

National Drinking Water Advisory Council Water Security Working Group

July 6, 2004 Conference Call Final Summary

The Water Security Working Group (WSWG) of the National Drinking Water Advisory Council (NDWAC) held its first meeting by telephone conference on July 6, 2004. The meeting began at 3:30 and ended at 5:30 eastern standard time. Marc Santora, the designated federal official for the WSWG, was present, as were all WSWG members except for Doug Anderton. Ed Thomas served as an alternate for Mr. Anderton. The meeting was facilitated by Rob Greenwood, Ross & Associates Environmental Consulting, Ltd., the support contractor for the WSWG.

This document provides a summary of key areas of WSWG discussion, tentative areas of agreement, and next steps. The meeting was open to the public and an opportunity for public comment was provided. The meeting agenda and materials are available through the WSWG website at <http://www.epa.gov/safewater/ndwac/council.html>

The Draft Summary Notes of the July 6, 2004 Conference Call were distributed to the members of the working group (WSWG) on July 20, 2004 for comment and no requested changes or suggestions were received during the comment period.

Objectives

The objectives of the first meeting of the WSWG were to:

- Initiate WSWG deliberations and welcome members to the working group.
- Provide an overview of the WSWG ground rules, operating procedures and high-level project plan and schedule and ask for WSWG review and comment on these documents.
- Discuss themes from interviews with WSWG members and a “straw person” outline for a possible approach to best security practices findings and recommendations and prepare for the first in-person meeting of the WSWG.
- Provide an opportunity for public comment.

Opening Remarks

Nanci Gelb, Deputy Director of the Office of Ground Water and Drinking Water, welcomed the WSWG members and thanked them for their service. Ms. Gelb explained that water and waste water utilities are considered critical infrastructure for security and expressed EPA's support for the NDWAC's recognition of the importance of the water security issue. She emphasized that understanding practical ways to improve security and to effectively encourage adoption of best security practices will be key to EPA's ability to work with utilities to increase security across the water sector. Ms. Gelb ended by assuring work group members that they have EPA's support in their efforts and that the staff of the Water Security Division, with the contractor facilitation team, are available to support the working group's deliberations. She, and the rest of the leadership in

the Office of Ground Water and Drinking Water, will stay informed about the working group's progress and look forward to their findings and recommendations.

WSWG Composition, Convening, and Chair

Marc Santora, the EPA's Designated Federal Official (DFO) for the working group, gave an overview of how the WSWG was convened. The WSWG is comprised of 16 members, selected by EPA. Mr. Santora explained that the WSWG members represent different backgrounds and experiences in the water sector. He explained that in selecting from among the almost 100 nominees for the WSWG, EPA considered technical expertise, diversity of experience in the water sector, depth of security-specific experience, and experience participating in a consensus-based effort. The WSWG includes representatives from large and small, urban and rural, and public and private, water and waste water systems, public health, state government, and environmental and community-action interests.

It was announced that Dr. Rebecca Head of Washtenaw County Public Health in Michigan and a member of the NDWAC, in consultation with her fellow NDWAC members, has agreed to serve as the chair of the Water Security Working Group. One WSWG representative (Mr. Ed Thomas, serving as an alternate for Doug Anderton) expressed concern about the selection process for the chair and indicated his view that the chair of the WSWG should have direct experience with utility operation, rather than a public health background. Mr. Thomas further expressed the concern that a chair who does not have direct experience with utility operation may have difficulty ensuring that the utility perspective is adequately brought forward and considered during WSWG deliberations. Mr. Greenwood assured the group that, regardless of who is chair, the role of the facilitation team is to work with each individual group member and the group as a whole to ensure that all perspectives are fully represented during WSWG deliberations.

The group discussed the role of the chair. The role of the chair is to serve as a sounding board for the facilitation team between WSWG meetings and to help provide leadership at the meetings. The chair participates as a full member of the WSWG, but does not determine the group's agenda, findings, or recommendations any more or less than any other group member.

Dr. Head briefly described her background and familiarity with water utility security issues. WSWG members who addressed the chair issue expressed the perspective that it is appropriate for one of the three NDWAC members serving on the WSWG to serve as the working group chair. A number of WSWG member expressed support for Dr. Head's selection as chair. The facilitation team committed to provide additional information to the WSWG on the procedures for identifying chairs for NDWAC working groups.

Ground Rules and Operating Procedures

Elizabeth McManus, of Ross & Associates Environmental Consulting, Ltd., briefly reviewed the WSWG ground rules and the draft operating procedures. The ground rules for working groups are established by the NDWAC and are not subject to change. The draft operating procedures are established by each working group to serve the group's needs. Ms. McManus explained that the draft operating procedures include discussion of the mission, participants and participation, the chair, the facilitators, the federal representation, consensus, open meetings, communication with the press and the schedule of meeting. She invited WSWG members to please review the draft operating procedures and offer comments, so that procedures can be finalized at or in advance of the group's first in-person meeting at the end of August.

The group briefly discussed how the ground rules and operating procedures address alternates. Under the NDWAC ground rules for working groups, work group members are expected to attend all meetings. If necessary because of unforeseen circumstances, a member may designate an alternate to attend a meeting in his or her place. Alternates should be peers of the working group member whom they represent. Alternates may participate in deliberations but will not participate in working group decision making. In an emergency situation, an Association staff member may attend in place of a working group member, but this will be allowed only once throughout the duration of the working group. The NDWAC ground rules for working groups were distributed to the WSWG in the conference call materials, and are attached to this meeting summary.

One working group member asked about the possibility of bringing staff to meetings. Staff are welcome to attend meetings as observers and to offer comments, if desired, during the public comment periods.

Best Security Practices—Themes from Interviews with Working Group Members

Prior to the July 6, 2004 conference call, interviews were conducted with each WSWG member to discuss his or her perspective on the WSWG mission and water security practices. Rob Greenwood (Ross & Associates Environmental Consulting, Ltd.) reported on seven themes that emerged during the interviews with WSWG members and that may be principles that could be used to frame the WSWG's deliberations on water security practices. These are:

1. Vulnerability assessments and other guidance help utility managers determine what they could do relative to security; the role of best security practices may be to help utility managers make decisions about what they should do.
2. Recommendations on best security practices should largely be at the level of themes or principles for effective security programs and practices; a prescriptive approach (e.g., build an 8 foot fence) is not appropriate.
3. Both prevention—through understanding and addressing vulnerabilities and by using inherently safer practices—and response are important.
4. Recommendations should consider and build on the work that has already been completed on best security practices and related areas, not reinvent the wheel.
5. Coordination with other programs and integration are important. A good security program is attentive to interdependencies, and connected to other infrastructure elements, information sources, and the emergency response community.
6. Recommendations should be specific enough to be meaningful, but flexible enough so that it is relevant to all utilities—urban/rural, big/small, public/private—and to utilities that are at different stages of designing and implementing a security program.
7. It will be important to find an appropriate balance between providing enough detail and information to be helpful to utility managers and providing too much detail and information (e.g., that might enable malevolent threats).

The WSWG discussed the seven themes. With respect to the first theme, a number of WSWG members expressed the perspective that use of the word “best” to describe security practices could be interpreted as too directive. Instead, the group talked about describing security practices as “effective” or “successful.” Similarly, a number of WSWG members expressed concern that

presenting security practices recommendations as things that a utility “should” do may be too directive.

A number of WSWG members amplified the perspective (expressed in the interview themes) that security practices recommendations should be oriented towards security planning practices, principles, and objectives, rather than security system specifications or requirements. One WSWG member talked about this as the group identifying security objectives that everyone could agree to and then identifying some options, or examples, of techniques that utilities might use to meet security objectives.

One WSWG member indicated that the idea of education and training on security and security practices for utility staff would be an important part of a successful security program. The group discussed adding an explicit reference to education and training to the security practices themes.

A number of WSWG members expressed the perspective that incorporating thinking about cost-effectiveness would be an important part of developing recommendations on security practices and of any individual utility’s decisions about the specific security practices and activities that are appropriate to their utility-specific circumstances. One WSWG member expressed the perspective that cost-effectiveness was especially important in the context of utilities determining what types of security programs and practices they could afford to fund on their own, rather than counting on the federal government or other organizations to provide funding. The group talked about the fact that if the focus is at the level of objectives or principles, then utility managers can identify high-, medium-, and lower-cost options to move towards meeting objectives or implementing principles, and that this flexibility would be important, given the budget pressures under which most utilities operate.

The group converged around the ideas that: (1) “best” security practices (if that word is used) should not imply or create something rigid; and (2) the focus of recommendations should be on giving utility managers a framework or advice that they can use to make good, informed, cost-effective choices about what types of security practices or activities to implement in the context of their utility-specific vulnerability assessments and other utility-specific circumstances.

Straw Person Approach to Organizing Security Findings and Recommendations

Following the discussion of themes or principles for security findings and recommendations, Rob Greenwood reported on a possible approach to organizing security findings and recommendations that had emerged from the individual interviews with WSWG members. The group discussed the idea of thinking about security practices and organizing security findings and recommendations into three interrelated categories:

- Security strategy
- Key elements of a robust security program
- Security objectives for critical water infrastructure or functional elements

The group briefly discussed the straw person organization approach. Members who offered a perspective on the straw person approach supported using it as a starting place for further WSWG deliberations.

Other Discussion

The WSWG also discussed how EPA plans to use the working group's findings and recommendations. EPA hopes that the WSWG findings and recommendations will set forth broad guidance on principles or security objectives that can be used by the utility industry and that will result in measurable improvements in security over time. The Agency would use findings and recommendations from the WSWG to continue to work with the full NDWAC and the utility sector to develop tools, training, and other focused assistance on security, and to create incentives for utilities to make progress in the security area. EPA is hopeful that the WSWG will consider a variety of types of incentives, and not focus only on financial incentives.

The group discussed the roles of other federal agencies with an interest in security relative to the WSWG. EPA is the designated sector-specific lead agency for critical infrastructure security related to water. In that capacity, EPA works very closely with the Department of Homeland Security (DHS), the Centers for Disease Control (CDC), and the Department of Defense (DoD); each of these agencies has provided staff who will serve as resources to the WSWG and act as liaisons between the WSWG and each agency. Mr. Thomas offered the perspective that best security practices might be better addressed under the DHS, rather than by a group organized by EPA. The group specifically discussed the "water-sector coordination board" a utility-focused group that may be forming under the auspices of DHS, and the need to capitalize on opportunities for coordination between the WSWG and the water sector coordination board.

Finally, the group discussed the need to be attentive to the potential for findings and recommendations on security practices to create vulnerabilities for the utility sector by making public too much information on potential avenues of attack. The group discussed that this may be a concern even if the information and resources used by the WSWG are all already public documents, since the compilation of documents and information into one place may create a security risk that any individual document alone may not engender. The group asked that the facilitation team and EPA explore the circumstances under which portions of their future meetings and/or portions of their report might be restricted from public access. The group recognized that determining if and under what circumstances to restrict access to WSWG deliberations or the WSWG report could be difficult, since individual group members likely will have different perspectives about at what point the level of detail in information is too sensitive for public discussion.

Draft WSWG Project Plan and Schedule, and Information Gathering Effort

Elizabeth McManus briefly reviewed the WSWG draft project plan and schedule. The WSWG mission is very ambitious in the context of the five in-person meetings and four to six conference calls that are planned for group deliberations and decision making. The purpose of the project plan and schedule is to anticipate a logical sequence for addressing the three issues before the WSWG, and to identify and schedule critical milestones in group deliberations and decision making. The project plan also establishes an overall schedule for WSWG meetings.

Ms. McManus announced that the first in-person meeting of the WSWG has been scheduled for August 31 - September 2 in Seattle, Washington. Details about start and end times for the Seattle meeting and other logistics information will be provided in the next two weeks. Dates for the remaining four in-person WSWG meetings are proposed in the draft project plan. WSWG members are asked to please review these dates and indicate if they have any conflicts by July 13, 2004. The schedule and dates for the remaining four WSWG meetings will be determined in July so that meetings can be calendared.

Ms. McManus also talked briefly about the ongoing effort to gather information to support WSWG deliberations. Initial steps in the information-gathering effort will include development of an annotated bibliography of references and other resources on security policies and practices.

Public Comment

Four members of the public choose to make comment to the WSWG.

Mr. Craig Johnson (BioVer Labs) asked why his organization, despite producing many materials for an EPA compendium web site, had been denied access to the same compendium on-line. Ms. Pawlukiewicz asked Mr. Johnson to follow up by email with Marc Santora, who will ensure that Mr. Johnson's concern is forwarded to the proper person at EPA.

Mr. Alan Roberson (American Water Works Association) expressed concern that it may be more appropriate to address any need for guidance for the utility sector through the DHS, particularly given the potential for such a document to, by its very nature, present a security vulnerability, and considering the liability issues that contemplation of "best" security practices could raise for the utility industry. Mr. Roberson indicated that no other sector in which security is an issue has published "best practices." In that context, Mr. Roberson questioned the need for the WSWG, and suggested that the group should, at their first meeting, have a discussion about whether an EPA working group on water security is needed.

The working group had a brief discussion of Mr. Roberson's comment. A number of working group members echoed Mr. Roberson's concern that the purpose and need for the group should be discussed, and/or that the DHS may be better positioned to lead an effort to develop guidance on water security practices. The group again discussed the idea of dealing with "ways of thinking about security" or "security principles" or "objectives" rather than a prescription of security-related activities as a way of beginning to address concerns about utility liability. A number of working group members expressed the idea that in addition to any discussion of the potential disadvantages of a water security work group, the group should discuss the potential advantages, and should discuss what action EPA, as the lead agency for security for water infrastructure, or other Agencies may take in the absence of recommendations on water security practices. One WSWG member observed that a way to frame the discussion may be to consider (1) what types of security concerns may be created by the existence of recommendations on water security practices, and (2) whether these concerns can be ameliorated and/or whether the benefits of such a document outweigh concerns. A number of working members expressed support for development of recommendations on water security practices, and indicated that such recommendations are needed and could be helpful to utilities. The group converged around the need to continue this discussion at their first in-person meeting, and to ensure that the purpose and need for recommendations on water security practices, and the approach to developing such practices, is clearly understood.

Jack Jacobs (American Water Works Security Committee) asked if all of the information produced by the WSWG is public. To date, all materials related to the WSWG are public. If, because of security concerns, there is a future need to keep some materials private, these circumstances will be noted and clearly explained in summaries of the WSWG deliberations. Public materials related to the WSWG are available through the EPA NDWAC website at: <http://www.epa.gov/safewater/ndwac/council.html>

Dr. Perialwar (Regu) Regunathan (NDWAC member) expressed support for the working group developing a clear understanding of the purpose and need for recommendations on security

practices, and advised that, in the context of that discussion, the group should consider both potential advantages and potential disadvantages of such recommendations and should consider what would happen in the absence of such recommendations.

Meeting Wrap Up and Next Steps

As the meeting was drawing to a close Mr. Greenwood thanked WSWG members for their attention and participation. Janet Pawlukiewicz, director of the EPA Water Security Division, on behalf of EPA again thanked WSWG members for their service.

The following WSWG action items and next steps were identified during the meeting:

- All WSWG members will review the draft WSWG operating procedures and provide any comments to Ross & Associates by July 13, 2004.
- Ross & Associates will work with EPA and the three WSWG NDWAC members to provide additional information on procedures for identifying chairs for NDWAC working groups to the WSWG.
- All WSWG members will review the proposed schedule for future WSWG meetings and either put the meetings on their calendars or provide information on any scheduling conflicts to Ross & Associates by July 13, 2004.
- In addition to the agenda topics identified in the draft WSWG high-level project plan, the agenda for the first in-person WSWG meeting will include time for discussion of the following: (1) the ongoing efforts, roles and responsibilities of the federal agencies involved with water security; (2) the role of the WSWG in light of these ongoing efforts, roles and responsibilities, and the purpose and need for recommendations on water security practices; and, (3) the circumstances under which portions of WSWG deliberations and/or products should be restricted from public access.

Attachments

Meeting Materials

Attachment A: Meeting Agenda

Attachment B: NDWAC Working Group Ground Rules

Attachment C: WSWG Draft Operating Procedures

Attachment D: WSWG Draft Project Plan (including the proposed schedule of meetings)

Meeting Attendance and Participation

Attachment E: WSWG Roster and Contact List

Attachment F: List of Members of the Public and Technical Resource Personnel in Attendance