

NATIONAL DRINKING WATER ADVISORY COUNCIL

MEETING SUMMARY

JUNE 20-22, 2006

**THE MADISON HOTEL
1177 15TH ST., N.W.
WASHINGTON, DC 20005**

**PREPARED FOR:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF GROUND WATER AND DRINKING WATER
1200 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20640**

AUGUST 2006

Members of the National Drinking Water Advisory Council (NDWAC) in Attendance

Brian Ramaley, Director, Newport News [VA] Waterworks, and Chair of NDWAC
Michael Baker, Chief, Division of Drinking Water and Ground Waters, State of Ohio, EPA
Nancy Beardsley, Director, Drinking Water Program, State of Maine, Dept. of Health Services
Dennis Diemer, General Manager, East Bay Municipal Utility District, Oakland, CA
Bruce Florquist, Small Systems Consultant, Windsor, CO
Gregg L. Grunenfelder, Assistant Secretary, Division of Environmental Health, Washington State
Department of Health
Dr. Rebecca Head, Health Officer and Director, Monroe County Health Department, Monroe, MI
Dr. Perialwar (Regu) Regunathan, Consultant, Wheaton, IL
David Saddler, Manager, Water, Wastewater and Propane Department, Tohono O'odham Utility
Authority, Sells, AZ
Blanca Surgeon, Rural Development Specialist, Environmental Rural Community Assistance
Corporation, Santa Fe, NM
Jeff Taylor, Deputy Director, Public Utilities Division, City of Houston, TX
Lynn Thorp, National Programs Coordinator, Clean Water Fund, Washington, DC
Brian Wheeler, Executive Director, Toho Water Authority, Kissimmee, FL
John S. Young, Jr., Chief Operating Officer, American Water, Voorhees, NJ

U.S. Environmental Protection Agency Attendees

Pamela Barr, Director, Standards and Risk Management Division, Office of Ground Water and
Drinking Water (OGWDW)
Eric Burneson, Chief, Targeting & Analysis Branch, OGWDW
Clare Donaher, OGWDW
Cynthia Dougherty, Director, OGWDW
Ben Grumbles, Assistant Administrator for Water
Steve Heare, Director, Drinking Water Protection Division, OGWDW
Bruce Kobelski, Underground Injection Control (UIC) Program, OGWDW
Debbie Newberry, Chief, Security and Assistance Branch, OGWDW
Mike Shapiro, Deputy Assistant Administrator for Water
David Travers, Acting Director, Water Security Division, OGWDW
Lee Whitehurst, UIC Program, OGWDW

Designated Federal Officer (DFO)

Daniel Malloy, Director, Resources Management and Evaluation Staff, OGWDW

Science Advisory Board (SAB) Liaison

Dr. Philip Singer, Dan Okun Distinguished Professor of Environmental Engineering, Department
of Environmental Sciences and Engineering, School of Public Health, University of North
Carolina at Chapel Hill

Centers for Disease Control and Prevention (CDC) Liaison

Dr. Sharunda Buchanan, Division of Emergency and Environmental Health Services, National Center for Environmental Health, CDC, Atlanta, GA

Members of the Public

Cartier Esham, Dutko Worldwide

Aaron Fischbach, Rural Community Assistance Partnership (RCAP)

George Hallberg, The Cadmus Group, Inc.

Khanna Johnston, Office of Cooperative Environmental Management

Vanessa Leiby, The Cadmus Group, Inc.

Frank Letkiewicz, The Cadmus Group, Inc.

Deirdre Mason, Association of State Drinking Water Administrators (ASDWA)

John Montgomery, National Rural Water Association (NRWA)

Alan Roberson, American Water Works Association (AWWA)

Robert Stewart, Rural Community Assistance Partnership (RCAP)

Jim Taft, Association of State Drinking Water Administrators (ASDWA)

Ed Thomas, National Rural Water Association (NRWA)

Diane Van De Hei, Association of Metropolitan Water Agencies (AMWA)

Al Warburton, American Water Works Association (AWWA)

**NATIONAL DRINKING WATER ADVISORY COUNCIL
JUNE 2006 MEETING
SUMMARY**

DAY 1 (June 20th)
(Agenda is found in Appendix A)

Called to Order at 1:35 p.m.

OPENING REMARKS

Brian Ramaley opened the meeting and welcomed two new and three reappointed members to the Council:

- Dennis Diemer, new
- Rebecca Head, reappointed
- David Saddler, new
- Jeff Taylor, reappointed
- Lynn Thorp, reappointed

Roundtable introductions of Council members

Mr. Ramaley reminded the Council that Dan Malloy, the new DFO, must be included on all NDWAC official communications. Then, he requested that any members of the public interested in speaking sign up for the public participation session scheduled for 4:30 pm on June 21, 2006. He also briefly reviewed the agenda, highlighting substantive actions such as reviewing the final report of the workgroup on Public Education requirements for the Lead and Copper Rule (LCR), discussing the status of performance measure efforts, and introducing a variety of topics with presentations from Council members and EPA senior managers.

Cynthia Dougherty also reviewed the agenda, which she characterized as packed. She hoped to keep on schedule in order to consult with NDWAC on changes to the Underground Injection Control (UIC) as well as the Public Education requirements for the revisions to the LCR.

On June 21st, Ben Grumbles, the Assistant Administrator for Water, and Mike Shapiro, the Deputy Assistant Administrator for Water, will meet with the Council. Ben will present the Office of Water's priorities and issues in 2006 and Mike will discuss the Agency's draft Strategic Plan, 2006-2011.

Priorities of EPA's OGWDW include ensuring that recent rules are being implemented and tools to implement these rules are available. OGWDW is working on the affordability methodology for small public water systems, the Ground Water Rule (GWR), the LCR revisions, regulatory determinations for the second Contaminant Candidate List (CCL), and initial work on the third CCL. OGWDW is also working on the Unregulated Contaminant Monitoring Rule (UCMR), the rule on airline drinking water, and carbon sequestration within the UIC Program.

The Council's work on attributes of an effective security program for a water system is being widely used by associations and water systems. The Agency is working with systems to determine how to use the Council-developed measures for security across sectors.

Performance measures for OGWDW will be discussed later in the meeting. OGWDW is increasingly asked to provide data on program effectiveness to demonstrate accomplishments, including prevention data.

DRAFT FINAL REPORT OF THE WORKGROUP ON PUBLIC EDUCATION REQUIREMENTS FOR THE LCR

Mr. Ramaley praised the workgroup for its hard work including a conference call in March 2006, during which many challenging issues were discussed until a consensus was reached. He turned over the floor to Gregg Grunenfelder for a presentation of the workgroup's draft final report and mentioned he would entertain a motion to accept the report.

Gregg Grunenfelder presented the final draft report of the NDWAC workgroup focused on the public education (PE) requirements for the LCR. The workgroup, comprised of 16 members including four NDWAC members, was established in June 2005 and had four meetings over the one-year period of its charge. The workgroup discussed recommendations on Action Level Exceedance (ALE), delivery requirements, and guidance materials. He expressed appreciation to EPA and the facilitator for their assistance on these challenging issues surrounding lead. He defined the workgroup's charge as: (1) reviewing current PE requirements on lead in drinking water and defining needed improvements; (2) developing language for communicating the risk of lead in drinking water to the public; and (3) defining the means to effectively deliver needed information to the public. The workgroup developed several principles on what makes a public education program message successful. The workgroup determined a successful message should be timely, concise, and clear (the current guidance is 1,800 words); would meet the communication needs of diverse populations including flexibility for varying system sizes; would compel and encourage the public to take action to reduce exposure; would communicate risk from all sources and methods of exposure while focusing on drinking water; and, would be revised based on future evaluations. From these principles, the workgroup determined PE requirements and guidance should:

- direct and assist the utility to accomplish a successful PE program
- provide flexibility for local situations – not all information has to be in every communication
- equip utilities with tools to explain the difference between the action level and health risk level;
- consider different sizes and types of systems; and
- offer multiple communication methods.

The workgroup's final report provides proposed recommendations to NDWAC on required language and required topical areas with word choice flexibility. For instance, consumer notification must begin with a prewritten opening statement and include information on health effects of lead, sources of lead, steps consumers can take to protect themselves, details on the current lead problem, and an explanation of what is being done to correct the problem.

Lynn Thorp commented that the previously included language was very arcane, and thus the new language is a needed improvement.

John Young commented that the proposed recommendations would make for a better and more understandable document for the public. He asked how this process would work, i.e., would the primacy agency review and then determine whether each of the topical areas had been addressed?

Mr. Grunenfelder responded that, yes, at the beginning of the public education campaign, the primacy agency would perform a review and ensure the public education campaign is implemented.

Mr. Ramaley noted that the system with the violation should be working quickly and closely with the primacy agency. Part of the education component will be ensuring primacy agencies are on board and fully educated to provide review and a quick turnaround.

Mr. Grunenfelder discussed proposed delivery mechanism recommendations when the action level is exceeded. Required delivery mechanisms include sending a brochure to all pediatricians and pre-schools, directly contacting local public health agencies, and providing information on or in each water bill. In addition, systems serving more than 100,000 people must post information on a publicly-accessible Web site and submit a press release twice annually to local media. Proposed recommended delivery mechanisms include sending brochures to teen parent programs, women's shelters, and higher education institutions. Systems serving more than 3,300 people are required to undertake at least three additional recommended activities, and systems serving less than 3,300 people are required to undertake at least one additional recommended activity. All required activities must be repeated every 12 months for as long as the exceedance remains. Required language must also be included in annual Consumer Confidence Reports (CCR).

Mr. Ramaley asked whether the common practice of electronic billing and online debit payments were considered as part of the finding to include the information in the water bill.

Mr. Grunenfelder answered that the workgroup did not address this specifically.

Mr. Ramaley expressed concern that electronic billing needs to be more specifically addressed in the near future.

Mr. Grunenfelder continued with the workgroup's proposed recommendations for ongoing public education on lead in drinking water. All compliance sample results must be sent to the customers participating in the sampling program in a timely manner and at no cost. All public water systems are encouraged to implement PE programs on lead in drinking water. To support these activities, EPA should work collaboratively with CDC and state/local health organizations to emphasize and reinvigorate PE programs; encourage and support utility/local public health efforts in educating the public about lead; and develop a model PE insert for potential inclusion with water utility billings. EPA should also modify the CCR rule to include lead information whenever lead is detected in compliance monitoring samples

The workgroup developed proposed recommendations for small water system guidance documents, which may, in some cases, be useful to all water systems. The recommended documents include checklists of required PE steps and deadlines; flow diagrams showing optional decisions, steps, and

deadlines; templates such as public service announcements and letters to health care providers or public health officials; a frequently asked questions sheet; miscellaneous advice for small systems; and lead service line replacement (LSLR) outreach.

To make EPA a clearinghouse on PE re: lead, EPA should create a language bank of documents and guidance materials: addressing flexibility for unusual circumstances, creating and sustaining PE partnerships, partnering with public health officials, working with the media, and evaluation of PE and outreach programs.

The workgroup also presented draft recommended expedited implementation, urging EPA and primacy agencies to allow utilities to use the new materials before the revised regulations are officially adopted.

The workgroup also presented proposed recommendations that EPA address lead in plumbing fixtures by publishing a list of currently available fixtures with very low lead content; prioritizing research on very low lead fixtures; exploring the adequacy of National Science Foundation's (NSF) Standard 60/61 (pursuing stronger compliance with such standards if needed); and championing a program to promote very low lead fixtures, similar to the ENERGY STAR[®] program. The workgroup also proposed continued evaluation of the effectiveness of LSLR programs and consideration of whether additional regulation or guidance may be warranted. EPA should collaborate with CDC to pursue ongoing research into the health effects of low level exposures to lead. Ongoing research and development of risk communication information and techniques are needed to refine existing materials.

Discussion

Perialwar Regunathan commented that the group worked quite well together despite some major differences of views. He submitted a Minority Report because there are different levels of understanding on the lead problem, and he did not believe that the proposed recommendation on the action level was sufficient. Lead has become an acute contaminant for certain populations. He did not believe that the draft short flush recommendation was sufficient and included additional language for sub-populations meeting certain criteria. He thought more concrete action should be taken such as alternative treatment and/or supplies.

Mr. Ramaley agreed to move ahead with the majority report.

Rebecca Head noted that some communities and counties have U.S. Department of Housing and Urban Development supported lead-abatement programs, and it might be useful to list these groups as potential partners. Also, on a completely different issue, she noted that page A-6 of the report lists NSF's phone number and asked if additional groups should be listed as well.

Dr. Regunathan agreed with Dr. Head, but noted he had been in the minority here as well.

Ms. Thorp explained that NSF is the most appropriate agency and has the strongest web site.

Mr. Ramaley remarked that he thought this was a very good product and possibly one of the most practical pieces the Council has produced, as these are solutions that can be implemented. However, he had two comments. As people who have signed up for electronic billing likely want to

reduce/eliminate paper transactions, these people should receive electronic notification of ALE exceedances and not a hard-copy letter. Also, there appears to be an implication that home plumbing is causing the high lead level and not chemistry. Is this the intended implication?

Mr. Grunefelder responded that the proposed recommendations are focused on what homeowners can do to reduce exposures, assuming that the utilities are doing everything they can to reduce exposures as well.

Blanca Surgeon explained that this issue was discussed quite a bit in the workgroup. Utilities must comply with regulations. However, homeowners do not receive administrative orders, hence there is a greater need to focus education efforts on them.

Dr. Regunathan added the goal was to be informative and minimize water problems, and this language will get the homeowners' attention.

Ms. Thorp noted that lines 16-20 on page A-4 do not include language on home plumbing, but the CCR language on page B-1 does. She noted that the group spent a considerable amount of time discussing the brochure text and determined that the details in lines 16-20 on page A-4 were most important since often customers read only the first part of a notice.

Ms. Dougherty commented that even though there may be things that homeowners can do, it should be clear if the problem is actually system-wide so that homeowners understand that the system should be addressing the problem.

Phil Singer raised two comments. Regarding condition two of attachment B, one (1) part per billion (ppb) is actually a very low level, which would impact many more systems. Is this something that should be encouraged?

Mr. Grunefelder responded that the working group's intent was to encourage systems to meet the 1 ppb level. He noted that because condition #3 (in which customers would be provided lead education even when no lead is detected in compliance monitoring samples) was overly burdensome, it was deleted. By making this change to provide lead education even when small amounts of lead are detected through compliance monitoring, more utilities will have to meet the requirements and thus improve information to customers.

Dr. Singer, raising his second comment, asked if 60 days for notification is too long a period of time.

Mr. Grunefelder responded that especially for large utilities, with all of the approval needed, printing of materials, etc., 60 days is actually a tight timeline. Sixty days is the current timeframe as well, and the workgroup collectively decided shortening the timeline was not feasible due to the variety of logistics involved for large utilities.

Brian Wheeler shared two comments. First, 1 ppb is not a high level; he suggested revising the language to "lead levels" to avoid consumer confusion. Secondly, if it can be clearly determined which customers are affected by high lead levels, this group of customers can be targeted instead of informing all customers.

Mr. Grunenfelder responded that utilities can specify in the notice which groups are more likely to be affected, but he was not sure a mechanism existed to send notices to a particular group.

Jeff Taylor agreed with Mr. Wheeler, noting that an exceedance is often not system-wide, and utilities try to define the affected group to the greatest extent possible. The problem is when non-affected customers receive the notice as well and contact the utility with questions or comments that take extra capacity to address, directing attention away from other work. He questioned the efficacy of contacting all customers.

Ms. Surgeon asked if customers would feel safe and secure if notification is not sent to all of them? It's a system-wide precautionary education campaign so some people not affected might share the information with other people who are affected.

Mr. Taylor noted that the language in sections A1 and A2 will be used to address a serious or significant problem. Because section B2 is more protective of public health it will most likely be required of more systems.

Mr. Young questioned contacting bill-paying customers, noting that there are some customers that do not pay bills but receive the service.

Mr. Grunenfelder responded that this concern was addressed by including a variety of contact methods in addition to contacting bill-paying customers.

Mr. Ramaley added that it is difficult and expensive to directly contact all consumers, especially non bill-paying customers like apartment residents. The mailing cost for one direct notice from his system is approximately \$50,000, but, if the notification can be included in the bill, costs would be significantly reduced.

Mr. Wheeler noted that the bill-paying customers may not actually be the residents affected as some bill-paying customers do not reside in the dwelling, and 50 percent of the residents are not bill-paying customers. He added that his system would have to use other means to contact everyone served by the system.

Mr. Ramaley agreed that there is significant variety in how bills are distributed and pointed out that a number of other avenues for reaching customers were listed for that very reason.

David Saddler asserted that asking a utility to send information to all customers when only a subset of customers is affected may cause a huge financial burden.

Dennis Diemer added that, if the problem can be isolated, there should be flexibility to notify a subset of customers. Contacting the entire system may send the wrong message and reduce customer confidence in the utility.

Ms. Surgeon explained that contacting a subset of customers in the system was not discussed in the workgroup because public education should be comprehensive. She asserted that education for the entire community is important because people move.

Ms. Thorp agreed that the issue was not discussed in the workgroup because the problem is considered a system-wide issue. This is in agreement with risk communication principles. While there is a potential to gain confidence by not informing unaffected individuals, there is also a balance to maintain because confidence may also be lost by not notifying all customers.

Michael Baker added that some very large systems have entirely distinct treatment and distribution systems. In this case, when there are two sets of customers receiving water from different sources, treated by different plants, and with no blending of water, reducing the scope of the mailing to the affected customers may be worth considering.

Mr. Ramaley responded that the Council could consider recommending flexibility of scope in certain circumstances. Alternatively, the brochure can explain that the issue affects only certain areas, although this option does not address the financial burden of the requirement to contact all bill-paying customers.

Mr. Baker explained it would be particularly useful to allow reduced notification in a few circumstances, where two systems are linked only because of the financial/administrative considerations.

Mr. Saddler advocated for a change in language for this proposed requirement because there are tremendous costs for this type of mailing, and the burden could be avoided with a modification.

Dr. Regunathan added that the blending of water may make it difficult to delineate, but, if a good definition can be developed, then this would be worth considering. He proposed adding “of the affected system.”

Mr. Grunfelder suggested considering that there are some advantages to keeping a non-affected customer informed as these customers may be financially affected through system improvement costs, even if their water is not affected.

Ms. Dougherty replied that it is important to send the notice to all affected customers, since it is not always possible to pinpoint where the problem is occurring. Also, it is important to remember that if all systems fully comply with the rules, these measures will not need to be implemented.

Mr. Young added that an inventory of LSLR would be needed to define the affected areas/population.

Mr. Ramaley noted that the proposed change is no more onerous than current requirements.

Dr. Singer commented that there is not enough monitoring to say with confidence which subset of the public is exposed to lead.

Mr. Ramaley reminded the Council that if they wanted to modify the report, a motion to accept or deny was needed.

Dr. Head motioned to accept the report, and **Mr. Baker** seconded the motion.

Dr. Regunathan motioned to amend page A-1, line 27 to add “to all bill paying customers in the affected system.”

Mr. Saddler seconded the motion.

Mr. Ramaley asked whether the ALE applies to the entire system.

Mr. Wheeler explained that if there are separate public water system identification numbers (PWSIDs), there were no situations he could think of where this would be a problem

Ms. Thorp asked **Dr. Regunathan** for explanation of the purpose of his amendment.

Dr. Regunathan explained that Chicago has two to three treatment plants, but they are entirely separate. Those customers served by an individual system should be notified, rather than the whole system when a problem occurs. He added that this is an unlikely scenario.

Mr. Saddler suggested that the language should be shortened to “all bill-paying customers affected.”

Mr. Ramaley asked if language should be included that ensured all affected customers are covered.

Ms. Thorp thought the addition was redundant, but that the current language was insufficient. She mentioned that if all customers will be affected by the cost of system improvements, then all customers should be notified.

Bruce Florquist mentioned that there are only a handful of systems that can identify the affected area from a bill paying standpoint.

Vote on amendment – 1 yea, 1 abstention, 12 nay. Motion fails.

Vote on original motion to approve the Work Group’s draft report – 13 yeas, 1 nay. Motion carries.

The report on the recommended Public Education Requirements for the Lead and Copper Rule revisions will be sent to the Administrator on behalf of the National Drinking Water Advisory Council.

Ms. Surgeon thought it would be useful to have the model available as soon as possible.

Mr. Grunfelder recommended that EPA allow for the implementation of these changes before formal rule revisions can take effect.

Ms. Dougherty explained that a state’s enforcement authority can ask systems to implement this in advance, but EPA does not have this authority.

Mr. Grunfelder asked whether EPA could communicate this recommendation to EPA’s Regional offices.

Ms. Dougherty agreed to look into it, but said she could not promise anything. She suggested that NDWAC's letter to the Administrator summarize all recommendations in the report and not just the portions mentioned in the executive summary.

CONSULTATION ON LEAD AND COPPER RULE (LCR) REVISIONS

Eric Burneson, Chief, Targeting and Analysis Branch/OGWDW, thanked the Council for the opportunity to consult on this matter. He began with a history of the changes to the LCR. In 2004, EPA began a wide-range review of implementation of the LCR to determine if there was a national problem related to elevated levels of lead in drinking water. EPA found that a majority of systems were meeting the lead action level (LAL), including approximately 96 percent of systems serving more than 3,300 people. However, the review identified several areas in which there was confusion in the existing regulations regarding implementation. EPA held four expert workshops to discuss the effectiveness of the regulations and received over 200 recommendations through these workshops. After reviewing the comments, EPA released a *Drinking Water Lead Reduction Plan* in March 2005, which outlined short- and long-term goals for improving implementation of the LCR including several targeted changes to the regulations. Additionally, EPA stated it would update two guidance documents – the *Simultaneous Compliance Guidance Manual* (SCGM) and the *Lead in Drinking Water in Schools Guidance Manual*. EPA published the updated guidance for Lead in Schools in December 2005. Currently, the SCGM is in the process of stakeholder review; the draft document should be available for comment later in June or early July 2006 (N.B. the draft SCGM will be posted on OGWDW's website: www.epa.gov/safewater during the week of July 17, 2006.). EPA also held an expert workshop on lead in plumbing components in July 2005 and formed the NDWAC Public Education Working Group.

EPA is considering a revision to the minimum number of required samples and the minimum number of locations from which samples should be collected. Challenges to this potential clarification include difficulty in accounting for variability in lead levels with too few samples, e.g., small non-transient noncommunity water systems (NTNCWS) may not have enough taps to meet the minimum number of sites. EPA is also evaluating the potential for modifying the monitoring period and compliance period definitions. Presently, the timing of actions after an exceedance is not clearly defined and, in turn, causes confusion, particularly among systems that monitor triennially.

EPA is considering a revision of system eligibility criteria for reduced monitoring, but the Agency may add criteria that systems exceeding the LAL cannot be allowed to go to reduced monitoring. EPA may also modify the requirement for state notification of treatment and source changes. EPA is evaluating whether the state plan review and approval should be used to assure changes have minimal impact on corrosion control. The Agency potentially may require systems to provide notification to occupants of lead monitoring results from their taps and might require posting this information for public facilities. Currently, many systems voluntarily provide results but not all.

EPA is potentially moving forward on several of the proposed recommendations made by the NDWAC's Public Education Workgroup and accepted by the full Council, including revisions to the content of the message provided to consumers, how materials are delivered, the timeframe for delivery of materials; using additional organizations to reach at-risk populations; and modifying educational statements about lead in drinking water in the annual CCR. EPA may modify the regulation to require re-evaluation of tested out lead service lines if the system later re-exceeds action

level; current regulation considers the line permanently replaced. However, future condition changes may affect corrosion control and lead leaching from lead service lines.

EPA may potentially make modifications on several other short-term issues, including optimal corrosion control through plumbing component replacement or point-of-use (POU) and point-of-entry treatment, site selection in areas with water softeners and POU treatment units, and determining whether regulations should require greater synchronization on water quality parameter and lead and copper monitoring in order to provide more comparable results for states to evaluate.

Discussion

Mr. Young asked for clarification of the definition of treatment change, particularly as it relates to corrosion optimization.

Mr. Burneson answered that changes are constant as systems try to optimize the system. There may be a reliance on existing state review processes, which are not defined through regulation.

Mr. Ramaley asked whether procedures vary between states.

Mr. Young responded affirmatively, noting that review and evaluation procedures vary greatly among states.

Dr. Regunathan asked Mr. Burneson whether treatment changes will be defined or if a study will be performed before the changes.

Mr. Burneson explained that there will likely be heavy reliance on states' review processes and will largely be a matter of state discretion.

Dr. Regunathan noted that in Washington, DC the change from chlorine to chloramines was significant and, for any treatment changes, there should be sufficient data and defined changes in order to avoid confusion.

Mr. Burneson responded that pilot testing is a very interesting proposal that needs to be considered through cost-benefit analysis because it might be quite expensive.

Ms. Dougherty explained that EPA can provide guidance but cannot define the changes.

Dr. Regunathan asked when reduced monitoring is allowed.

Mr. Burneson responded that when a system has two consecutive compliance periods below the LAL, the system can move to reduced monitoring. Currently, if a system with an ALE can meet its water quality parameters (WQPs), it can move to reduced monitoring.

Dr. Regunathan noted that POU is not a good location for lead testing. He also questioned that technically if WQPs are in compliance, there could be reduced monitoring despite excess copper levels. The intention had been that stringent water quality measures would eliminate the copper issue.

Mr. Burneson agreed that POU is not the preferred location for lead testing, but said that some systems have no choice and may require re-piping.

Dr. Regunathan said that it would be better to use the bypass capability of a water softener for sampling.

Mr. Baker asked what the next step was on these potential changes and when there might be an opportunity for comment and/or input.

Mr. Burneson explained that the next step is the actual Agency proposal, which is likely to be issued within the next month (N.B. the proposed revisions to the LCR were published in the *Federal Register* on July 18, 2006). There will be another opportunity for comment when these recommendations are no longer “potential recommendations,” but “actual recommendations.” This presentation was made in compliance with the requirement of consulting with the Council prior to making actual recommendations.

Dr. Singer asked whether there are other sampling considerations other than the “fewer than five.”

Mr. Burneson responded that only that subset of systems would be part of this potential revision.

Ms. Thorp asked whether the changes bring greater understanding about exposure. She also asked why spatial and temporal issues were not addressed.

Mr. Burneson responded that this issue was covered with five samples.

Ms. Thorp also asked about the purpose of the testing.

Mr. Burneson explained that the potential revision does not seek to address the purpose of the testing, although the purpose of the original rule was to determine the effectiveness of optimal corrosion control treatment. The potential proposed revisions do not address this issue, but EPA does recognize the concerns raised but not addressed by the revision.

Ms. Dougherty added that once this rule is out, EPA will continue to look at other issues related to lead.

Mr. Ramaley thanked **Mr. Burneson** for consulting with NDWAC.

WATER SECURITY – MUTUAL AID AND ASSISTANCE NETWORK

Debbie Newberry, Chief, Security Assistance Branch/OGWDW, summarized mutual aid as an agreement between jurisdictions or agencies to provide services across boundaries in the event of an emergency. The Federal Emergency Management Agency (FEMA) reimburses mutual aid costs provided that the recipient requested assistance and that the agreement is in place prior to the assistance. On a national level, EPA supports the Water Agency Response Network (WARN). Through WARN, water utilities help each other prepare for natural and man-made disasters by organizing in response to established requirements and sharing personnel or other resources. In order to successfully establish interstate WARN systems, utilities, state personnel, associations, and

regulators (on the state and federal level) must work together. Four American Water Works Association (AWWA) Mutual Assistance Grant Workshops are scheduled for this year to encourage states to develop mutual aid and tools. EPA will play a role in working to recognize WARN systems across state lines. EPA will provide states and systems with tools, guidance, and workshops, and set up Web sites as needed. Several WARN programs are already in place – CalWARN, FLWARN, TXWARN, and LAWARN.

Mr. Wheeler shared how the FLWARN system operates. Messages are sent out as hurricanes approach, systems can request assistance, and teams can be mobilized before the hurricane even hits.

Discussion

Sharunda Buchanan asked how this reconciles with the Emergency Management Assistance Compact (EMAC), and whether a declaration of emergency is a requirement. She asked whether WARN is for emergencies and non-emergencies.

Ms. Newberry responded that EMAC can cross state lines to help utilities if the state requests it. WARN systems can be tied in and recognized by EMACs, but the first priority is to get the WARN systems up and running so that the WARN system will be recognized.

Dr. Buchanan commented that there may still be issues with reimbursement and paying the bills.

Mr. Wheeler noted that Florida has not been reimbursed for Hurricane Katrina support, although they have been promised that the check is coming. The recipient state reimburses the donor state after which the recipient state is repaid by FEMA.

Mr. Ramaley asked whether this system would be applicable for handling issues related to a flu pandemic or other non weather-related issues.

Mr. Wheeler commented that this has not been discussed, but WARN should be flexible enough to deal with non-weather emergencies.

Mr. Ramaley asked whether the vision had focused specifically on hurricanes or if the definition was broader. He also asked how this affects National Incident Management System at a local level.

Mr. Wheeler explained that initially the system looked solely at hurricanes (the region was affected by four hurricanes in 2004), but they hope to expand the approach.

Mr. Ramaley expressed interest in looking at a broader mission. For example, it would be particularly useful for a Virginia WARN system to be terrorist-ready as well.

DAY 2 (June 21st)

STORMCENTER COMMUNICATIONS

Mr. Ramaley asked Mike Baker to introduce this session because the State of Ohio has recently entered into an agreement with StormCenter Communications.

Mr. Baker commented that StormCenter helps to broadcast messages to the public about drinking water related issues, which supports public education efforts and introduced Ed Gross, the Executive Vice President of StormCenter Communications.

Mr. Gross explained that StormCenter's objectives are to: (1) deliver innovative environmental content to media partners, apply environmental science in order to engage Americans, and (2) enhance their environmental IQ because the public is frequently influenced by incorrect or outdated environmental myths. A public-private partnership can successfully move environmental information to the public by packaging the information in an exciting and interesting way. Sponsorship is the key to sustaining this long-term effort. StormCenter has developed content provider networks (comprised of government, non-governmental organizations, citizen organizations, volunteers, and the private sector) to serve as the eyes and ears of the local markets served, to provide locally-focused content ideas, to maintain an events calendar for use by the media partners and public, and to help compile stories.

StormCenter provides several tools, including Envirocast WEB-TV and Envirocast Bulletins. Envirocast is a multi-media, web-based, interactive environmental program that helps TV stations better position water issues and generate new sources of revenue. User benefits include provision of real-time local information, information on local events to get the community involved in keeping clean neighborhoods and waterways, and visually exciting environmental images. Over the last few years, StormCenter has increased its offerings while local partnerships have strengthened to support the StormCenter mission.

Mr. Baker noted that sponsors in Columbus, OH have responded enthusiastically to the program. The local interest in Columbus is to focus on water resources and on communicating more accurate information on drinking water to the public.

Mr. Gross commented that StormCenter can tailor content to a local market, just as a water-focused Web site was created in Columbus in response to local interest.

Dr. Buchanan asked whether there was a system in place to evaluate the efficacy of the service.

Mr. Gross explained that the first survey was recently done in Reno, NV with surveys in several other locations to come soon. Pre- and post-StormCenter launch surveys will help gauge changes in public awareness.

Mr. Wheeler commented that he found the presentation very interesting and inquired whether StormCenter has interfaced with any road weather programs, as there are stations in many different locations.

Mr. Gross said they had not worked with any road weather programs.

Mr. Ramaley extended an invitation for StormCenter to come to Hampton Roads, VA for a watershed focus group. In that area of VA, the local community has a very important role in managing the Chesapeake Bay watershed, and a number of water-related campaigns have been conducted in Hampton Roads. Has StormCenter worked with focus groups?

Mr. Gross responded that no focus groups have been convened because efforts thus far have focused on generating news station interest. There is interest in developing focus groups in the future.

Mr. Ramaley noted that a key method to developing sustained interest from the news stations is to speak with top-level management and discuss the impact StormCenter can have for the station's bottom line.

Mr. Gross agreed. He said they have met with many general station managers to ensure the StormCenter message is supported on a regular basis.

Mr. Ramaley asked how StormCenter handles issues that are controversial and difficult to frame.

Mr. Gross responded that StormCenter's message is not biased. Instead, StormCenter provides science and facts that are understandable for the general public by mining information from many different sources and turning it into an easily accessible format. StormCenter provides data without taking a stance on the data.

Dr. Head asked whether they have worked with public health personnel to establish the link between water quality and public health protection.

Mr. Gross responded that StormCenter does not work with public health staff. If there is a public health issue, it can be packaged for education centers in a simple and understandable way.

(After the end of this session and before the introduction of Ben Grumbles, Assistant Administrator for Water, **Mr. Saddler** announced that he brought copies of an interactive CD prepared by the National Rural Water Association for all Council members. The CD is a good resource document containing a collection of White Papers by a wide range of authors on topics such as Affordability.)

COUNCIL'S CONVERSATION WITH BEN GRUMBLES, ASSISTANT ADMINISTRATOR FOR WATER

Mr. Grumbles thanked everyone for their commitment to serve on the Council, particularly the new members, Mr. Diemer and Mr. Saddler. The Council's work plays a significant role in the Office of Water. He thanked the Council especially for focusing on one of his priorities, the public education requirements in the LCR, which is very important to public health and national drinking water stability.

The three water priority areas for EPA are:

(1) *Infrastructure sustainability through the four pillars approach – better management (asset management), full-cost pricing, watershed approach, and water efficiency.* On May 3, 2006 EPA signed a statement of intent with Drinking Water and Wastewater organizations to work with utilities to develop key attributes of asset management and barriers. On water efficiency, the Administrator recently announced a voluntary public-private partnership called Water Sense, modeled on the ENERGY STAR[®] program. This program emphasizes labeling and certification to inform consumers and utilities

about water efficiency for both drinking water and wastewater. Water Sense will enable consumers and utilities to more easily select high-performing products and appliances and increase water conservation. In addition, innovative financing efforts will help close the gap between expected needs and expected revenues.

(2) *Watershed efforts.* The Supreme Court recently ruled on a Clean Water Act case. This is a very significant case, which will consume a great amount of EPA's time in the future. EPA will identify whether any additional rule-making is needed and determine how to provide a supportive role to Congress. President Bush and EPA Administrator Johnson's goal is to achieve an overall gain of wetlands. Through the Source Water Protection Collaborative, EPA will identify opportunities for source water protection.

(3) *Monitoring for Drinking Water.* President Bush and EPA Administrator Johnson's goal is to manage for environmental results by monitoring progress and trends and using this information to decide where to invest resources. So much of the success of the drinking water program relies on solid monitoring and data. Later in the year, a second UCMR will be promulgated to improve data quality for drinking water systems. This data will be important to all aspects of the drinking water program, including the proposed LCR revisions. There will be a significant workload with the groundwater rule, which should be finalized in the next few months and no later than fall 2006. Also, it is important to ensure homeland security through drinking water and wastewater security. Funding for Water Sentinel and water monitoring programs will provide tools for states and communities.

Discussion

Mr. Ramaley expressed his appreciation for Mr. Grumbles' thoughts on the Supreme Court case, noting that things have changed, but that he is not quite sure how yet.

Mr. Grumbles agreed. The Court's decision was so divided that many people involved in water issues in Washington, DC are trying to determine what the decision means. There were three separate opinions, and none of these was a majority decision. Justice Scalia and others, in what is known as the plurality decision, asserted that federal agencies overstepped their bounds in protecting wetlands under the auspices of the Clean Water Act. An equal number of justices (four) filed a dissenting opinion asserting that EPA's actions were justified. Justice Kennedy sided with the first group in terms of the result, but disagreed with the rationale used. EPA and the Army Corps of Engineers will now sift through the decisions and determine what to do next.

Mr. Taylor asked how can NDWAC help with any of EPA's priorities, particularly within the next 12 months?

Mr. Grumbles requested the Council's thoughts and help in advancing awareness of lead and drinking water in schools and daycare facilities, particularly in exploring ways to work with states to increase awareness. He also requested a focus on science-based approaches; meaningful opportunities to reduce risk; and monitoring for emerging contaminants, particularly in the areas of pharmaceuticals, health, and beauty products. He asked NDWAC to continue providing thoughts on water security from a research, technology, and program perspective.

Dr. Head suggested advancing key elements with new partners. While public health organizations are not new partners, she sees connecting data with public health outcomes as a key piece for water security. She asked how this might play into the listed priorities.

Mr. Grumbles agreed that public health agencies could make good partners in a variety of areas. He mentioned that EPA has had conversations with CDC about greater partnership on public health, water security, and other issues. Decentralized wastewater systems offer another opportunity for partnership with watersheds and rural water organizations. He sees this as an issue of public health as well as a watershed issue. He suggested fostering a culture of collaboration between the clean water and drinking water communities. He noted that 30 percent of shellfish bed closures are attributed to septic failures.

Dr. Head offered another statistic. In Michigan, an examination of septic systems revealed a 20 percent failure rate for newly installed systems.

Dr. Regunathan asserted that monitoring cannot just be for compliance but needs to be broader to create a national data snapshot.

Mr. Grumbles explained there are two separate goals – one is to model for compliance, and one is to model for data. President Bush has devoted funding for a national snapshot that will create, for example, a national assessment of lake conditions. This snapshot will not evaluate compliance but rather use benchmarks to evaluate reference conditions and parameters to determine trends.

Mr. Young commented on one of the five priorities identified by Mr. Grumbles for the Office of Water (A one page document on these priorities was passed out immediately prior to Mr. Grumbles' session.). With respect to this priority - Work to Ensure a Diverse, Talented, and Highly-Skilled Workforce -, he noted the water industry is almost in a crisis mode and is sorely in need of more bright, young minds. He asked whether this was an EPA priority internally or industry wide.

Mr. Grumbles replied that this is simply an internal EPA priority.

Mr. Ramaley suggested there might be a potential for uniting efforts to better prepare the water industry.

Mr. Saddler thanked Mr. Grumbles for his understanding approach and willingness to help small water systems. He requested that Mr. Grumbles maintain objectivity in handling new issues such as drought and water rights.

Mr. Diemer offered congratulations on Water Sense and suggested that EPA consider identifying lead-free products in conjunction with Water Sense and certifying products as both lead-free and water-efficient.

Ms. Thorp asked whether Mr. Grumbles had any affordability comments he could share before the Council launched into the Affordability portion of the agenda.

Mr. Ramaley noted that a NDWAC workgroup made recommendations on this, but the Agency is moving ahead with items at odds with these recommendations.

Mr. Baker asked whether there is anything Mr. Grumbles might want from NDWAC for the upcoming discussion on affordability.

Mr. Grumbles shared that it is extremely important to him and to the Administrator to move forward and finalize an affordability methodology. He noted that there are some comments at odds with the proposal, and EPA is committed to reviewing these comments in order to find an acceptable approach that leads to sustained progress. It is important to respond to concerns and lay out an approach by the end of the year. EPA will revisit the original proposal and look to NDWAC as an important source of information.

Mr. Ramaley noted there have been incremental rule changes that impact affordability.

Dr. Buchanan noted that public health outcomes are overlaid with monitoring. She proposed a CDC-EPA meeting to develop a plan of action that could be presented to NDWAC. Within a year's time, there could be a plan of action with results.

Mr. Grumbles agreed that a meeting is a good idea and offered to collaborate about possibly scheduling such a meeting.

Mr. Ramaley suggested that getting ahead of climate change impacts is an area of common concern and offers opportunities for coastal collaboration. He encouraged the Council to think about proactively addressing the situation. He thanked Mr. Grumbles for his time with the group.

AFFORDABILITY METHODOLOGY FOR SMALL PUBLIC WATER SYSTEMS

Mr. Burneson presented EPA's proposed Affordability Methodology for Small Public Water Systems. In accordance with the 1996 Safe Drinking Water Act (SDWA) Amendments, a variance can be issued to provide relief for small systems experiencing higher per capita costs for treatment. A variance can be issued to a public water system serving less than 10,000 customers, enabling the system to utilize a treatment technology that achieves the maximum removal of the contaminant that is both affordable and protective of public health but does not remove the contaminant to the degree specified by the drinking water regulation. However, in order for a small public water system to obtain a variance, EPA would have to determine that compliance costs for a future rule are unaffordable for a specific size category and/or source water condition. Additionally, EPA would have to identify affordable variance technologies that are protective of public health, and the state would have to decide that the system cannot afford compliance and that the variance technology is adequate to protect human health. Before receiving the variance, a system must also go through a public process to inform and seek feedback from the community.

Under EPA's current methodology, all drinking water regulations are considered affordable, and currently there is no methodology for determining if a variance technology is protective of public health. As part of the Fiscal Year 2002 appropriations process, Congress required EPA to re-evaluate the methodology it uses to determine if new drinking water standards are affordable for small systems. In response, EPA requested the advice of the Science Advisory Board (SAB) and NDWAC. Both groups provided recommendations that EPA used for the proposed methodology. SAB and NDWAC recommended that EPA consider the household cost of each new regulation on an incremental basis rather than a total cost of all water treatment regulations, and NDWAC

recommended that EPA consider reducing the current affordability threshold. EPA did not charge either group with providing advice on how to determine if a variance technology is protective of public health.

On March 2, 2006, EPA published a *Federal Register* notice asking for comment on a number of options for revising the affordability and protective of public health methodology. EPA received about 3,000 comment letters before the comment period closed on May 1, 2006.

EPA's proposed affordability methodology options were to lower the affordability threshold, evaluate household cost on an incremental basis rather than a total cost of all water treatment regulations, and to switch national determination to include an additional county level screen. EPA did not request comment on using NDWAC's recommended affordability threshold because EPA determined it would not allow for appropriate implementation at the Federal level and would not trigger a nonaffordability finding. EPA believes the proposed options better reflect the financial impact upon small systems that may face significant challenges in affording the costs of compliance with a new drinking water rule, and increase the likelihood that small systems variances will be available for states to grant for future drinking water regulations.

EPA's proposed methodology options were to find a variance technology that is protective of public health if the concentration of the contaminant after treatment by the variance technology is no more than three times the maximum contaminant level (MCL). EPA would view this three times exceedance level as a general guideline, which might be modified for a specific contaminant if unusual factors associated with the contaminant suggest that an alternate level is appropriate.

Discussion

Mr. Ramaley said the approach of comparing thresholds to household costs is reasonable. However, he thought the incremental rule change methodology might be useful for all systems, not just for small systems.

Mr. Burneson explained that this approach is limited to small systems by statutory constraints.

Mr. Baker commented that EPA seems to be addressing the affordability issue after the fact, and asked whether considering the small systems statutory elements could have been worked into the standard setting process. Could the standard have been defined from the beginning to be protective and meet affordability needs of small systems?

Mr. Ramaley explained that affordability is an after the fact concern, as the primary focus is on performance measures.

Ms. Dougherty added that statutory elements under consideration for this rule include: does it have an adverse health effect, and is there a reasonable opportunity for health risk protection through regulation? The first priority is protecting public health. After determining the maximum contaminant goal level, MCLs can be determined, which is as close as feasible based on technology that is affordable for large systems. The first priority is protecting health. The final rule cannot be based on what small systems can do – the law mandates that feasibility determination be based on what large systems can do.

Mr. Burneson agreed that the rule is driven by large systems because economies of scale in health protection are achieved in large systems, which is illustrated on page 10676 of the *Federal Register*.

Dr. Regunathan commented that this approach results in tiered MCLs and asked why one level should be used as an appropriate level for small systems while another is established for larger systems. He cautioned EPA against this approach. As an alternative, he suggested distinguishing if the contaminant is an acute risk, sub-acute risk, or chronic risk.

Mr. Wheeler argued that the approach is wrong. The solution to affordability issues is not to expose customers to greater risk but to determine a better treatment that is affordable. This creates confusion both by customers as to why some people are paying more and by systems as to why some are doing public notification for high levels and others are not. Also, if the variance moves forward, what happens if the technology becomes affordable in 5 years?

Mr. Burneson responded there is a 5-year state review.

Ms. Surgeon commented that after NDWAC spent days creating recommendations, it is hard to swallow EPA's drastic departure from these recommendations. She noted her frustration and asked "why does an issue like variances appear in the SDWA?" The variance should be taken out; otherwise a double standard is created. In the most powerful nation, there should not be two standards for risk. Small systems will immediately move to make the tools affordable and to find a solution that avoids increasing exposure. Whether it requires consolidation or talking to their Senators and Representatives, small systems will work to avoid becoming part of this double standard. Maintaining a double standard will push people to buy bottled water and increase their cost of water while reducing water system confidence.

Mr. Saddler agreed that water systems need to be responsible for developing economies of scale and coming up with a process that provides a better MCL. In the meantime though, there should be a way to protect public health, perhaps through primacy agencies. In the perfect world, there would only be one standard.

Dr. Head noted that earlier Mr. Grumbles mentioned that full-cost accounting is a top priority. The full costs of the double standard should be considered. When considering these potentially vulnerable populations, what are the medical costs, loss of employment costs, and taxes? Full cost accounting needs to be considered in order to make this a reasonable approach.

Mr. Diemer commented that from his large-systems perspective, the dual standard is problematic. Customers will wonder why the cheaper standard is not available to all customers. The dual standard is unworkable.

Mr. Taylor commented that the dual standard will create divisiveness in the industry. Standard setting is problematic. He commented that if this is a cost issue, there should be a cost-based solution, and that public health methodologies should not be used to solve the problem. He suggested that large systems support small systems in finding a way to meet the MCLs.

Mr. Young expressed his concern that the dual standard is "ethically troublesome and socially unjust," a phrase he does not use lightly. No one will understand how this proposal will protect public health because this proposed solution confuses the issue of public health and the costs of

water. It is already difficult to educate consumers about the value and safety of water, and this will make it all the more challenging. There is a need for discussion of willingness to pay versus ability to pay. It will be difficult to explain these system size concepts to the public and why system size should influence water quality requirements. From a practical point of view, how can this double standard be explained to customers?

Ms. Dougherty challenged the group to think more about protecting the public health and how this two-tiered system might be approached differently. It is a screening level, and it is up to the states to determine if the variance technology is protective enough of public health. By law, a variance technology cannot be identified without discussing public health. She expressed interest in any ideas about how to nationally decide what to do when compliance technology is unaffordable. If variance technology is not possible, then this section of the law is not possible. She asked the group to consider workable solutions given how the law is currently written. She also noted that EPA took all NDWAC comments seriously and spent a significant amount of time working through the options.

STATUS OF SUBGROUP ON PERFORMANCE MEASURES

Mr. Ramaley proposed extension of the subgroup's charter another year before Nancy Beardsley presented a status report on the NDWAC's Subgroup on Performance Measures.

Dr. Regunathan motioned for a one year charter extension.

Dr. Head seconded the motion.

Motion passed unanimously.

Nancy Beardsley thanked the Subgroup members and the EPA and CDC staff for their assistance. To date, the Subgroup primarily focused on refinements to EPA's current performance measure, taking account of the Association of State Drinking Water Administrators (ASDWA) and EPA workgroup changes. The impetus for the Subgroup's work came from Office of Management and Budget (OMB) reports and evaluations, which, in part, determine funding for the Agency. The current path assumes that systems in compliance are reducing risk and protecting the public health, but OMB is dissatisfied with this assumption. OMB directed EPA to find other measures that are indicative of the protection of public health. There was a sense of urgency at the November 2005 meetings to produce recommendations for EPA to consider. For the third step in the Subgroup's charge — developing new performance measures, Clare Donaher expressed an interest in jumpstarting this initiative. NDWAC's recommendations were not included in the Agency's draft Strategic Plan, 2006 – 2011, which is currently circulating for review and comment.

Discussion

Mr. Ramaley explained that the Subgroup discussed revised measures for organic, inorganic, and microbial contaminants in November 2005 and presented them to the full Council on November 17, 2005. The Council as a whole made a recommendation to EPA. He asked why the revised language was not included in the strategic plan.

Ms. Dougherty responded that the language was used internally, but was not presented to the public. EPA's belief was that the revised language overstates what compliance accomplishes in some cases, as most systems that are already in compliance have not achieved a health risk reduction, although the language is correct for systems that had to take actions to come into compliance. The language was dropped to avoid overstating what the rule accomplishes.

Dr. Head asked how the concept of risk reduction can be introduced for compliance. This needs to be done in order to establish a baseline.

Ms. Dougherty explained that an Information Collection Request (ICR) notice was recently issued to collect better data.

Dr. Head thought the emphasis should be on risk reduction. It does not seem that the government is trying to show that people are complying and that compliance shows a risk reduction because they do not exceed the legal limits.

Ms. Dougherty responded that they might not always be reducing risk, they might be preventing additional risk.

Mr. Ramaley noted that there was a desire to create something that could be implemented. It was intended to mirror compliance objectives but to articulate the measure in terms of risk reduction.

Ms. Dougherty answered that the text was found to misrepresent the requirements.

Dr. Regunathan asked why the Agency did not revise the text, rather than ignore it entirely.

Ms. Dougherty responded that it was not until the process was very far along that the decision to remove the language was made.

Ms. Thorp responded that the problem appeared to be language-related. It is hard to quantify the benefit of a rule that does not impact a system. Hazard avoidance, which is different than reduction, can be quantified however.

Dr. Buchanan noted that in lieu of tangible health outcomes data a surrogate had to be used. CDC can use “risk reduction” consistently across agencies.

Mr. Taylor commented that there appears to be a wholesale change from the way performance measurement was done in the past. While unable to parse out components, over time this will develop into a new way of handling performance measures. He asked whether the current path has value, or if a new path should be started.

Mr. Baker commented that a large number of systems achieve more contaminant removal and inactivation than required for microbials. He suggested the Agency should carefully avoid saying that systems are not reducing risk.

Mr. Ramaley added that the language was intended to mean that risk reduction would be zero for those systems not required to do anything, while there would be another risk reduction number for systems required to make changes.

Dr. Head commented that, as a toxicologist, there is a big difference between compliance and risk reduction. She suggested flipping the language to show the meaningfulness of what is being done, even if from an English perspective it does not sound good to say zero risk-reduction. The “risk reduction” wording is closer to describing what utilities are doing from a historical perspective. Even if there are no data, this language helps make that distinction.

COUNCIL'S CONVERSATION WITH MR. SHAPIRO, DEPUTY ASSISTANT ADMINISTRATOR FOR WATER

Mr. Shapiro welcomed new members to the Council. He acknowledged that NDWAC plays a critical role, providing some of the most actionable material of all of EPA's advisory councils. NDWAC is especially effective at providing valuable input to EPA, particularly on complicated issues. He was pleased to be able to hear some of the discussion on performance measurement because it is not an easy process. The Agency's Strategic Plan is revised every 3 years, and EPA is constantly adjusting and evaluating how well its programs are being managed. Since he heard the end of the discussion on risk reduction language, he shared his insight that if a connection could not be readily made within a relatively well-informed community, then it did not make sense to include that language in the draft plan. The most effective measure for the public is that water can be consumed with confidence. This is a compelling measure. Safe water is available anywhere in the U.S., which is not true in many other countries. It would be nice to share how many cases have been avoided and lives have been saved by this fact. Most of the current effort is focused on diligently maintaining achievements made to-date and confidently ensuring the program's sustainability.

Discussion

Dr. Head agreed with Mr. Shapiro's statement that part of the issue is data; more data are needed. EPA and CDC are working toward ways to collect more data. As a member of the subgroup, she expressed interest in meeting with OMB's health and environment analysts at the same time. This would be a helpful way to address the issue of public health.

Mr. Shapiro agreed that such a meeting could be useful.

Mr. Ramaley raised the issue that percentage compliance was an inferior way to approximate consuming safe water. "Acceptable risk" and "safe" are relative terms and not quite the right way to explain performance. Given existing measures and data, how should public health benefits be characterized? The measure of the percentage of systems meeting the required reduction in risk was developed because EPA could use available data to establish a baseline and could measure progress against that baseline every year. This approach captures what is currently happening and would need to be modified as more rules are promulgated.

Ms. Surgeon expressed that the main issue is what to measure. Persistence is needed to convince people that what can be measured is what is appropriate to measure. Even though statistics are not available in some cases, it is better not to have statistics of catastrophic proportions, as in New Orleans.

Dr. Buchanan clarified that the percentage of systems in compliance is an output not an outcome. She questioned how progress can be made using compliance rather than risk reduction. Is there a way to measure improvements over time? How can funding be increased for new and innovative programs if there is no articulation of performance over time? What is your advice moving forward?

Mr. Shapiro expressed that the Program Assessment Rating Tool (PART) is important to measuring the effectiveness of the program, both for program improvement and for making funding decisions. One of the hardest jobs is convincing people that solving a problem is not a one-time fix

for drinking water. Capturing the ongoing public health risk reduction is important to sustain the program over time.

Dr. Regunathan shared that compliance monitoring is minimal compared to the risk reduction achieved. The monitoring program is central to this discussion. Next year, the focus should be on using compliance data to establish trends by modeling and extrapolating (following the example of the Air Toxics program).

Mr. Shapiro shared that the air program conceptually has the same challenges as water, but they have good epidemiological data.

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM ISSUES

Steve Heare opened the discussion with a summary of UIC program issues. The program will be challenged in ways that were not originally envisioned. Carbon sequestration is a key strategy of the Agency on climate change. In order to maintain the current atmospheric carbon dioxide (CO₂) concentrations, more than 2,000 gigatons of carbon would have to be sequestered over the next 20 to 40 years. Rulemaking on the State of Florida's UIC program for hazardous waste wells (Class I) is limited to a few of the most southern counties in Florida but full consultation was done with the State of Florida. The rulemaking process was slow, and a litigator requested proof of EPA's consultation with NDWAC on the UIC rule, which EPA is asking NDWAC for today.

Consultation on the Florida Rule

Lee Whitehurst, a National Program Expert in EPA's UIC program, explained that this is a consultation on a rule issued in February 2005. The UIC program's mission is to protect underground sources of drinking water from contamination by regulating the construction of underground wells. SDWA requires EPA to develop minimum federal regulations for state and tribal UIC programs to protect underground sources of drinking water (USDW). USDW are defined as aquifers or portions of aquifers that have sufficient quantity of groundwater to supply a public water system and contain fewer than 10,000 mg/total dissolved solids.

Currently 33 states have primary enforcement authority (primacy), while there are seven joint EPA-state programs, and 10 states for which EPA administers the program.

Mr. Whitehurst reviewed the five classes of UIC wells before focusing on Florida's history on Class I municipal waste disposal wells. Class I wells include the most harmful toxics, and these wells must prevent movement of the substances contained inside. EPA delegated the UIC program to Florida in 1984. Because of its unique geology, Florida is the only state where municipalities use deep injection wells for the disposal of treated wastewater. Florida's Class I municipal waste disposal wells were permitted on the assumed existence of a confinement system, e.g., layers of impenetrable rock, to prevent fluid from contaminating a drinking water source. However, in the late 1980s, fluid movement was found in 16 wells. EPA headquarters (HQ) and EPA Region IV worked with Florida to revise its program based on this critical finding. Now, in certain Florida counties, wells with fluid movement may continue to inject, provided the wastewater treatment system includes industrial pretreatment, secondary wastewater treatment, and high-level disinfection. The revised UIC Class I

Program Revision in Florida is based on congressional mandates and ensures non-endangerment of USDWs with cost efficiency to utilities.

The Florida revision was challenged and is currently in mediation in the 11th Circuit Court of Appeals, with the next mediation scheduled for July 2006.

Discussion

Ms. Beardsley asked what the penalties are for utilities whose UIC fluids escape the Class I wells.

Mr. Whitehurst responded that the liability is immense and the utilities would face both administrative and civil penalties.

Mr. Baker thanked Mr. Whitehurst for consulting with the Council. He mentioned an earlier discussion on Class V wells and coalbed methane during which NDWAC recommended that EPA pay more attention to Class V wells because they pose some of the greatest threats to drinking water.

Drinking Water Treatment Residuals (DWTR)

Bruce Kobelski, a National Program Expert in EPA's UIC program, opened the discussion by saying that drinking water treatment facilities are looking for affordable disposal solutions for DWTR generated by removing natural or man-made contaminants (e.g., arsenic or radionuclides) as well as accessing more saline resources previously considered too costly to treat. Looking to the future, desalination technologies may be feasible, but as larger inland desalination plants have fewer disposal options, injection may become a preferred disposal option. In order to prepare for the potential increased demand for injection permits, EPA is collecting additional data to better understand the scope, fate, and transport of residuals. EPA is also developing a paper that presents technical recommendations on the construction, operation, and monitoring of large-scale Class I wells. Additionally, EPA is assessing policy needs and developing a communication and outreach strategy. Because this is being done on a limited budget, EPA will leverage resources with the U.S. Department of Energy (DOE), the Groundwater Protection Council, and Sandia National Labs.

Discussion

Mr. Ramaley expressed his appreciation for this important work and agreed this will be an important issue over the next 20 years. Along the coastal region, desalination is increasingly being done as costs have become less of a barrier. Treatment of brackish water has emerged as an alternative to development of new sources of freshwater, making disposal of the water an issue of growing importance for utilities.

Mr. Baker offered his agreement, adding there are immediate issues with small volume waste generation. He asked how treatment can meet standards when there is no disposal option. States need flexibility to regulate in order for this to make sense.

Mr. Saddler noted that Class II and Class V Wells will be an increasing issue for rural areas.

Ms. Beardsley stated that Maine is struggling with disposal guidance because small trailer parks do not have the resources for developing a Class I Well, but there are limited disposal options.

Carbon Sequestration

Mr. Kobelski reported on the significance of geological sequestration (GS) for addressing climate change over the next century. To make an impact, a portfolio of technologies will be needed including GS. Attractions of GS include the potential to mitigate CO₂ while enabling continued use of fossil fuels, especially coal, under a climate policy. The U.S. would likely be part of the portfolio of global storage capacity, which could include as many as 18,000 carbon sequestration sites. DOE is currently leading the federal government's efforts through a Carbon Sequestration Leadership Forum and the development of regional partnerships. EPA is collaborating with DOE on these efforts. In 2004, EPA formed a GS Workgroup between the Office of Air and Radiation and the Office of Water to focus on technology, regulation, risk assessment, communication, and outreach. EPA is also sponsoring and co-sponsoring many technical workshops. EPA is working on a process to address well class issues, both short- and long-term, in order to provide guidance to help regions and states permit the wells. Gathering data from pilot projects will help determine the next steps.

The Carbon Capture and Storage (CCS) initiative within the UIC program could potentially offer massive deployment and implementation of CCS technologies for power plants, communities, injection wells, miles of pipeline, and tons of injection. Permitting will be burdensome, but the key will be the ability of regulators to assure the public that GS is safe, effective, and will result in a better environment.

The U.S. is fortunate that there is already a UIC program in place, as a number of countries have seen the value of UICs and come to the U.S. for advice on developing their first UIC regulations.

Mr. Baker noted his appreciation for EPA's supportive approach toward UICs and commented that learning from pilot projects should be a reasonable approach to take.

FUTURE DIRECTIONS/PRIORITIES OF THE NATIONAL DRINKING WATER PROGRAM

Standards and Risk Management Division

Pam Barr, Director, Standards and Risk Management Division in OGWDW, reiterated that the potential revisions to the LCR, which Mr. Burneson discussed yesterday, were just the *potential short-term* changes. Long-term ideas are being pursued as well. EPA will consult with the Council at a later date on long-term ideas. Several issues were identified on the Total Coliform Rule (TCR) and Distribution System Rule, such as minimum monitoring and indicators (similar issues to the GWR). Distribution system risks need to be more fully addressed, including backflow and storage tanks. White papers generated from expert workshops and stakeholder participation are posted on EPA's web site. For the GWR, EPA will likely take the 60-day extension.

New and emerging contaminants are the future of the program. The approach is to begin with a large universe of possible contaminants and then narrow down the list. The universe is enormous, but the resources are not. The challenge in the treatment research and risk assessment is to focus on the contaminants where the most difference in protecting the public health can be made.

The biggest challenge is a lack of data; data are important for delineating benefits of particular rules and for EPA and the states to express the value of the program.

Mr. Ramaley interrupted this session to keep to the schedule on the Agenda for public participation.

PUBLIC PARTICIPATION

John Montgomery, National Rural Water Association (NRWA)

He stated that he represented NRWA during negotiations on the 1996 SDWA Amendments. Congress was ready to exempt all systems serving fewer than 10,000 people from the new provisions. Instead, we negotiated relief in the form of the affordability threshold for receiving a variance. This was the one provision that made the Amendments acceptable to small systems. The provision on affordability for small systems was a key part of the SDWA because small systems could not afford the new regulations. Without the variance provision, we would have preferred no bill, and small systems could have blocked the whole thing. None of the relief that we (small systems) expected came to us under the current rule. Small systems returned to Congress and told them to follow the law. This is what the Constitution is all about. If large systems don't like the law, they should go to Congress to get it changed. But large systems don't have any "whack" in Congress.

Small systems wrote a minority report on affordability, and EPA, as they should, is now following the NDWAC minority report's small water system recommendations. As the recent Supreme Court decision on the Clean Water Act illustrates, EPA needs to follow the law. It's important that we follow the wording in the law. We feel strongly that this is still protecting public health. I have no doubt in my mind that 30 ppb for arsenic still protects public health. MCLs have become a political issue, and EPA has driven many of the MCLs lower than is necessary to protect public health (EPA is too conservative by a factor of 10). It's not our objective to set a second standard; it's simply a variance until it's feasible to meet the standard. EPA already has many rules that include different requirements for small systems. We think of variances as providing an interim stepping stone. This gentleman over here (*pointing at John Young*) who talked about the provision on affordability for small systems as unethical and unjust, I find his comment to be fraudulent.

Mr. Montgomery brought a bi-partisan letter from five senators supporting EPA's decision on affordability. The position of these senators is that EPA is not going far enough to support small systems. Small systems would like to be allowed to do their business. It is ethically unjust for people to criticize small systems.

CONTINUATION OF FUTURE DIRECTIONS/PRIORITIES OF THE NATIONAL DRINKING WATER PROGRAM

Water Security Division

David Travers, Acting Director of the Water Security Division/OGWDW, reported on the Division's future direction and priorities. The framework for the water security strategy is based on response, through mutual aid and emergency response training and tools, and recovery, through decontamination. A basic structure is applied to each project that examines resources, activities,

outputs, audience, and short- and long-term outcomes. The Council provided recommendations on a three-phase implementation approach. The Water Security Division is using GAP analysis to determine if tools are available to allow implementation of the 14 features identified in the Council's report on and to determine whether EPA, associations, or another group is best positioned to deliver those tools. The Division is developing incentives for voluntary adoption for the water sector by looking at voluntary programs, both within and outside EPA. A Measures Testing Group (MTG) was established in January 2006 and is charged with evaluating each national aggregate measure to see which 14 features are integrated and to refine and track the collection of data. The verification includes peer review to maintain consistency of measures. The MTG draft options are expected in July 2006 with a final report due by December 2006.

Discussion

Dr. Head thanked Mr. Travers for his presentation. This looks like a good next step. She also thanked him for coming to Michigan to discuss this with water utilities interested in security.

Mr. Travers noted that, while the program began to address terrorism-preparedness, it has evolved into an all-hazards approach, and there are a number of cross connections with hurricanes and other challenges. A robust security system will help utilities in many ways.

Dr. Buchanan asked about the potential for collaboration with public health counterparts.

Mr. Travers responded that the MTG will develop a system to collect data that create a baseline for a trend analysis. The MTG portion of the business plan includes broad measures on public health collaboration.

SELECTION OF STAKEHOLDERS PROCESSES FOR REGULATORY DEVELOPMENT

Discussion

Mr. Young commented that the process of negotiation is important on rules, particularly when there is conflicting science. How does EPA decide whether to use the Federal Advisory Committee Act (FACA) stakeholder process?

Ms. Dougherty responded that all regulations should have FACA involvement in order to hear comments from all different viewpoints. This also helps bring people to a similar level of understanding to move ahead. The stakeholder process should help develop a workable rule and negotiate the best approach for dealing with science, not for negotiating away the science. In the past decade, there have been some rules that were developed without the FACA process, and there have been problematic issues for these rules. It generally makes more sense to hold a FACA than not.

Mr. Ramaley added that most rules deal with a variety of issues such as treatment and epidemiology that benefit from consideration by a group of stakeholders who can sort through the issues and reach a workable regulation. It can be a painful process, but at least all the parties understand how the regulation was developed. It is hard to say whether the process creates better rules because only

time will tell, but it does create more workable rules that can be embraced across a variety of stakeholders.

Mr. Young asked if the intent is to use FACA on all rules, then might it be worthwhile to communicate to everyone that this is the process for all rules?

Mr. Ramaley answered that there must be willing parties at the table, which is why for each rule the best stakeholder process for that rule is determined based on who is interested in the rule and what issues should be considered.

Ms. Dougherty noted that the scoping process determines the best stakeholder process and aids in developing a more transparent process.

AFFORDABILITY METHODOLOGY FOR SMALL PUBLIC WATER SYSTEMS

Discussion Continued

Ms. Surgeon expressed interest in reaffirming the Council's position and recommendations on this issue. She asked whether a motion should be made to reiterate to EPA that the Council still stands behind the original proposal.

Mr. Baker responded that he was not sure how much the Council could do considering Congress did make variance part of the law. He noted his disagreement with the congressional mandate on variances.

Ms. Dougherty commented that the earlier issue did not deal with the protection of public health and suggested that the Agency would appreciate any suggestions the Council might have on moving ahead on this issue.

Mr. Taylor asked Ms. Dougherty if there is something forcing the Agency to act as it has. Would she be able to share this with the Council in order that the Council not provide recommendations outside the possible path of options? The original discussion was on cost; was the public-health solution offered for cost reasons? Is the door open to solving the cost issue outside of the variance procedures?

Ms. Dougherty responded that the variance was set up to address the cost issue, but it was mandated that public health still be protected. A re-analysis of the risk assessment for each rule will be conducted each time this happens. The states will need to examine the affordable technology and determine whether it is protective of the public health.

Mr. Ramaley asked Ms. Dougherty to share the congressional mandate with the Council in as simple terms as possible.

Ms. Dougherty explained the congressional mandate is for EPA to determine a methodology for establishing whether meeting an MCL is affordable for each size category of small systems. EPA needs to establish what is affordable for each of the three size categories.

Dr. Regunathan noted that the POU treatment for arsenic and radionuclides is compliance technology that does not yield a less than desirable outcome. He asked if there were similar tools that are less costly and meet a lower standard.

Ms. Dougherty responded that when these compliance technologies are installed, the filter is not replaced as frequently, resulting in lower operating efficiency and partial flow treatment.

Mr. Wheeler thanked Ms. Dougherty for her explanation of the legislation. He asked whether a public hearing could be held before each small systems variance is granted.

Ms. Dougherty answered that public hearing is built into the process.

Ms. Beardsley believes that variances should be the extreme exception when every other compliance option has been exhausted. However, if the bar is set too low, it may be difficult politically for states to refuse the variance, and small systems will be able to get a variance by default. She wondered how costs could be addressed without eroding the complex public health network that has been developed over the past 30 years. She expressed further concern about setting two sets of public health standards, and questioned how EPA, the states, and systems will explain the two standards to the public.

Ms. Barr asked about the possibility of providing more time to meet the standards rather than a different standard to meet. She also asked whether exemptions might be a possibility.

Ms. Beardsley answered that states do have a formal enforcement process to give systems more time to comply.

Ms. Dougherty responded that Congress also looked at a suite of tools including variance and exemptions that might help systems meet the requirements.

Dr. Singer commented that asserting variance technologies are protective of public health is illogical. While everyone accepts the cost issues, setting a different MCL as protective is illogical and needs to be reconsidered.

Mr. Baker added that this will not solve the small system affordability issue. He asked what criteria were used to determine the protectiveness of public health; a contaminant-by-contaminant process does not seem feasible.

Ms. Dougherty noted that using the uncertainty factors for a given standard, an argument can be made that moving within the same range may actually provide the same level of protection.

Ms. Thorp agreed that there is some truth to the range argument, but then why is an MCL set? She expressed concern that this issue is increasingly about money, and that the money issue cannot hide behind the health issue.

Mr. Diemer responded that the issue is about both time and money. He suggested the need for future funding packages to deal with this issue instead of creating a double standard that does not solve the problem.

Mr. Taylor added that there are financing mechanisms available to address the money issue. If a system passes the variance test, then they could be given the difference in capital that the need to meet the original regulation.

Mr. Ramaley suggested considering where the money would come from before supporting that idea.

Mr. Taylor added that he agreed philosophically that there may not be enough money to cover compliance costs for small systems. However Mr. Montgomery's comments during public participation indicated that funding would only be needed in very rare situations.

Dr. Regunathan added that Mr. Montgomery also said if anyone disagreed with the law, they could go back to Congress. Is that an option for the Council to consider?

Mr. Ramaley responded that he had written down Mr. Montgomery's comment, and while Mr. Montgomery did say, "if you don't like the law, go to Congress," he also said that large systems don't have influence in Congress.

Mr. Young added that a chapter was included in the NDWAC affordability report addressing funding and solutions. EPA needs to talk about affordability at the individual level. If the energy industry can address costs on an individual level (LIHEAP), the water industry should be able to do the same.

Mr. Grunenfelder shared his interest in meeting with members of the congressional delegation on affordability. He asked whether the Council might be in a position to provide feedback to Congress on the issue, as he does not see how the law is workable.

Ms. Dougherty recommended that the Council either provide advice to the Administrator as a group, or contact Congress as individual citizens. This Council does not have the authority to contact Congress as a group.

Mr. Ramaley asked whether rural citizens might have different expectations for their water systems. Rural citizens would not expect an ambulance as fast as in the city, and perhaps risks are acceptable tradeoffs for the quality of life in rural areas.

Mr. Wheeler disagreed based on his West Virginian roots. Rural citizens lower their expectations for some services, but they actually have higher expectations when it comes to their water.

Dr. Regunathan noted that rural citizens pay quite a bit for their water. He asserted that the NRWA does not speak for all rural systems in the country.

Dr. Singer added that it is important to be upfront and tell rural citizens that they are at greater risk. If the Council is so displeased with EPA's selected course of action, there is an obligation to record this displeasure.

Mr. Diemer noted his agreement with Dr. Singer.

Mr. Baker proposed suggesting to the Administrator that the Council finds this portion of the SDWA amendments unworkable. It is important to acknowledge the congressional origins of the mandate.

Ms. Thorp suggested that the motion could revolve around the challenges to the Agency that the Council has recognized and suggest that the Agency re-examine the methodology based on these challenges.

Ms. Dougherty reminded the Council that on page 10675 of the *Federal Register*, in the middle of the second column, the Council already told the Agency that there were substantial issues with the variances.

Mr. Ramaley noted that the Council is not required to take any action. He asked if any member of the Council wished to reaffirm the recommendations provided in the previous report, note concern over the dual levels of protection, or ask the Administration to work with Congress on this issue.

Ms. Thorp agreed that the Council should recognize the congressional origins of EPA's current direction, both the 1996 Amendment and the congressional appropriations in 2002. Involving Congress in this again, however, is not a good idea.

Mr. Young and several other Council members agreed to draft language to present and vote on in the morning.

DAY 3 (June 22nd)

AFFORDABILITY METHODOLOGY FOR SMALL PUBLIC WATER SYSTEMS

Discussion Continued

Mr. Ramaley asked the Council to review a draft statement a group of members developed the previous evening as a response to EPA's affordability proposal:

The NDWAC reaffirms *The Recommendations of the NDWAC to U.S. EPA on Its National Small Systems Affordability Criteria* sent to EPA's Administrator in 2003 and rejects the notion of dual levels of public health protection. The NDWAC recognizes that the cost of compliance for small systems is a real concern and offered appropriate alternatives that are protective of public health. (revised)

Ms. Surgeon motioned for adoption of the draft statement for transmittal to the Administrator.

Dr. Head seconded the motion.

Ms. Thorp requested insertion of the appropriate title for the report, which is: "The Recommendations of the NDWAC to U.S. EPA on its National Small Systems Affordability Criteria."

Ms. Surgeon clarified that she moves the statement for adoption with the full title included.

Motion passes unanimously.

Mr. Ramaley said the DFO will include this language in an official letter to the Administrator that forwards the Public Education Requirements for the LCR revisions and presents other recommendations, e.g., the extension of the Subgroup on Performance Measures.

CONTINUATION OF FUTURE DIRECTIONS AND PRIORITIES

Drinking Water Protection Division

Mr. Heare reported there are three general areas of focus that EPA has in working with organizations, states, and earmark grantees (NRWA, RCAP):

- (1) *Measuring and communicating the status of drinking water quality.* The Agency's draft Strategic Plan, 2006-2011, is out for comment. Programs that have failed the PART may be dropped. Check www.expectmore.gov for more information on scoring of programs. A key focus is on improving oversight roles and lessening implementation burden on the states. A logic model was developed in the past year; the logic model is a program evaluation tool that

logically maps a process or program (inputs, resources, activities) and the outcomes that flow from it. EPA will pilot the logic model and its indicators in four EPA regions and 13 states. This logic model provides an opportunity to step back and measure what is important. Additionally, the logic model will assist in communicating the benefits of drinking water efforts to the public and those that oversee the program.

- (2) *Strengthening state program capacity and system capacity for long-term sustainability.* In addition to the traditional written guidance, web casts are an increasingly popular training method. The Safe Drinking Water Information System (SDWIS), the national data system, will soon be web enabled and help reduce the states' burden. Fifty-one of the 68 primacy agencies use SDWIS, with two more soon to start. A major effort has been made to provide upfront training and web casts for early implementation guidance of the Stage 2 Disinfectants and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule. EPA will actively partner with states to reduce the Arsenic Rule burden.

Even though the focus has been on helping states implement rules developed in conformance with the 1996 SDWA Amendments, a new rule - - the airline drinking water rule - - is also under development. When EPA sampled plans for coliform and disinfection residual, there was a significantly higher positive rate than in stationary systems. Virtually none of the airlines were in compliance with the NTNCWS Interstate Carrier Conveyance rules. EPA is currently developing a rule tailored to aircraft and negotiating bridge orders with 44 carriers to encourage them to do sampling, disinfection, and notification when there is a positive result. The Agency is collecting data to begin developing the rule. Even though the rule is on an expedited process, it will still take some time.

Discussion

Dr. Head asked whether cruise ships would be included in the rule.

Mr. Heare noted that cruise ships are under a different framework as are trains. However, rules for these sectors may be considered in the future.

Dr. Buchanan commented that CDC has a cruise lines program in which they pay CDC to inspect their fleet when they dock.

Mr. Heare provided a summary of sustainable infrastructure issues. The cost of upkeep and repair for aging infrastructure is staggering. Innovative approaches and new technologies are needed to address these challenges. The four pillars of sustainable infrastructure are better management, water efficiency (Water Sense), full-cost pricing, and watershed-based drinking water protection. On the permitting and trading front, the Agency is issuing a National Pollutant Discharge Elimination System (NPDES) Permitting Program to consider nonpoint source pollution and the impact of tradable credits.

- (3) *Advancing Source Water Protection (SWP) and UIC programs.* The SWP assessment required under the SDWA is complete, now SWP essentially becomes a voluntary program as there is no additional regulatory authority. The national action plan is to work through national level organizations to reach people on the local and county levels. EPA has already partnered with 13 organizations, collectively named the Source Water Collaborative

Ms. Thorp requested that Mr. Heare send the Source Water Collaborative mission statement to the Council for further discussion at the fall 2006 NDWAC meeting.

Mr. Heare thanked the Council for the UIC consultation. The challenges of emerging waste streams and carbon sequestration will put UIC in the spotlight. Currently, there is no UIC national database, which would help convey to other interested parties that UIC can be well managed. The Agency will collaborate with states and the Ground Water Protection Council (GWPC) to develop this national database.

Mr. Florquist asked if Mr. Heare had talked to the Forest Service about joining the Collaborative.

Mr. Heare responded that the Agency has worked with the Forest Service to prioritize the fuel load reduction program and to identify the impacts that fires can have on the SWP, but the Agency has not talked to the Forest Service about joining the Collaborative.

Mr. Florquist noted that in his small hometown, the Forest Service has been working on these issues for 50 years. He also recommended that the Agency check with Petroleum Information to gather information on UIC, as they store a great deal of information on wells.

Mr. Heare agreed to look into Petroleum Information as a potential resource.

Dr. Buchanan asked how many people believe the training on building program capacity made a difference. How can outcomes be demonstrated?

Mr. Heare responded that the Agency is struggling to link the strategic plan by measuring changes in compliance based on the trainings completed in order to measure how much people take away from the trainings.

Mr. Ramaley asked how many states have sought primacy on Stage 2 early implementation.

Mr. Heare noted that the majority of states have said they want some role in implementing the rules, although he did not know of any states that had sought primacy.

Mr. Ramaley responded that Virginia has.

Mr. Heare added that, regardless of how many states seek primacy, many states have become more involved. Some of the states that cannot take on primacy still want the letter and postcard communications to utilities to come from the state agencies.

BUDGET OUTLOOK

Mr. Malloy reviewed EPA's budget over the past few years and noted net changes from the 2003 actual budget to the President's 2007 budget request. Overall, under the President's budget, EPA faces cuts of nearly \$757 million. Operating programs had a \$286 million increase. However this increase is due to salaries and actually represents a 5 percent reduction Agency-wide. The State and

Trial Assistance Grants had a cut of nearly \$1.04 billion, which largely represents the fact that the President's budget does not include any earmarks.

The Drinking Water budget over the same period shows increases in the areas of drinking water programs (more than \$16 million) and Homeland Security (more than \$32 million).

Mr. Grunenfelder asked how much influence Headquarters has on the Regions' budgets, as it seems that the Regions determine cuts based on where vacancies occur.

Ms. Dougherty explained that the Regions have a great deal of flexibility in terms of how they use their resources, and Headquarters focuses on ensuring that states reach their outcomes and outputs.

Ms. Beardsley commented that state funding has declined or stayed constant for many years while responsibilities are mounting. The states are nearing a crisis point. Even though this has been mentioned before, it is worth noting again.

Mr. Malloy responded that this is an important item of discussion each year both within the Agency and externally. As the budget continues to tighten, the Agency is well aware of state challenges. The only change the House Appropriations Committee made to the President's budget was to cut Homeland Security by \$25 million.

Mr. Grunenfelder asked whether a contamination warning system could be developed given the budget reduction.

Ms. Dougherty responded that three to five pilot projects would provide a solid amount of information to determine whether the Water Sentinel program is feasible. In decreasing the Agency's request for homeland security resources, the House appropriations subcommittee for EPA requested that in the future the Agency route these requests to the House Appropriations Subcommittee that deals with the Department of Homeland Security.

Mr. Malloy reviewed the four PART ratings: effective, moderately effective, adequate, and inadequate. The Drinking Water State Revolving Fund, Public Drinking Water Systems, and UIC have all received ratings of adequate, while the rating for all other aspects of the drinking water program have not yet been issued.

Performance measures will continue to play an important role for the Agency. Accordingly, **Mr. Malloy** reviewed the percentage of the population served by community water systems receiving drinking water that meets all health-based standards. The percentage fluctuates over the years (79 percent in 1993, 91 percent in 2000, 90 percent in 2004, and 88.5 percent in 2005) and may be reflective of changing standards.

Ms. Dougherty noted that the Agency struggles to show that the standards and workloads have increased over the years. Therefore, an 88.5 percent level achieved in 2005 may actually demonstrate higher health standards than in previous years.

Mr. Malloy explained the composition of federal spending, noting that discretionary spending is a small portion of the budget. If Medicare, Medicaid, and Social Security continue to increase at the

current pace, these programs will far outpace GDP growth, and discretionary spending will tighten further.

Mr. Ramaley turned the floor over to **Mr. Baker** who requested a few minutes of the Council's time.

Mr. Baker proposed draft performance measure text for the Council to consider sending to EPA, reaffirming that the Agency's Strategic Plan subobjectives be changed in line with the Council's recommendations. Proposed text:

The National Drinking Water Advisory Council (NDWAC) reaffirms its recommendation that EPA modify subobjective 2.1.1 in the current Strategic Plan to better reflect the public health benefits of national efforts to reduce exposures to contaminants in public drinking water. Specifically NDWAC recommends the following language for the revised measure be included in the 2006-2011 Strategic Plan:

“Percent of population served by community water systems continuously achieving at least the required reduction in the risk of disease and other effects of contamination in drinking water.”

It is the Council's understanding that this language was rejected due to a belief it overstates the actions taken by water systems to reduce risk. In other words, the language was rejected due to an incorrect belief that just because a system is in compliance with the drinking water standards does not mean the system has done anything to reduce risk. On the contrary, the language recommended by NDWAC more accurately incorporates all of the actions taken by EPA, states and water systems to achieve compliance with drinking water standards and reduce public health risks. This language recognizes that achieving at least the required reduction in risk requires proper location and protection of the source of drinking water, proper design and construction of treatment and distribution facilities, proper operation and maintenance of those facilities by trained and competent individuals, and a commitment by the water system to long term sustainability.

NDWAC also reconfirmed it will continue efforts to refine and improve ways to measure public health outcomes over the next year.

Mr. Grunenfelder noted that he was not part of the workgroup that drafted this language but noted that at some point maintenance of public health benefit gains is an acceptable option. To account for systems that are meeting the standards but not further reducing risk, could the text be revised to “achieving and continuing to protect public health standards?”

Mr. Ramaley thanked **Mr. Baker** for his expansion on the Council's thoughts.

Ms. Thorp offered her appreciation for his effort as well. While it is difficult to measure something that did not occur, it is important to challenge EPA's current stance in order to better recognize the benefits of systems continuing to meet all requirements.

Mr. Taylor offered his support for the approach and noted that credit should be taken for all compliance and efforts above and beyond compliance.

Dr. Regunathan added that projections could be made based on what would happen if requirements were not met.

Mr. Ramaley noted this will end up not only being a performance measure for systems but also a measure for the entire industry. Everyone has contributed to meeting public health goals and not always in response to compliance requirements.

Dr. Regunathan motioned to adopt and transmit **Mr. Baker's** reaffirmation to the Administrator.

Dr. Head seconded the motion.

Motion passed unanimously.

ISSUES FOR DISCUSSION AT FALL 2006 MEETING

Ms. Dougherty commented that later in the summer, there will be a conference call consultation with the Council on the Ground Water Rule.

Possible topics for the fall 2006 meeting of the Council include:

- EPA's approach to consultation with NDWAC on rules and policy
- The Source Water Collaborative
- Small and rural systems
- Update on the Distribution System Rule and related issues
- Performance measures
- Security Performance Measures Workgroup update
- Updates on UIC activities
- Western states and Interbasin Transfer
- Pandemic flu implications for drinking water systems
- Status report on early implementation of Stage 2 and LT2 rules
- CCL3 implementation recommendations update
- Emerging contaminants
- Consolidation and regionalization
- EPA Strategic Plan update
- Implications of Supreme Court's Clean Water Act decision
- Airline Rule update
- Improving health risk communication

Mr. Ramaley noted that there are enough topics for three full days, and as the fall meeting typically includes a field visit, the agenda will have to be trimmed. The meeting will be held in late November or early December 2006 with possible dates and availability to be discussed later. Locations suggested thus far include West Virginia and New Mexico.

Mr. Ramaley expressed his continued appreciation for the cooperative spirit the Council brings to the table.

Adjourned at 10:40 a.m.