will integrate the actions of the HSAC into the Agency's overall strategic plan to water utilities improve their overall security in a reasonable and balanced manner.

The following questions and issues are based on several discussions with the water sector and outline where research is needed to address some of the critical data and information gaps to maintain the sector's progress in improving water security.

- What is the relative importance of drinking water to national homeland security relative to other critical infrastructure sectors such as food, electricity, and finance? And what are the criteria for making such a determination, i.e. what are the metrics by which DHS or others perform such an assessment to guide their funding priorities?
- What understanding exists regarding interdependencies between water and other critical infrastructure sectors (such as firefighting and hospitals), and the associated consequences should they experience a long-term loss of service?
- What is the capability for providing an alternative water supply for both a short-term loss of service (one or two weeks) and a long-term loss of service such as one or two months? And what measures are being taken to develop this response and recovery capacity?
- What role can water systems expect federal agencies (and which agencies) to take in a local response that may have national security implications such a small water system that might have a customer with some national defense significance?
- What are the public's expectations for water security and are they willing to pay for it?
- What are the most likely threats to drinking water utilities—physical destruction, contamination, cyber hacking, etc.?

- Which are the more likely targets—urban or rural systems, large or small systems, historic sites, highly populated sites, national events, etc.? Many medium and small water systems feel “protected” due to the small size of the population served.
- What is the relative effectiveness of physical security improvements versus improved security policies and procedures versus increased response and recovery capabilities?
- How can cost-benefit analyses be used to prioritize security improvements relative to the expected effectiveness in reducing or mitigating a particular type of vulnerability?
- How do we appropriately evaluate emerging technologies for contamination monitoring and physical security?
- How will EPA balance its mandates under the Safe Drinking Water Act (SDWA) to improve water quality with the security needs for contamination monitoring and response and recovery?

AWWA is not looking to the federal government for the answers to all of these questions and issues. We recognize that the answers may be considered sensitive or classified, but some means of communicating this information to the sector must be established quickly if continued investment in the protection of this critical infrastructure is to be sustained in the long-term. Unfortunately, it appears that very little is being done to answer any of them. Developing the solution to such complex issues may be very difficult, if achievable at all. However, even if research does not conclusively answer a specific question, that research is still advancing the state of the knowledge. We would rather see some security research attempt to answer the above questions rather than saying that the questions are too difficult so why bother conducting the research. We believe actions taken with regard to challenges noted above are critical in supporting sustained advancements for the security of our nation’s drinking water.