National Drinking Water Advisory Council

Meeting Summary

May 14 &15, 2003

Washington Terrace Hotel 1515 Rhode Island Avenue, NW Washington, DC

Prepared for:

United States Environmental Protection Agency Office of Ground Water and Drinking Water 1201 Constitution Avenue, NW. Washington, DC 20004

June 13, 2003

Members of the National Drinking Water Advisory Council (NDWAC)

Dr. David P. Spath, Chair Mr. Michael G. Baker

Honorable John W. Betkoski, III

Mr. Bruce Florquist

Dr. Jeffrey K. Griffiths

Dr. Rebecca A. Head

Summary of May 2003 NDWAC Meeting

- Mr. Bradford McLane
- Mr. Brian L. Ramaley (not present)
- Dr. Graciela I. Ramirez-Toro
- Ms. Vicki Ray
- Mr. Dennis Schwartz
- Ms. Blanca A. Surgeon
- Mr. Jeff Taylor
- Ms. Lynn Thorp
- Mr. John S. Young, Jr.
- Dr. Mary Davis, Science Advisory Board Liaison, U.S. EPA
- Ms. Brenda Johnson, Designated Federal Official, Office of Ground Water & Drinking Water, U.S. EPA

Also present:

- Ms. Veronica Blette, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Will Bowman, Office of Ground Water & Drinking Water, U.S. EPA
- Ms. Elizabeth Corr, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Tom Curtis, American Water Works Association
- Mr. Bill Diamond, Office of Ground Water & Drinking Water, U.S. EPA
- Ms. Cynthia Dougherty, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Jeff Kempic, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Ephraim King, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. John Montgomery, National Rural Water Association
- Ms. Janet Pawlukiewicz, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Jay Rutherford, Association of State Drinking Water Administrators (ASDWA)
- Mr. Peter Shanaghan, Office of Ground Water & Drinking Water, U.S. EPA
- Ms. Charlene Shaw, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Ed Thomas, National Rural Water Association
- Ms. Sherri Umansky, Office of Ground Water & Drinking Water, U.S. EPA
- Mr. Ken Wernick, Office of Ground Water & Drinking Water, U.S. EPA

WEDNESDAY, MAY 14, 2003

I. Opening Remarks – Dr. David Spath and Ms. Cynthia Dougherty

Dr. David Spath convened the meeting at 8:40 a.m. by introducing himself and Ms. Dougherty. Dr. Spath welcomed everyone to Washington, D.C. and discussed housekeeping issues. Ms. Dougherty also welcomed the group. Council members introduced themselves.

Dr. Spath asked that members of the public interested in commenting during the comment period sign up to do so. He stated that the public comment on the affordability report would be held after the presentation of the affordability workgroup's presentation.

Dr. Spath introduced Ms. Blette to discuss the results of the survey of the Federal Advisory Committee Acts (FACA) across the government.

II. FACA Survey Results - Ms. Veronica Blette

- Ms. Blette presented a summary of the survey of FACAs across the government, and results of the FACA Stakeholder Engagement Survey for the NDWAC group. The purpose of the survey was to develop cross government performance measures. There was a 2-year process to develop the questionnaires, which consisted of 25 questions covering three topics: people, process, and outcomes. The questionnaires were completed over the Internet from December 2002 to January 2003. The government-wide response was 49 percent. (A response rate of 30 percent is typical for this type of survey.) Of the 70 NDWAC members and members of the three NDWAC workgroups who received the survey, 40 responded. (A 57-percent response rate.)
- Survey questions were given an answer from 1 to 5. Ms. Blette provided the following interpretation of the scores:

5 = always yes

4 = yes, most of the time

3 = polite no

2 = no

1 = definitely not

An answer of 5 indicates the responded is fully engaged. A high percentage of 5s indicates the subject committee has a strong chance of meeting its goals.

Summary of May 2003 NDWAC Meeting

- Most of the questions about NDWAC were answered 4 or 5; there were almost no 1s, very few 2s, and some 3s.
- The overall mean score for the NDWAC was 4.07. The mean score for EPA was 3.91 and government wide the mean score was 3.98.
- Results showed an overall satisfaction with committees. Ms. Blette will mail the results to the NDWAC members. Ms. Blette said that NDWAC scored below the government average in overall satisfaction of work of the overall committee, but scored high on meeting operating procedures and how well-prepared committee members are. The outcome questions are the most important and were pretty far below the government average.
- Results of the survey for NDWAC may be skewed to one committee if more members of that committee answered than another committee. However, it is best to assume that the results are the same for any one group.
- According to the survey results, NDWAC's overall strengths include:
 - Meetings are well run.
 - Procedures and guidelines are fair.
 - Council member have good access to senior management and technical experts.
 - The advisory groups are having an important influence on drinking water policy.
- Overall weaknesses include:
 - The recommendations are not being used effectively by EPA (not influencing their policy).
 - The committee does not set reasonable time lines.
 - The committee does not meet often enough.
 - The committee members are not well prepared for meetings.
- Interpretation of these results show that the groups are not receiving sufficient feedback from EPA regarding how EPA is using their recommendations. Many FACA groups cited dissatisfaction with communication. Communication from the full Council to the working groups may also need to be improved.

- The MD/DBP Advisory Group was taken as a "best practices" case study because they had an overall mean score of 4.5. A summary of best practices will be made available to all designated federal officers.
- The next survey is planned for September and October, 2003. The surveys will be conducted annually. The findings from the surveys will be provided to the Council and its committees.

- Dr. Davis asked if the MD/DBP group was the one that arrived at an agreement for the structure of the rule. Ms. Dougherty said yes.
- Dr. Spath asked if it is possible to see the evaluation information teased out committee-by-committee. Ms. Blette said she will follow-up with the Gallup organization, which conducted the survey, about that. She said that a problem with getting that type of information is there have to be between 5 and 10 responses to be considered statistically significant, and there may not be enough responses from any one group to make such an evaluation. Ms. Dougherty suggested that Ms. Blette present the survey results to the CCL working group and maybe the research group so they can see the information.
- Dr. Spath asked what it meant that the NDWAC mean score is 4.07. Ms. Blette responded by saying that the score is about 4 out of 5, meaning people are satisfied.
- Ms. Surgeon asked what the end result or goal of this survey is. Ms. Dougherty responded that the survey is conducted to help managers of FACAs get a sense of how to be more successful and work to the best advantage of the group. Ms. Dougherty also said that the government wants to have a better group outcome, and suggestions might improve that overall performance.
- Dr. Griffiths asked if it is possible to see the results in a summary format so that NDWAC members may see the results without having to read the entire report. Ms. Blette said yes.
- Ms. Blette recommended that the NDWAC hold conference calls before the next meeting.
- Dr. Spath commented that there is suspicion that the research sub-committee has not worked in awhile, and they may be dissatisfied with that, so that may be what the results are reflecting.

Summary of May 2003 NDWAC Meeting

Dr. Spath introduced Ms. Dougherty for the strategic planning, budget, and accountability presentation.

III. Strategic Planning, Budgeting, and Accountability - Ms. Cynthia Dougherty, Mr. Will Bowman, Mr. Bill Diamond, and Ms. Veronica Blette

• Ms. Dougherty stated that the overview in these presentations is to bring the group up to date on strategic planning at EPA and performance of other government programs. Ms. Dougherty introduced Mr. Bowman to discuss EPA's Strategic Plan.

The National Drinking Water Program: 2003 EPA Strategic Plan Overview - Mr. Will Bowman

- Mr. Bowman provided a summary of EPA's third Strategic Plan, which is a requirement of the Performance and Results Act.
- One of the many requirements of the Results Act is to improve EPA accountability over a 5-year planning period. The Strategic Plan serves many purposes: public communications document, budget and planning guide, and accountability mechanism for the Office of Management and Budget (OMB).
- Each Strategic Plan has three main parts:
 - Narrative ("how").
 - Strategic architecture (goals, objectives, subobjectives) and performance measures.
 - Performance targets (how many/what percent).
- Mr. Bowman provided a summary of the differences between this Strategic Plan and the two previous Strategic Plans.
 - The number of goals has been reduced from 10to 5.
 - EPA no longer has national annual targets. Instead EPA has a "bottom-up" annual target setting.
 - The Strategic Plan includes indicator measures.
 - The Strategic Plan focuses on integrating Clean Water Act and Safe Drinking Water Act programs.
 - There are high levels external review and input from states and associations. There are two public comment periods in the Strategic Plan.

- Mr. Bowman provided a summary of where drinking water fits into the Strategic Plan. Drinking water is found in Goal 2 Clean and Safe Water, Objective 1 Human Health, Sub-objective 1.1 Water Safe to Drink. There are 23 program activity measures, 7 strategic performance outcome measures, and 7 program integration measures. Drinking water is also found in Goal 4 Communities and Ecosystems.
 - An example of a program activity measure is: By 2008, all States will have conducted sanitary surveys at community water systems once every 3 years.
 - An example of a program integration measure is: Beginning in 2005, and each year thereafter, identify critical drinking water contaminants of concern in surface waters and issue new or revised human health criteria.
- Drinking water and waste water facility security efforts are captured in Goal 4.
- Mr. Bowman discussed the next steps:
 - EPA will work closely with stakeholders to make revisions.
 - The Environmental Council of the States (ECOS) will review the Strategic Plan in June 2003 and make recommendations to EPA.
 - EPA will submit the Strategic Plan to OMB in July 2003.
 - EPA will submit the Strategic Plan to Congress in September 2003.
- Mr. Bowman said that more information is available on the Chief Financial Officer (CFO) Web site: www.epa.gov/cfo/.

- Dr. Head asked if the targets for the percentage of drinking water systems that must be in compliance are the same for every state. Mr. Bowman responded that EPA has less control over the 95 percent target, but there is a slightly lower target for new standards because they affect small systems.
- Dr. Head asked what the "safe to drink" water percentage is. Ms. Dougherty stated that the percentage is set nationally, then EPA works with each state every year in terms of the state's targets. EPA is working with ECOS to come up with a list of common goals that states and EPA have. Mr. Bowman added that new measures discuss reaching compliance for a number of systems specifically rather than just a percentage of the

target population. Ms. Dougherty commented that regions have a Memorandums of Agreement (MOAs) addressing how to work with states to determine the percentage of systems that must be in compliance.

- Dr. Spath said that each state must have a work plan.
- Ms. Dougherty said that each member received, in their binders, a copy of the six-page matrix, which shows program activity measures.
- Mr. Baker commented that there has been a major emphasis on environmental outcomes rather than program outputs. He also noted the integration measures have only come with the encouragement of stakeholders.
- Dr. Griffiths thanked Mr. Bowman for his presentation. Dr. Griffiths then asked for more clarification of the differences between the old and new strategic plans. Mr. Bowman responded that under the old 10-goal structure, EPA included effective management as a goal. Now, instead of having those sorts of goals separate, they have been nested into the program. Sound science and effective management have been integrated within each of the other goals so that they are contained within the architecture of the entire program. Ms. Dougherty added that EPA is trying to focus much more on outcomes as opposed to program activities. Mr. Bowman commented that EPA did a better job in this Strategic Plan of showing the relationship between stakeholder working and strategic goals.
- Dr. Ramirez-Toro asked how EPA is going to look into upgrading small system numbers. She noted that many small systems are under-accounted for across the country. Mr. Bowman responded by stating that EPA is trying to address this goal on a system basis instead of a percentage of the population, because that puts the majority of the focus on large systems, and EPA wants to give small systems as much emphasis as possible. In addition, NDWAC is not seeing everything in the Strategic Plan. Ms. Dougherty added that EPA used data from SDWIS to make judgements on compliance, and they are conducting ongoing work to ensure data is improving.

Dr. Spath thanked Mr. Bowman for his presentation and introduced Mr. Diamond for the presentation on CWA and SDWA integration.

EPA's Strategic Plan: Measures to Encourage CWA Support of Drinking Water Protection - Mr. Bill Diamond

• Mr. Diamond said that this is the first time the Strategic Plan links CWA activities and SDWA needs and outcomes. EPA came up with a handful of measures to link to meaningful results in public health protection.

- For three decades, CWA and SDWA types of problems especially attuned to CWA solutions and tools: point sources, polluted runoff, acid deposition, changing landscapes. Part of SDWA goal is to try and reflect CWA implementation at national, state, regional, and local levels.
- Mr. Diamond stated that program integration is important because many common threats to drinking water are dealt with using CWA tools.
- Mr. Diamond discussed the comprehensive effort to increase CWA integration. These efforts include:
 - Joint program status and needs assessment.
 - Development of improved tools to promote connections and symbiosis.
 - Joint planning.
 - Coordinated research priorities.
 - Outreach and education.
 - Partnered initiatives.
 - Accountability system performance measures.
- Mr. Diamond stated that EPA tried to look at CWA activities and integration measures to support SDWA needs and priorities.
- Mr. Diamond summarized the seven integration measures in the Strategic Plan. These measures are:
 - By 2005, identify waters used by community water systems (CWSs) as a source of drinking water for which states and tribes have, wherever attainable, adopted water quality standards (WQSs) with public water supply as a designated use, or WQSs with equivalent level of human health protection. Mr. Diamond noted that this could be a potential problem because many states do not have appropriate designated uses.
 - By 2005, EPA will complete Phase 1 of the partial recalculation of human health criteria using new human health methodology.
 - Beginning in 2005, and each year thereafter, EPA will identify critical drinking water contaminants of concern in surface waters and issue XXX new or revised human health criteria under CWA section 304(a).
 - By 2008, XX percent of surface waters used as a drinking water sources will
 have, where attainable, WQSs with public water supply as a designated use or
 will have WQSs that provide an equivalent level of human health protection.

- By 2008, XX percent of surface waters that are (1) designated for public water supply use and (2) classified by states as highly or moderately susceptible to contamination will be monitored annually for attainment of human health WQSs for drinking water contaminants.
- By 2008, XX percent of surface waters that are (1) designated by states as highly vulnerable to contamination, (2) designated for public water supply use, and (3) impaired due to non-attainment of human health WQSs will have a completed total maximum daily load (TMDL).
- By 2008, XX percent of waters that are (1) designated by states as highly vulnerable to contamination, (2) designated for public water supply use, and (3) have a completed TMDL are attaining human health WQSs for drinking water contaminants.
- Mr. Diamond said that EPA will:
 - Make additional refinements to the Strategic Plan in response to comments.
 - Receive more input from ECOS.
 - Send the Strategic Plan to OMB.
 - Develop guidance and support materials.
 - Initiate implementation.

Mr. Diamond also said that the OGWDW is working with the Office of Science and Technology (OST) to develop water quality criteria.

- Mr. Betkoski said that, in Connecticut, the State Department of Public Health sometimes reclassifies the designated uses of waters, which makes it even more difficult to accurately protect drinking water. Mr. Betkoski asked if EPA can do anything about this. Mr. Diamond replied that EPA does not have review authority in terms of land designation, and that EPA is working to encourage people to take appropriate steps in high target areas. Mr. Diamond indicated that the overall trend is to have more watershed protection than less.
- Dr. Davis asked what the new human health methodology is and if it has been developed. Mr. Diamond replied that EPA has a standard protocol for the number of studies, peer review, etc. to support good science. It was revised a year or two ago, now EPA is using the new methodology to recalculate existing human health criteria. Mr. Diamond said that Jeff Grubs in OST could provide Dr. Davis with more information.

- Mr. McLane asked if there is a list of criteria states can use for determining designated uses. Mr. Diamond replied that OGWDW is working with OST to create a list of criteria for designation. EPA is trying to move away from working with a chemical-by-chemical list of maximum contaminant levels (MCLs) to instead work with a list of MCLs for a suite of chemicals. EPA is working with other partners to determine if working with a suite of chemicals is the right approach, or if EPA should work with technology regulations instead. Mr. Diamond suggested that the answer might be that EPA should go with a combination of technology regulations and a suite of chemicals.
- Mr. McLane asked if EPA is considering a nutrient study to add disinfection byproducts. Mr. Diamond replied that EPA will consider nutrients after *Cryptosporidium* and viruses are addressed. Mr. Diamond mentioned that there is big emphasis on CWA with regards to nutrients.
- Mr. McLane asked how EPA is planning to perform integration measure 27 if public waters are not classified as public water supplies under the CWA. (Item 27 reads: By 2008, XX percent of surface waters used as a drinking water sources will have, where attainable, WQSs with public water supply as a designated use or will have WQSs that provide an equivalent level of human health protection.) Mr. Diamond replied that EPA will work with states to close the gap.
- Mr. McLane suggested that EPA make certain robust use attainability analyses are done when water bodies are classified for water supply use and the state is reluctant to upgrade the classification. Mr. Diamond assured Mr. McLane that EPA does have a rule on reviewing state standards for designation. Mr. Diamond believes it is most important for EPA to bring the information to the table for states and localities.
- Mr. Baker asked how many states are conducting source water monitoring. Mr. Diamond replied that no state is monitoring because no stream segments have been identified as problems. EPA is trying to get a handle on what is being monitored, and is trying to work with states and the United States Geological Survey (USGS) to develop a more targeted monitoring scheme. EPA has made a significant effort to better identify latitude and longitude of all intakes. Mr. Diamond felt that EPA has a good database now, but they have only completed 22 states. By 2005, EPA hopes to have completed all states.
- Mr. Baker encouraged the Council to support the CWA and SDWA integration measures, and encouraged members to also look at measures for the Source Water Protection Program (SWPP). Mr. Baker commented that 90 percent of systems use groundwater sources and EPA's Strategy is terribly lacking with regards to groundwater. Mr. Baker believes that this failure needs to be addressed to protect resources. EPA needs to recognize that ground water quality protection is a component of both the SDWA and

CWA. He also noted the Strategy has to allow for areas where no baseline data have been collected. EPA's strategy needs to allow and account for ambient ground water monitoring for those outcomes that do not have baselines.

- Ms. Thorp asked if these measures are seen as brand new work when looking at the budget for agencies. Mr. Diamond replied that OMB's review of measures will look at measurable goals and link that to the budget.
- Mr. Florquist asked if EPA has run into conflict under water rights versus specific use designations, especially for Western states. Mr. Diamond replied that states might run into those conflicts, but EPA does not because EPA deals only with designation at a national, strategic level. These conflicts may prove costly for states, but that will be further down the road. EPA's emphasis is on getting a correct science foundation to back up any dispute that may occur. Ms. Dougherty reiterated that the states are responsible for designating the use of water.
- Mr. Florquist noted the need to consider separately groundwater under the direct influence of surface water (GWUDI) and non-contributory groundwater.
- Dr. Griffiths applauded EPA's efforts to integrate CWA and SDWA. He expressed interest in reviewing EPA's literature. Dr. Griffiths commented that the literature on climate change and human health effects suggests that heavy rainfall events may result in adverse public health outcomes because water systems become overwhelmed during these unusual weather events. Over the past 5 years, ongoing efforts to look at clean water and how to improve the health of source water are coming out with significant human health outcomes. The literature is becoming much stronger on this point, he said.

Update on the Drinking Water Budget - Ms. Cynthia Dougherty

- Ms. Dougherty informed the Council that EPA considers three fiscal years at one time. EPA is currently operating in fiscal year 2003; Congress is considering the budget for fiscal year 2004; and EPA is currently working on the budget proposal for fiscal year 2005.
- Ms. Dougherty said that Congress appropriated more money to EPA this year than the administration had asked for, but allocated the money in different places. The public water system supervision (PWSS) grants, underground injection control (UIC) grants, and DWSRF were all funded at requested levels, minus 0.65 percent. But because Congress earmarked a number of projects to receive funding directly from EPA, the actual budget that EPA staff have to work with is less. Usually, EPA does not take money away from state grants or staff salary, only out of discretionary spending. This year, the drinking water program took a cut of 20 percent (\$5.3 million) in extramural funds. The

drinking water program has taken a similar cut for 3 years running. These costs have resulted in cuts in training and other assistance, such as data systems.

- The president requested an increase in the drinking water budget for fiscal year 2004. It includes a \$12 million increase in PWS grants, a \$500,000 increase for UIC grants, and \$850 million for the Drinking Water State Revolving Fund (DWSRF) through 2018. There is a continuation for \$5 million counter-terrorism support and a request of \$8 million to support infrastructure in Puerto Rico.
- Budget planning for fiscal year 2005 has just started. Given the state of the federal budget, EPA assumes there will be no major increases in funding. EPA will submit the budget for fiscal year 2005 to OMB in September 2003.
- Dr. Spath said he was encouraged by the recent increase in PWSS grants to the states.

Dr. Spath introduced Ms. Blette for discussion of OMB initiatives.

OMB Initiatives - Ms. Veronica Blette

- Ms. Blette listed the five tasks on the president's management agenda:
 - Strategic management of human capital.
 - Competitive sourcing.
 - Improved financial performance.
 - Expanded electronic government.
 - Budget and performance integration.
- Ms. Blette showed that the budget and performance integration includes the Program
 Assessment Rating Tool (PART) and common performance measures for rural water
 projects. PART evaluates program performance in four critical areas:
 - Program purpose and design.
 - Strategic planning.
 - Program management.
 - Program results and accountability.
- Ms. Dougherty added that OMB's Web site lists how they are going to use PART. OMB
 may use the tool to make decisions to fund programs; if programs are not meeting goals,
 then they may not be funded.

- Ms. Blette stated that OMB assessed 234 programs, 11 of which were EPA programs. Three of the 11 programs were in the Office of Water: DWSRF, Non-point Source Grants, and Tribal Assistance Grants.
- For about half of the 234 programs—including 10 of 11 EPA programs—OMB found that results were not demonstrated.
- Ms. Blette summarized the results for the DWSRF program. The DWSRF program scored well in program purpose and management, but scored lower in planning and results. OMB found that the DWSRF program measures did not adequately support the overall public health protection goal of the drinking water program.
- OMB also did not agree with the drinking water program's primary measure. OMB suggested a high-level outcome measure focused on reducing the incidence of waterborne disease outbreaks. There are, however, inherent difficulties with such a measure, Ms. Blette noted. It is difficult to determine the ultimate source of reported disease incidents, data are inadequate due to sporadic reporting, and such an approach focuses only on acute contaminants.
- In response, EPA has developed new DWSRF measures, which are included in the draft Strategic Plan and will be submitted for the 2005 PART exercise. The DWSRF program is investigating the potential of developing better outcome measures. (This will depend, in part, on the completion of joint EPA-Centers for Disease Control [CDC] studies expected by the end of 2003.)
- In the future, the DWSRF will be re-evaluated annually. Larger drinking water programs are scheduled for evaluation in 2006, for the fiscal year 2007 budget submission. They include the Public Water Supply Supervision Program, Drinking Water Regulations, and Drinking Water Implementation.
- Ms. Blette said that another OMB initiative is to develop common performance measures for programs with similar goals to help evaluate and improve performance. The performance measures may need to be changed to better reflect the nature of the programs.
- OMB wanted to develop a common measure to compare federal programs that provide assistance to small rural drinking water systems:
 - Bureau of Reclamation (BOR), Indian Health Service (IHS).
 - Rural Utilities Service (RUS), EPA DWSRF.

- OMB asked the agencies to calculate their number of connections per million dollars and population served per million dollars. These figures were calculated separately for systems in the east and west. OMB compared BOR with IHS and RUS with EPA.
- The results were published in the FY 2004 Department of the Interior budget narrative. BOR and IHS serve far fewer connections and people per million dollars than EPA and RUS. The administration will further analyze these programs in the coming year to improve and streamline federal assistance for drinking water in rural areas.
- Ms. Blette showed that, according to the latest Drinking Water Infrastructure Needs Survey, smaller systems have higher per household costs, thus, programs that fund more small systems will likely have lower ratings. This analysis seems to ignore public health needs for assistance.

- Dr. Head asked how much OMB takes legal mandates into account. Ms. Blette replied that OMB does not pay attention to statutory restrictions because they can make recommendations to improve legal mandates.
- Dr. Davis asked how the programs that went through the PART evaluations were chosen. Ms. Blette replied that OMB plans to do 20 percent of each agency's budget annually. OMB hopes to get through all programs within 5 years. OMB did not have any criteria for choosing the programs they analyzed in the first round. EPA recommended to OMB that all drinking water program elements be reviewed in the same year.
- Mr. Young commented that he is disturbed about the whole OMB evaluation process, which uses waterborne disease prevention to measure program effectiveness. Mr. Young noted that public health protection will suffer if funds are spent on developing baseline data on waterborne disease occurrence, rather than to provide public health protection. Mr. Bowman replied that OMB said EPA's Goal 2 [Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.] is among the better agency goals, but when they go through the process, they may get more information on waterborne disease versus population. Ms. Dougherty added that EPA is required by statute to estimate prevalence of waterborne disease. EPA works with the CDC to distribute an annual waterborne disease outbreaks report. Dr. Spath noted that reporting on waterborne diseases is such a problem that he cannot imagine it being a useful performance measure.
- Dr. Griffiths commented that this is a disturbing exercise. He said that reporting on waterborne disease outbreaks is the eternal problem with public health systems, and

using reports from the CDC for that purpose is "a shocking misuse" of that knowledge and "is not sound science." He noted that the public health surveillance system seriously under-reported the incidence of cryptosporidiosis during the early stages of the 1993 outbreak in Milwaukee.

- Mr. Baker commented that the major problem with focusing strictly on environmental outcomes is the failure to recognize good prevention programs and areas where there are not already environmental baselines established. It's a Catch-22. Unless a baseline is established, funding will not be provided to determine the baseline. EPA should put in program output measures, not just the environmental outcomes that OMB wants.
- Mr. Florquist asked if OMB made any compensation for the fact that BOR started providing drinking water only within the last 20 years. Ms. Blette replied that OMB did not account for that.
- Dr. Davis said she is very concerned about the initiative. She said her question for OMB is how will they measure the effectiveness of these programs.
- Dr. Griffiths reminded the Council that in the past they have invited representatives of organizations the Council wishes to question. Dr. Griffiths said the Council might be able to understand the process better if OMB could explain it to the members. Dr. Spath said that the Council may want to consider making comment on this process and perhaps invite OMB to the next NDWAC meeting in Washington, DC.

1st BREAK (Recess 10:44 a.m. to 11:06 a.m.)

Dr. Spath reconvened the meeting at 11:06 a.m., and asked that those interested in public comment sign up if they had not already. Dr. Spath then introduced Ms. Pawlukiewicz for the water security presentation.

IV. Water Infrastructure Protection - Ms. Janet Pawlukiewicz

- Ms. Pawlukiewicz presented a summary of EPA's role and progress in water infrastructure security. The four mission-critical areas of EPA's Homeland Security Strategic plan are:
 - Critical infrastructure protection.
 - Preparedness, response, and recovery.
 - Communication and information.
 - Protection of EPA personnel and infrastructure.

Summary of May 2003 NDWAC Meeting

- Ms. Pawlukiewicz stated that the primary goal of EPA's Homeland Security Strategic Plan is to enhance security of water and wastewater utilities. The six tactics used to accomplish this goal are:
 - Tools, training, and financial assistance.
 - Vulnerability assessment tools and training:
 - Threat Document and Threat Level Guidance Threat Document is available.
 - Large system grants to more than 400 systems.
 - Small and medium system strategy.
 - Train-the-trainer for small systems.
 - Workshops/consultation services for medium systems.
 - Emergency response guidance EPA teamed with ASDWA.
 - Security Enhancements Guide will be completed in late 2003.
 - Research and technology development:
 - Research Action Plan.
 - Environmental Technology Verification Program.
 - High priority projects concentration/extraction, and river spill and pipeline net.
 - Assessment on contaminants contaminant database.
 - Assessment of lab capabilities.
 - Build security into ongoing practices:
 - Operator certification.
 - Training for States/Sanitary Survey.

- Capacity development/asset management/environmental management systems.
- Information exchange on threats and incidents:
 - Water Information Sharing and Analysis Center (www.waterisac.org) receive information on threats to water systems.
- Coordination with law enforcement, emergency response, medical and lab sectors:
 - Developed a "Top 10 List" of what law enforcement people need to know about water security.
- Coordination with interdependent infrastructures telecommunications and energy.
- Ms. Pawlukiewicz said that one of the challenges with implementing EPA's Homeland Security Strategic Plan is the sensitivity of the information. The information needs to be sent to utilities so they can be aware of threats, but if this sensitive information is sent out to thousands of utilities, the information is no longer secure.
- Ms. Pawlukiewicz presented the "Four P's" of planning for emergencies:
 - Partner utilities need to look at local organizations who can help in an emergency.
 - Protect.
 - Plan.
 - Practice supporting drills around the country.
- For more information go to www.epa.gov/safewater/security.

- Ms. Dougherty clarified that EPA is not providing regulations for water infrastructure security. EPA is simply facilitating the change in the culture so that utilities consider security when providing drinking water to customers.
- Dr. Head asked how much emphasis is put on including partners in the drills. Ms. Pawlukiewicz replied that partners are encouraged to participate in the drills and

workshops. Ms. Pawlukiewicz stated that EPA is starting to develop support for that, but has not determined at what level that will occur.

- Dr. Head asked if EPA will be working with first responders. She asked whether first responders will be trained to deal with contamination that may affect a water system, but is not yet in the water system. Ms. Pawlukiewicz replied that several modules on threat assessment are being developed. For example, one discusses actual analytical methods. Later modules will cover decontamination and clean up.
- Ms. Surgeon commented that she liked the "Four P's" approach. Ms. Surgeon then asked if the public education activity of giving tours to school children has gone away with the security issues. Ms. Pawlukiewicz replied that it depends on the utility. Some utilities change their tour procedures based on the national threat levels. Mr. Baker commented that Ohio systems base their tour procedures on the national threat level. Mr. Taylor commented that the public utilities division for the City of Houston has pretty much shut down water utility tours entirely, unless there is an excellent reason to have a tour.
- John Young asked what input Ms. Pawlukiewicz would give to financial regulators on how to assess the costs associated with added security measures. Ms. Pawlukiewicz replied that EPA is putting together some information on security enhancements that might be of some help. EPA is receiving vulnerability assessments, but are very limited with what they can do with that information because it is considered sensitive, protected information. Ms. Dougherty added that financial regulators should be particularly interested if a system has conducted a vulnerability assessment and is making decisions about what enhancements will provide the best return based on where their vulnerability is. Financial regulators can assess the costs of added security by getting the rates for the necessary enhancements.
- Dr. Griffiths commented that the discussion on drinking water system security is about a cultural change. One way to bring that change about is in the training given to tomorrow's drinking water professionals. Dr. Griffiths asked if EPA has outlined an approach to changing the education of drinking water and public health professionals in the United States and how security will be incorporated in professional standards. Ms. Pawlukiewicz replied that EPA has outlined in the Strategic Plan a number of programs that would help to build educational standards. Ms. Pawlukiewicz stated that quite a few organizations have looked at voluntary standards for water systems. Dr. Griffiths responded that his query was more around higher education and university education. Ms. Pawlukiewicz replied that part of the water organization partnership is also looking at higher education training including design standards.
- Mr. Baker noted that as drinking water utilities spend a tremendous amount of money on security, they should also look at the benefits and risks from the standpoint of water

- quality. He asked if Ms. Pawlukiewicz had any time line for training and the Security Enhancement Guide. Ms. Pawlukiewicz replied that protocol training will be held this fall and the Security Enhancement Guide should be out by the fall as well.
- Mr. Baker then noted besides the vulnerability assessment, the resulting Emergency Response Plan also needs to be kept secure. Ms. Pawlukiewicz replied that EPA is being extremely cautious with submitted information. Ms. Dougherty added that while EPA has been cautious, sometimes EPA finds out that another agency has put the same information on its Web site and is not protecting the information at all. EPA has tried to keep very sensitive information out of guidance documents and to give people who need it access to it in other ways.
- Mr. Baker asked if training for first responders was being directed to local law enforcement officers. His agency finds there is a need for training to make the initial threat assessment. Ms. Pawlukiewicz replied that law enforcement is included to the extent of federal law enforcement. Ms. Pawlukiewicz said that EPA has a pilot program in the northeast that it hopes to expand, but which is now just in the beginning phases. Dr. Spath added that the FBI resource limitations are significant. Training is necessary, but no one really knows what would go into training because this is new. Dr. Spath applauded Ms. Pawlukiewicz for trying to develop modules that will help assessments be made.
- Mr. Taylor commented that utilities have worked with the CDC to look at contaminant fate and transport issues, but he does not believe the information is being shared with water utilities in a way they can use. Mr. Taylor requested that utilities get something they can work with. Up to a certain point, utilities do not know how to respond because they are not provided with enough information.
- Dr. Ramirez-Toro asked if there are plans to include different programs and strategies like capital development for small systems. Ms. Pawlukiewicz replied that EPA is including security in their capacity development training. The Bay Area Science Infrastructure Consortium (BASIC) program has combined large and small systems, and that there are wonderful partnerships going on across the country.
- Dr. Spath noted that many states are trying to look at how partnerships work and what benefits exist for states and utilities. In California, there is a recognition that there are a lot of players and there is a need to bring them all together. The federal government has a lot of information that they have to keep secure, so in many cases, states and localities are paralleling what is being done on a federal level. States need to figure out how to get all of the players of each state involved. Dr. Spath is glad that EPA is reaching out.

LUNCH (Recess 11:59 a.m. to 1:05 p.m.)

Dr. Spath reconvened the meeting at 1:05 p.m. and introduced Ms. Shaw for the EPA outreach efforts presentation.

V. EPA Outreach Efforts - Ms. Charlene Shaw and Ms. Sherri Umansky

- Ms. Shaw began her presentation by introducing the members of her team.
- She summarized the primary responsibilities of EPA's outreach team. These are:
 - Message development.
 - Product development such as brochures, posters, videos, and fact sheets.
 - Editorial services for other OGWDW teams.
 - Safe Drinking Water Hotline.
 - "Safewater" Web site.
 - Office of Water Resource Center.
- Ms. Shaw listed the top 10 topics for hotline calls and the top 10. Web pages accessed. The top 10 topics for hotline calls are:
 - Local drinking water quality (9%).
 - Tap water testing (9%).
 - Consumer Confidence Reports (7%).
 - Household wells (6%).
 - Home Water Treatment Units (5%).
 - Lead (5%).
 - Background information (4%).
 - Other EPA programs (4%).
 - Coliforms (3%).
 - Radon (3%).
- The top 10 Web pages accessed are:
 - Drinking Water Homepage.
 - List of MCLs.
 - 40 CFR Part 141.
 - Drinking water from household wells.
 - Regulations and guidance page.
 - Kid's water cycle graphic.
 - Local drinking water information page.
 - Kid's main page.
 - Standards Program main page.

- Security for CWSs.
- Ms. Shaw noted that the number of hotline calls has dropped recently because more people are accessing the Web site.
- Ms. Shaw summarized the outreach team's recent major activities:
 - Development of an education poster that depicts threats to drinking water, the multiple barriers that prevent contamination, and how individual action can make a difference
 - Lesson plan for high school students.
 - Game board with four scenarios: bullfrog abnormalities, overwhelming algae and floundering fish, big city woes, and gastronomic bubbling.
 - Flash program/CD-ROM of the new poster with pop-up boxes for each identified item on the poster.
 - Protect Water for Life poster.
 - Four security flyers that will allow users to add their own emergency information and post on bulletin boards, building entrance doors, and local post offices. They will be available on the EPA Web site.
 - 2003 MCL poster and pocket guide. CCR: Building Public Trust is the theme of the MCL pocket guide for 2003.
 - Source Water poster, which depicts all the contaminants that can get into a drinking water system, i.e. all the contaminants that the CWA and SDWA are designed to protect the public from. The poster is available in several sizes, and the 24 x 36 and 11 x 17 inch versions have been translated into Spanish.

Ms. Shaw turned over the presentation to Ms. Sherri Umansky to discuss health care provider outreach.

- Ms. Umansky listed EPA's health care provider outreach activities:
 - Pilot projects in Colonias in Arizona and Texas.
 - Education video.
 - Internet module supported by the Water Protection Task Force.
 - Professional meetings.

- Ms. Umansky mentioned that there is a Web-based training program at www.WaterHealthConnection.org for which 22 continuing education credits are available. The training, which is not a product of the outreach group, has a security component.
- Ms. Umansky indicated that the video "Tap Into Prevention: Drinking Water Information for Health Care Providers" would be released in the summer of 2003. The video is aimed at doctors, nurses, public health officials, and health educators. It presents information on three case studies described by the doctors, nurses, lab technicians, and health and water officials who were, or are now, actively involved. The video also includes basic information on water contamination and treatment processes, bottled water, and home water treatment.
- Ms. Umansky said the video focuses on the personal stories of people involved in reallife incidents:
 - For example, the video covers a lead testing program in Philadelphia schools, where many children were found to have elevated levels of lead in their blood. Every single tap whose water tested high for lead was shut off and the schools used bottled water until the lead problem was fixed.
 - The video also uses a case study from rural Minnesota to show how water-related health information can be worked into regular interactions with patients.
- Ms. Umansky commented that pilot testing feedback has been very helpful.
- Ms. Umansky said that the video will be available for ordering through the OGWDW Web site and the Safe Drinking Water Hotline in VHS and DVD formats.
- Ms. Umansky listed the 2003 conferences that the EPA outreach team will attend:
 - National Environmental Health Association.
 - American Academy of Nurse Practitioners.
 - National Association of City and County Health Officials/Association of State and Territorial Health Officials.
 - American Public Health Association.
 - National Science Teachers Association.

- American Water Works Association.
- National Rural Water Association.
- Association of State Drinking Water Administration.

- Mr. Schwartz asked where the posters are available. Ms. Shaw replied that the latest poster is still at the printer and the rest can be ordered from the OGWDW Web site.
- Dr. Head asked if EPA has shared the education video with the CDC. Ms. Umansky replied that they have not, but that CDC is chairing an environmental conference and EPA will take the video to the conference.
- Dr. Spath commented that it is nice to see that this workgroup's recommendations are coming to fruition.

VI. Affordability Workgroup - Mr. John Young, Ms. Blanca Surgeon, and Mr. Bruce Florquist

- Dr. Spath introduced Mr. Young for the first portion of the affordability workgroup presentation.
- Mr. Young opened the presentation by explaining that the National Small System Affordability Workgroup consisted of four members of the NDWAC: Blanca Surgeon, Bruce Florquist, Diana Neidle (no longer a member of NDWAC), and himself.
- Mr. Young stated that page V of the affordability report describes the 18 representatives on the workgroup. The representatives came from academia, tribes, state agencies, utilities, consumer groups, environmental groups, and professional organizations. The workgroup held 5 meetings and 15 conference calls from September 2002 through March 2003 in an effort to strive for consensus.
- Mr. Young provided a brief overview of the workgroup's purpose. The 1996 SDWA Amendments required EPA to determine if rules were affordable at a national level, and if they were not, EPA had to define less-expensive variance treatment options. The workgroup was charged with:
 - Reviewing EPA's current national level affordability criteria.

- Providing advice on alternative affordability criteria and approaches.
- Identifying alternate strategies that enable small systems to achieve affordable compliance .
- The workgroup agreed to take a comprehensive look at the issue. To achieve this goal, they organized 3 committees: Affordability Criteria Committee (ACC), Committee on Financial Support Strategies (CFSS), and Committee on System-Level Strategies (CSLS).
- Mr. Young turned over the presentation to Ms. Surgeon to present an overview of the ACC recommendations.
- Ms. Surgeon said that the ACC reviewed EPA's current approach, started answering the six charge questions, and then went into recommending an approach.
- The current EPA approach to calculating affordability is summarized in the equation:

AEM = AT-EB

Where AEM is the Available Expenditure Margin, AT is the Affordability Threshold, and EB is the Expenditure Baseline.

AT is the maximum affordable water bill, which EPA currently defines as a 2.5 percent of median household income (MHI).

EB is the current water bill reflecting the current cost of water for the median system (which EPA obtains from a system survey).

- The ACC had three issues with EPA's current approach. These issues included:
 - EPA's approach allows early rules to "eat up" the affordability threshold (maximum the public is able to pay).
 - Once the affordability threshold is used up by early rules, no subsequent EPA rules would be "affordable" because the affordability threshold was reached.
 - The EPA approach is intended to reflect the cumulative effect of multiple regulations and other expenditures on small systems, but data challenges inherent in the national expenditure baseline approach limit its ability to do so.

- Ms. Surgeon mentioned three workgroup observations:
 - No variances are being issued to small systems under EPA's current approach.
 - The ACC was evenly split about whether more variances are desirable.
 - There was surprising consensus, or near consensus, on many points.
- The ACC recommendations are:
 - EPA should change its overall approach to assessing small systems affordability and switch to an incremental approach to determine affordability additive as more rules are promulgated.
 - A national increment affordability threshold should be set at 1 percent of the median household income (MHI). MHI is about \$40,000 a year.
 - EPA should conduct face-to-face, "meaningful" public education. (Meaningful means that it goes beyond having pamphlets and requires accountability from people who deliver and receive training.) Public education ensures that the public is informed and understands the issues. It is the law currently.
- Ms. Surgeon listed the six charge questions and then discussed the ACC's recommendations for each question:
 - 1. Should MHI or another income measure be used for income level?
 - The ACC agreed that the MHI is the best measurement now available. If
 in the future another measure is better, the ACC will recommend using
 that new measure.
 - 2. Should a 2.5 percent threshold be used as the income percentage for determining the maximum affordable water bill?
 - The ACC agreed that this approach should be replaced with an incremental approach. The national affordability threshold for each rule should be set at 1 percent of MHI. States should also consider that some communities may be affected by more than one rule. Public education and participation efforts are necessary to ensure consumers are fully informed of their options and implications. EPA should re-evaluate best available technologies (BAT) every few years.

- 3. How should the expenditure baseline be adjusted to account for new rules?
 - The baseline would be eliminated under the new approach. If EPA uses the current approach, the ACC recommends factoring those costs that systems incur nationwide into the baseline. Water bills differ from town to town, so it is difficult determining a national baseline. The ACC had major issues with the baseline.
- 4. Should separate affordability criteria be developed for surface water and groundwater systems?
 - The ACC agreed that the same criteria should be applied to both surface water and groundwater systems.
- 5. Should financial assistance be incorporated in the calculation for the baseline?
 - This will be eliminated under the new approach because there will be no baseline. The ACC agreed that if EPA uses the current approach, assistance should be considered if it is a national program.
- 6. Should regional affordability criteria be developed given data limitations?
 - If EPA uses the current approach, the ACC recommends that regional affordability criteria be developed if data are available from national sources. EPA should establish differential regional affordability criteria when compliance cost data are available. A distinction should be made between rural and urban communities.
- Ms. Surgeon turned over the presentation to Mr. Florquist to present an overview of the CFSS recommendations.
- Mr. Florquist began by thanking the staff at RESOLVE, which facilitated the workgroup's meetings, and commenting that the EPA staff were wonderful to work with.
- Mr. Florquist said that small systems cannot afford to do things because of their inadequate rate structure. The CFSS discussed affordability rate making by looking at:
 - Declining block rate an approach that gives large users a break on their water bills
 - Service charges or consumption charges not a viable approach to rates.

- AWWA MI, Chapter 16 should be used by more water systems.
- Lifeline rates alone, they are not going to solve the problem of affordability. They should be targeted at vulnerable populations, such as the elderly, people living on fixed incomes, and households with large numbers of children.
- Rate shock instituting a new rate could be a shock to those who are currently paying a low, flat rate.
- The CFSS spent a lot of time working on the low income water assistance program (LIWAP) to target low income households, small systems, and high water rates due to regulatory compliance. The LIWAP fund would be similar to the low income home energy assistance program (LIHEAP). The LIWAP would cost less than \$1 million for the entire country. Consideration of a LIWAP was not part of the charge to the group; it grew out of the group's deliberations.
- The CFSS looked at how the DWSRF is functioning and suggested that EPA modify it. The CFSS believed that any disadvantaged community should be a priority and receive technical assistance. The DWSRFs are underutilized because they are difficult to get, or it is too hard for systems to provide the required matching funds.
- Mr. Florquist turned the presentation over to Mr. Young to provide the CSLS overview.
- Mr. Young said that the CSLS addressed non-financial solutions that help achieve affordable compliance.
 - Cooperation (regionalization, consolidation) shared management and shared resources; there are some geographical restrictions. The most important approach to achieving affordable compliance, but the most difficult for small systems, who need technical resources to come up with a plan.
 - Treatment technologies the issue is how to reduce the cost of treatment. There is a need to promote a market in treatment cost reduction through conservation.
 - Alternatives to central treatment point of use, point of entry, bottled water.
 - Capacity optimization control leakage; system design to reduce capacity, meter and rate design to reduce water use.
- Mr. Young discussed the CSLS' specific recommendations for cooperation:

Summary of May 2003 NDWAC Meeting

- States need to take charge of promoting cooperation by providing management, technical, and planning assistance.
- Promote outreach to address the value of cooperation and consolidation.
- Improve record-keeping and submit progress reports on capacity-building programs.
- Provide incentives for other cooperative efforts.
- Ensure local participation in cooperative efforts.
- Regarding treatment technology, the CSLS recommended that EPA establish a work group to review the technology and policy feasibility of allowing a "super" best available technology (BAT) approach to provide affordable, long-term compliance.
- Regarding alternative to central treatment, the CSLS recommended that the use of bottled
 water as an alternative to central treatment for small systems be reserved for very special
 circumstances.
- In terms of capacity optimization, the CSLS recommended that system flow capacity optimization be considered before the costs of treatment techniques or cooperation are developed.
- Mr. Young also mentioned recommendations in the area of public education:
 - EPA should determine the scope, feasibility, and cost of a national education program to address the health risks associated with poor water quality and the benefits of improved drinking water quality.
 - EPA should review the CCR to see if public education can be improved.
 - EPA should review the SDWA variance/exemption process to ensure that stakeholder education and input comes as early in the process as possible.
- Mr. Young moved that the Affordability Report be accepted and moved to the NDWAC
 for consideration and ultimately to be recommended to EPA. Dr. Head seconded the
 motion, which passed unanimously on a voice vote.
- Dr. Spath then opened the floor for public comment.

Public Comments on the Affordability Report - Mr. Ed Thomas

- Mr. Thomas from the National Rural Water Association (NRWA) urged the NDWAC to not make any decisions on the Affordability Report before being fully briefed on the minority report submitted by the NRWA.
- Noting that the NRWA represents 22,400 small systems, Mr. Thomas said rural and small communities cannot afford to pay more for water. The Affordability Report's recommendation results in \$400 per year, per household, per regulation, which is unaffordable. He also said the 1 percent of MHI threshold would not trigger a variance determination for many past EPA rules.
- The MCLs are not based on science, Mr. Thomas said, they are based on the feasibility of a large system to treat its water to those levels. Congress used variances as a mechanism to help small systems, and variances should be protective of public health. The NRWA recommended that EPA base MCLs on science, not on affordability.
- Mr. Thomas urged the NDWAC members to review the facts presented to the affordability workgroup. He said that any increase in the cost of water for "economically sensitive" subpopulations is unaffordable.
- Dr. Spath asked how variances would deal with unaffordability, since a small system would have to pay for the variance technology. Mr. Thomas replied that there may not be a cost associated with a particular variance. For example, a variance may only require public education.
- Mr. Thomas commented that 25 percent of households have an MHI of less than \$15,000 per year. Mr. Thomas then asked how these people could afford an increase.
- The NRWA proposed a Safe and Affordable Variance Approach where states decide if they can use variances based on case-by-case analyses. Mr. Thomas emphasized that the NRWA is offended by the Affordability Report, and stated that small systems disagree with it.

Ouestions and Comments

• Dr. Griffiths commented that he is puzzled by Mr. Thomas' assertion that a variance is protective of public health. Mr. Thomas replied that variances are a resource cost savings that allow people to afford their water.

• Dr. Griffiths stated that the MCL is based on science but also on what is feasible (cost/benefit). Mr. Thomas replied that the cost/benefit should be recognized for small systems.

Public Comment on the Affordability Report - Mr. John Montgomery (NRWA)

- Mr. Montgomery commented that small systems were not represented in the workgroup, and the workgroup did not really know how small systems operate. He said small system concerns were a big part of the 1996 SDWA Amendments and much of the discussion in the Affordability Report was covered during the deliberations on the 1996 amendments.
- Mr. Montgomery restated that the NRWA is offended by the entire Affordability Report. The gap is enormous between reality and what is represented in this report, he claimed. Mr. Montgomery urged the NDWAC to submit the NRWA report to EPA, too.

Questions and Comments

• Ms. Surgeon respectfully disagreed with Mr. Montgomery's comment about the composition of the workgroup. She said that she works in the field with small communities. The fact that the subcommittee did not include a membership association, does not mean that the workgroup did not have small communities in mind. Drinking water regulators and state agencies were represented in the subcommittee. Just because drinking water regulators and state agencies work with both large and small systems, does not mean that they did not keep small systems in mind. A small community is a small community regardless of whether it is a public or private water system.

Public Comment on the Affordability Report - Mr. Tom Curtis

- Mr. Curtis began by saying that the American Water Works Association (AWWA) is the nation's largest association representing water utilities. He expressed concern that there are substantial unanswered questions in the Affordability Report that merit more thought. He said the NRWA had raised valid concerns about the viability of the variance approach. And a number of people have questions about changing the affordability criteria. This suggests that more work needs to be done on the affordability criteria.
- Mr. Curtis said he doesn't understand the logic that leads to the conclusion that the cumulative costs of drinking water rules doesn't matter. He suggested more work on the topic needs to be done, and he voiced his support for the NRWA minority report. Mr. Curtis recommended that NDWAC look at the NRWA minority report and give more thought to the matter. The affordability criteria is fundamental to how a drinking water program does or does not work.

- Dr. Spath asked Mr. Curtis if he believes variances are good public policy and a reasonable mandate in the SDWA. Mr. Curtis replied that very few variances are issued in the United States, although Congress evidently thought they were important. Apparently, variances have not been used for a variety of reasons. Congress said that variances needed to be made available, but they are not available. In reality, the program has a fundamental disconnect. Mr. Curtis suggested that the NDWAC analyze the variance mandate and if the Council feels variances are unreasonable, it should recommend to Congress that variances be done away with. Mr. Curtis commented that he knows that variance is not working.
- Dr. Spath commented that the proposed affordability threshold of 1 percent MHI does not reflect the cumulative costs of other drinking water regulations (only the regulation whose affordability is being analyzed.) The workgroup did suggest taking that into consideration. He said the states should consider the cumulative effect of these regulations. Mr. Curtis called it a "cop out" to make the states address the cumulative economic effect of drinking water regulations on small systems.
- Ms. Thorp asked if AWWA was formally saying it doesn't support the Affordability Report but that it supports the NRWA's minority report. Mr. Curtis replied that no industry groups were represented on the Affordability Workgroup; only individuals who happened to belong to such organizations were on the ACC.
- Mr. McLane asked Mr. Curtis if AWWA had polled its members about the Affordability Report, or does AWWA have a sense of what percentage of its members oppose the effort or even know it exists. Mr. Curtis said AWWA had not polled its members, but would be delighted to do so. He said he was speaking from some experience of ongoing work and that utilities feel many important questions remain unanswered.
- Mr. McLane noted that Mr. Florquist and Mr. Schwartz belong to the NRWA and they are split 50-50 over the Affordability Report. He asked Mr. Thomas and Mr. Montgomery if the NRWA had polled its members to get their response to the Affordability Report. Mr. Thomas replied that the NRWA has not polled their members, but would be happy to do so. He added that throughout the process of deliberations on affordability the NRWA Board had been well informed. Mr. McLane said that he was just trying to get a general sense of the members' feelings. Mr. Thomas replied that the general sense is that small systems cannot afford this.
- Mr. Taylor commented that it sounded like the NRWA and the AWWA didn't like the Affordability Workgroup's recommendation about how to calculate affordability. He asked if Mr. Curtis supports the intent of making variances more available. Mr. Curtis

replied that he does think the affordability criteria should be reconsidered. It does make sense to put a trigger requiring EPA to take action based on any rule, and include variance technology on each rule. Mr. Curtis suggested having a field hearing in a stressed, rural community. Mr. Thomas added that Congress says variances are the option for small communities, but he feels that small communities should have the option to do what they want to do. Mr. Thomas suggested that if the NDWAC thinks variances do not work, they should report that to EPA and Congress.

• Mr. Taylor commented that the water utility in Houston has a lot of poor, low-income people. As a result, Houston has one of the highest water rates in the country. Simply raising water rates does not ring true. Water will cost more with more rules. Mr. Taylor suggested having the Affordability Workgroup look at trying to craft criteria by system size.

2nd BREAK (Recess 3:12 p.m. to 3:34 p.m.)

Dr. Spath reconvened the meeting at 3:34 p.m. and opened the discussion of the NDWAC Affordability Report.

Council Discussion of Recommendations - NDWAC members

- Mr. Schwartz moved that the NDWAC accept the minority report for equal consideration with the Affordability Report.
- Dr. Spath noted that the minority report is included in the Affordability Report and asked whether Mr. Schwartz wanted the minority report considered separately. Mr. Schwartz said he wanted the minority report considered "at the same level" as the Affordability Report.
- Mr. Young asked why should the minority report be separated from the Affordability Report? Mr. Schwartz said he wanted to have the minority report considered separately, rather than as an appendix to the main report.
- Mr. Betkoski seconded Mr. Schwartz's motion. Three Council member were in favor and four were opposed. The motion was not approved. The minority report will not have equal consideration with the majority report.
- Mr. Young commented that drinking water systems are categorized by size and compliance technology is analyzed by system size. The work group focused on small systems because they lack economies of scale. In theory, however, a system of any size could have affordability issues. Ms. Dougherty noted that in setting an MCL, EPA first determines a health goal, then sets the MCL as close as feasible to the goal. Feasible in

this case means affordable for a system that serves 100,000 persons. EPA is also required to identify affordability compliance technologies for systems that have service populations of fewer than 10,000 persons. Then states can determine whether a variance is warranted.

- Mr. Taylor asked that if rural water systems get hit with a rule, it is the intent of the committee to open the door to funding. But the NRWA doesn't want the door open?
- Mr. Schwartz said that the law calls for variance technologies to be made available; this has not been offered as an alternative. The 1996 SDWA amendments clearly called for availability of variance technologies. The workgroup's report said that this should occur, but the suggestion is overwhelmed by efforts to remove the affordability criteria, and that is not what the SDWA intends.
- Dr. Spath asked Mr. Schwartz if his position is that the SDWA requires variance technologies to be identified whether or not the rule is deemed affordable. Dr. Spath commented that if a rule is not affordable, a variance technology needs to be identified. Mr. Schwartz responded in the affirmative. Ms. Dougherty noted that the question posed to the committee was "Is our way to fulfill this part of the law the best way, or is there a better way to deal with affordability." That was part of what Congress asked EPA to do. She noted that Congress has provided other tools in addition to variances for states to help small systems afford compliance.
- Ms. Thorp said that she was trying to figure out if there is a problem with what Congress said in the 1996 SDWA Amendments or if the problem is with something else. Ms. Dougherty replied that the problem is that EPA has never determined that there has been an unaffordable MCL since 1996. Variances cannot be used at all for microbial rules, she noted. It was the arsenic rule that triggered this concern.
- Mr. Schwartz said that, although the need for variances has yet to be triggered, he fears that defining affordability as 1 percent of MHI means "a glass ceiling" limiting systems' ability to afford regulations will be hit quickly. That is why a control is needed.
- Mr. Baker asked for what size category of water system is \$40,000 the MHI. He was told that is the national Mr. Kempic replied that \$40,000 was the national average, but each of those categories came very close to the national average: \$38,000-\$40,000 per household. Mr. King said MHI is calculated for each system size category. Ms. Dougherty said the MHI for each category of small system ranges from \$36,000 to \$38,000, and the national MHI is about \$42,000.
- Dr. Spath asked if there was any discussion among the workgroup about combining a cumulative approach and an incremental approach. Mr. Young said yes, there was a great

deal of discussion, but the workgroup felt MHI needed to be assessed at the state level because it varies so widely among states. If the variance process never kicks in, the states never get a chance to determine whether a variance is warranted. Mr. Young felt that there is clearly an issue with the cumulative effect.

- Dr. Davis asked what the variation of the MHI is within each of the size categories. It seems that part of the problem is that things are being calculated on averages rather than individual data points for each system. On average, we're okay but in reality some are too hot and some are too cold. Mr. Kempic replied that EPA did a breakout of income within the systems and within each community. There was a much wider range of incomes within communities. Mr. King commented that system-level data are not available to EPA, so affordability must be calculated at the national level.
- Ms. Ray suggested that the NDWAC may need to have the committee address that situation with the data. If the variance provision is never triggered, states cannot use it to help small systems. The NDWAC needs to take a look at variances. The law says states can use variances, but for various reasons they cannot. If every rule is affordable at the national level, the states' hands are tied to help small systems. She suggested that perhaps EPA should identify variance technologies for every rule. Ms. Dougherty commented that what Ms. Ray suggested needs individual system information.
- Dr. Spath commented that the law specifies that the rule has to be found unaffordable before EPA can identify variance technologies. He questioned whether Congress has in this case made a good law. Ms. Davis asked whether the NDWAC should make a recommendation that the law be changed to effectively use variance technology.
- Mr. Baker said that under question six, the subcommittee suggested that if EPA continued to use the old method, it should consider paying attention to regional affordability criteria. He asked if there is a regional or geographic difference in MHI and water bills that can be identified. Mr. Kempic replied that there are some regional differences in MHI and water bills, but they are not dramatic.
- Mr. Baker asked if the subcommittee considered using regional MHI and how the subcommittee determined urban and rural systems. Mr. Florquist replied that the recommendation was that MHI should be calculated on a regional basis when there are data available. The problem is that there is not enough data to make that calculation. Mr. King commented that another problem is that even though EPA may have MHI for the nation, it does not have regional occurrence data for contaminants such as arsenic. This lack is important because contaminant occurrence varies across the nation, and EPA has no idea which specific systems will be affected by each specific rule. Ms. Surgeon replied to Mr. Baker's second question about determining urban and rural systems. She

- said that the subcommittee had a study by the NRWA that shows urban small communities have larger populations and higher income than rural small communities.
- Mr. Schwartz stated that he was confused by the so-called lack of data. He said he doubts there is much similarity in the MHI of Aspen, Colorado and Limon, Colorado. If any rule is assessed by national household income, then the rule will be unaffordable for 50 percent of the population. Mr. Schwartz was confused that if rules are actually unaffordable for a large population, why variance technologies have not been made available by EPA.
- Dr. Spath asked if Mr. Schwartz's opinion was that all of the rules are unaffordable. Mr. Schwartz replied that no, but if MHI is used in the affordability criteria, then almost half of communities will not be able to afford a rule. Ms. Dougherty commented that Mr. Schwartz's question is exactly what EPA asked the workgroup to address. If EPA followed the current law, what criteria should EPA use to determine when variability technologies should be made available? Mr. Schwartz stated that this is a dilemma especially when set at a national level. Systems would like more discretion and control over how to use resources to protect public health. Any national-level rule will not fit with local problems.
- Mr. Young commented that the Council's discussion is exactly the same discussion the workgroup had their first meeting. He commended the Council for bringing up the important issues, and added that the working group discussed all of these problems and others. They divided into three sub-groups in order to best address concerns. The workgroup agreed that compliance can be more affordable if a LIWAP is implemented.
- Mr. McLane commented that, regarding willingness to pay, there will always be people who would rather live with a problem than fix it. Mr. McLane's concern with variances is that people might be drinking water not up to standard, but not be aware of it. Mr. Young replied that this is the reason the workgroup stressed education so strongly.
- Mr. McLane suggested that the NDWAC approve the Affordability Report, and then, if at some point in the future someone can define a willingness to pay criteria, the NDWAC can incorporate it at that point. If a community decides that it does not want to pay for a certain technology, then it should not have to pay for it. Mr. Young commented that the problem is that people are going to be moving in and out of the community. Those who did not vote to accept a variance may not be aware that their health protection is any different from another community that does not have a variance. Dr. Spath noted that, in addition, it is unlikely that 100 percent of a community would agree to not pay for an additional treatment, so if a community voted and by majority rule accepted a variance, some of that community may not be represented or adequately protected based on their willingness to pay. Majority rule is not the spirit of the SDWA.

- Ms. Surgeon pointed out that it is very important to give small communities a choice. It is equally important to provide education about the implications of that choice. In her experience, if people find their water is bad to drink they will buy bottled water. And they won't use the system's water for a long time after the problem has been fixed. She also noted that NDWAC must realize the national criteria is mandated by law. It would be a lot easier to consider system-by-system or regional criteria. The NDWAC needs to decide how wide to open the door to variances, considering the information provided in the Affordability Report. Is it practical to open the door wide open? Can states handle that? Will a backlog of variances mean less health protection?
- Ms. Surgeon noted that variances are only one of the options that systems can use. She said she would rather work directly with a community than go through the process of applying to use a variance technology. It is almost as equally expensive for a community to comply with a rule as it is to ask for a variance permit. The feedback Ms. Surgeon received through her work with the Rural Community Assistance Program (RCAP) and from individual communities is that it is better to comply with a full rule than to seek a variance that will result in less health protection.
- Dr. Ramirez-Toro was very pleased to hear that the Affordability Report included education recommendations. She believes it is important to develop educational strategies that include the people making decisions in the communities. Currently, operators are receiving the education, but communities are not. Dr. Ramirez-Toro recommended opening up education and capacity development to communities on an individual level.
- Dr. Griffiths asked if it is correct that the subcommittee considered variances as one of the tools a small system can use to comply because variances are put forth in the law. Mr. Young replied yes, that many members had concerns with variances. Dr. Griffiths asked if the members who had concerns about variances had to swallow them. Mr. Young replied that there were certain members would have liked to delete variances, but they realized that throwing out variances would have prohibited consensus.
- Dr. Griffiths commented that he is philosophically opposed to variances, which he believes are inherently bad public policy. It is a bad idea to have two-, three-, or five-tiered public health systems or water systems in this country. The challenge to society is not how to protect people, but how to provide equal protection. As Ms. Surgeon pointed out earlier, communities would abandon the system and use bottled water if variances were in place. It is acceptable, when thinking about informed consent procedures for a drug study, to ask a person to sign a release and take on something risky for long-term benefits; however, it is not acceptable to ask people to take on something risky based on the fact that they cannot afford better protection. If the NDWAC agrees that there have to be variances because they are mandated in the statute, then the NDWAC should also

point out the difficulties and significant ethical problems with variances. Dr. Griffiths said that he was curious about some of the subcommittee's discussions about that issue.

- Mr. Young explained that some people on the subcommittee were uncomfortable with a two-tiered system, but that it would have been difficult to scrap variances entirely. Ms. Surgeon added that the workgroup should not say to Congress that variances need to be taken out of the law. The reality is that there are communities that need variances. There are some communities that are so remote that there has to be some middle ground. Ms. Surgeon asked if the NDWAC wants to open variances for only those extreme cases. She noted that she know of an Indian tribe that invested \$40 million in its water system to address compliance issues. But the customers will not drink the water because of its taste, preferring to buy bottled water instead. She again raised the importance of education. Mr. Young stated that the workgroup took a practical approach to variances. If variances were not allowed, not every small system would be in compliance. But, he added, variances may make some communities better off than they would be without a variance altogether.
- Mr. Taylor voiced concern about the cumulative impact if affordability was reduced. Mr. King replied that the Science Advisory Board (SAB) economics committee looked at the economic point of view and had some reservations about cumulative assessments. Beyond that, some costs 10 or 15 years ago are not applicable today to determine what is or is not important. Ms. Dougherty stated that EPA is currently using a cumulative approach, 2.5 percent. Mr. Taylor suggested that public health values are more important than long-term cumulative money issues. Mr. King replied that if a cumulative approach is used, eventually there would be no more regulations at all because there would be no ceiling left in the affordability threshold.
- Mr. McLane felt inclined to support the Affordability Report. He said that the he understands the report to say it is important to set standards and stick with them, except in the most extreme cases, and we need to help people afford these standards. The strength of the Affordability Report is creative thinking about ways to help people afford safe drinking water. Mr. McLane said that the LIWAP is a brilliant idea and suggested that the program should even be expanded.
- Mr. Betkoski stated that the public education component is critical to making safe drinking water affordable. People think water is free. The Affordability Report is, he said, a step in the right direction.
- Ms. Thorp agreed with the thrust of Mr. McLane's comments. She said her organization is concerned about who pays for required treatment. She said a burden is imposed on people who are not responsible for the need for treatment. Ms. Thorp said it sounded to her like Congress passed variances as a way to avoid an impasse and did not pass them enthusiastically. The Affordability Report takes a more practical approach to all things

that can be done before using variances and providing people with substandard water She said she does not think a more robust variance program will overcome suspicions in this country about public water and people's willingness to buy bottled water.

- Dr. Griffiths noted that the cost of water will rise for everyone in this country because the United States has a growing population, deteriorating water infrastructure, and increasing security issues. The NDWAC must recognize that water is not going to get cheaper. Dr. Griffiths stated that he would support the Affordability Report if the NDWAC added a recommendation saying that there is a lack of clarity about variances, and that variances should be revisited by EPA and Congress. Dr. Spath asked if Dr. Griffiths had language about that topic. Dr. Griffiths replied that he does not, and that some of the workgroup people may be able to provide better language. Mr. McLane asked if Dr. Griffiths was proposing that the NDWAC adopt an explanatory cover letter or modification to the text. Dr. Griffiths replied that the weight of a recommendation would be stronger if there was a vote of the Council behind it, rather than a cover letter. Mr. Young said he needed a better sense of how many issues the NDWAC would want to add. He said he would like to get "minor tweaking" on the table.
- Ms. Ray commended the workgroup on the Affordability Report. Ms. Ray suggested that adding a ceiling into the report might help those who would vote against the report. Dr. Spath noted that adding such a ceiling could mean that at some point every new regulation is unaffordable and as a result there will be public health impacts.
- Mr. Baker agreed with several of the previous comments. He said that not every system in his state may be able to achieve compliance, but moving them closer to compliance is good. Variances will not do that, nor do they address affordability concerns. Because of all the other criteria that have to be met, no variances have been issued in Ohio. Noting that the door to variances is pretty well closed at this time, Mr. Baker agreed with Mr. Taylor that the NDWAC should come up with a recommendation to EPA to work with Congress to address affordability in a way other than variances and move systems toward compliance. Mr. Baker said some areas of the report have yet to be discussed, and he believes there should be more discussion before he would agree to forward the report to EPA.
- Dr. Griffiths felt that if a system realized it had three rules coming down the pike, then it might seek a super BAT or comprehensive technology. Consequently, he did not believe that a cap on an affordability criteria of 1 percent of MHI per rule would be reached because systems would seek multiple-use technologies. Dr. Griffiths asked if there had been any consideration of the cost of super BAT for small systems, noting that such a cost could be a natural cap on compliance spending. Mr. Young replied that the workgroup discussed membrane technology at length as a super BAT, but not knowing if EPA would support that, the workgroup did not go any further with that topic.

- Mr. McLane suggested using the 1 percent of MHI criteria with a cap of 2.5 percent of MHI.. Mr. Young commented that the workgroup did not consider a cap of 2.5 percent of the MHI. If it had, the cap it would have recommended would probably have been higher.
- Ms. Surgeon noted that another issue that the workgroup did not discuss enough was that inevitably there will be a small community that cannot afford the 1 percent of the MHI. Some agencies allow for local MHI. Ms. Surgeon asked if local communities are allowed to calculate their own MHI. Mr. King noted that states are allowed to implement variances for systems that have service populations of less than 3,300. He noted that the statute allows 14 years for these water systems to comply with new regulations, another attempt to help them comply. Mr. King also noted that the Office of Research and Development (ORD) is reviewing BAT, looking at existing rules, and going into literature to put together some information for super BAT; however, ORD will not have results until mid to late 2004.
- Dr. Spath listed the options before the Council:
 - 1. Members can draft language along the lines of today's discussion for the entire Council to consider Thursday morning.
 - 2. The Council can table action on the Affordability Report for now, and members can review the report's recommendations after the meeting. Then, the Council can continue the discussion in a conference call.
 - 3. The report can be tabled until the Council meets again in the fall. (This is something the Council probably would not want to do, he noted.)
- In response to Dr. Spath's request for the sense of the Council, option #1 was agreed. Dr. Spath asked that during the evening, Dr. Griffiths, with help from the workgroup, craft language about the variance issue; Mr. McLane craft language about expanding the LIWAP; t Mr. Baker craft additional language about the DWSRF; and Ms. Ray craft language addressing the ceiling issue.
- Ms. Ray responded that she would not know what to say about a cap. Dr. Spath said it would not be necessary to recommend a specific cap at this time.
- Mr. Young noted that there are many recommendations for further study in the Affordability Report, so the Council's plan of action would be consistent with the report.
- The NDWAC decided to reconvene on Thursday, May 15, at 8:00 a.m. and begin by coming to closure on the Affordability Report issues.

Summary of May 2003 NDWAC Meeting

- Dr. Spath moved to close Wednesday's meeting. The motion was seconded.
- The Council adjourned at 5:05 p.m., to be reconvened at 8:00 a.m. the following morning.

WEDNESDAY, May 15, 2002

VII. Introduction and Review of Overnight Tasks

- Dr. Spath convened the second day of the NDWAC meeting at 8:15 a.m. by listing the four items that did not receive closure on Wednesday. Dr. Spath also noted that Dr. Head could not be present today.
- Four Council members volunteered to draft language for a cover letter to accompany the Affordability workgroup's recommendations and summary findings:
 - Dr. Griffiths was responsible for drafting language regarding recommending EPA and Congress revisit variances.
 - Mr. McLane drafted language regarding the LIWAP program.
 - Ms. Ray drafted language regarding adjusting the affordability threshold and ceiling limit.
 - Mr. Baker drafted language relating to the DWSRF.
- Dr. Spath recognized Dr. Griffiths to discuss recommended language.

VIII. Affordability Workgroup - Council Discussion of Recommendations (Continued)

• Dr. Griffiths presented the following language for the Council to consider:

The NDWAC fully recognizes the importance of affordable and safe drinking water, especially for small systems. The 1996 Amendments to the SDWA established the principle that variances in water treatment technology could be used to address the issue of affordability.

However, very significant practical, logistical, and ethical issues mitigate against the use of variances.

For example, the cost of establishing the appropriateness of a variance for a specific small system will be significant. The heightened monitoring, and regulatory, burden that would fall to state and local authorities will be unacceptable for many of them. Furthermore, the potential acceptance of lower water quality for disadvantaged communities is troublesome.

We advise the Administrator to convey these limitations to Congress so that this principle of variances in the extent of water treatment, as required for compliance, be reconsidered as a way to achieve affordability.

- Mr. Baker commented that he is in agreement with the drafted language. He recommended that there also be language discussing the difficulty that small systems have in meeting regulations, and the great need that small systems have.
- Dr. Griffiths asked if the subgroup felt that variances would not be used by states to address affordability, even if they were available. Mr. Young replied yes, and added that was the reasoning that the group used in order to develop alternate approaches to the affordability issue.
- Mr. Baker asked if the goal of the added language was only to eliminate variances, when the real issue is to develop a working methodology to address affordability for small systems. Regarding this issue, Dr. Griffiths asked the subgroup members if there was language in the report that dealt with this. Mr. Young replied that there was and the issue of whether variances should be used was discussed at length.
- Dr. Spath commented that the Council can finalize the draft language at a conference call following the meeting in order to make sure all concerns are addressed. He noted that any conference call is required to be open to the public.
- Mr. Young added that it might be appropriate to get the input of the chairs of the three workgroup subcommittees on the proposed language.
- Dr. Griffiths offered to draft another sentence including how important affordability is for small systems and conveys the unlikelihood that variances would be used to address affordability.
- Dr. Spath asked if the main point of the draft language was to question the appropriateness of using variances to address affordability. Dr. Griffiths replied yes, but that there are also many other practical and logistical issues that limit the use of variances. The main point that he wishes to convey to Congress is the ethical problems with variances. Dr. Spath suggested that the best way to proceed may be for Dr. Griffiths to get some thoughts down on paper, which the subcommittee chairs can finalize. Then, drafts can be sent to the council members, who can discuss them during a conference call, finalize the language, and send the Affordability Report on to the EPA Administrator.
- Ms. Ray said that the issue is whether the group wishes to recommend that variances not be used at all versus, if variances are used, is EPA going to identify a variance technology for each rule it promulgates regardless of whether the rule is deemed

affordable or unaffordable. These are two separate, but related, issues. Ms. Ray added that if the two issues are related, then she may be working on the same issue with her language. Dr. Spath noted that these are two separate issues.

• Dr. Davis asked if the Council is able to use the Internet to review and approve draft language without having to set up a conference call that has to be noticed in the *Federal Register*. Ms. Dougherty responded that it is a possibility.

The group then began discussing the LIWAP assistance program.

Mr. McLane said that, upon reflection he recognizes that transfer payments are not politically popular these days. Although he drafted language proposing an expansion of the LIWAP as proposed by the subcommittee, he feels that it may not be the appropriate time to propose this. He suggested that, if the following language is included, it should be presented as a suggestion rather than a recommendation:

The NDWAC strongly supports the concept of a LIWAP as envisioned by the affordability work group, but believes that such a program should ideally be created to assist not only low-income homes in rural communities that struggle to comply with PDWS [primary drinking water standards], but for all low-income homes that struggle to pay water bills.

Mr. McLane concluded that "this is probably a bigger can of worms than the Council wants to get into."

- Ms. Thorp commented that Mr. McLane's language reflects a great idea in principle, but an effort to expand this innovative program—which is not in place—might be counterproductive.
- Mr. Florquist noted that the workgroup discussed the issue, but it was outside the scope of the group's charge. He added that he thought no one in the group would disagree with what Mr. McLane said.
- Mr. Young added that he would not be opposed to adding a sentence or two in the report to reflect Mr. McLane's comment. He reiterated that the working group was narrowly focused on small systems.
- Mr. McLane said that, while an expansion of the LIWAP would be meaningful, it may not be practical, and he doesn't want this language to hold up the group.

Summary of May 2003 NDWAC Meeting

- Ms. Dougherty added that Congress is beginning to look at what help can be provided to
 water systems when a portion of their service population is disadvantaged, but she is not
 sure what the outcome will be.
- Mr. McLane said he was not willing to argue for his idea. Dr. Spath asked for a sense of the Council about what to do. He noted Mr. McLane raised a valid point, but the Affordability Report focuses on small systems.
- Mr. Baker suggested that the subcommittee was focused on small systems, and the report should maintain that focus.
- Ms. Surgeon commented that she was happy that the idea (of the LIWAP) is being embraced by the Council. She said that it may be enough to plant a seed in the report.
- Dr. Spath tabled Mr. McLane's additional language.

The group began discussing the issue of developing a ceiling for the affordability threshold.

- Ms. Ray hesitated to provide language, saying it is a work in progress.
- Dr. Spath suggested providing concepts now and working with the workgroup subcommittee chairs later to draft language for the Council to consider at a later date.
- Ms. Ray outlined two main concepts:
 - It is recognized that the cumulative costs of drinking water regulation are important in determining affordability and the SDWA policies for variance technologies. But states cannot use variance technologies if EPA does not identify any. Therefore, EPA should establish variance technologies for most of its drinking water rules so states can decide whether to them on a system-by-system basis.
 - The second concept concerns developing a cumulative affordability threshold. Ms. Ray said more work is required on language to do that. She asked the Council for assistance with drafting language for the second point.
- Dr. Spath noted that federal law does not allow EPA to establish variance technology for a rule without first determining that the rule is not affordable. That is the threshold that the NDWAC needs to define.
- Ms. Ray said that for every rule there is going to be a system that cannot afford it, and this should define the threshold.

- Mr. King noted that Congress provided a number of paths, in addition to variances, that small systems can use to comply with new rules. He added that EPA establishes small system technologies for every rule. Mr. King also said that, with variance technologies, systems pay less but their customers get less. He said he did not want the Council to think that there are variance technologies which provide comparable public health protection and it is just a matter of EPA looking harder to find them.
- Ms. Dougherty said that, under law, EPA determines whether a rule is affordable by systems of a certain size. If it is not, EPA identifies variance technologies. But if it is found to be affordable, EPA specifies small system compliance technology.
- Mr. Baker asked for clarification regarding rules where small system technologies are developed. Are those small system costs what the affordability is based on? Ms. Dougherty responded yes, that large system technology is not necessarily the basis for affordability. She pointed out that for arsenic, the main "best available technology" (BAT) identified 13 technologies for small systems.
- Dr. Spath noted that Ms. Ray's point is that there are always some systems that cannot afford these technologies. He asked if there was any way that these individual systems are recognized in the law. Ms. Dougherty replied that individual systems are recognized only through the exemption process where they are allowed 14 years to comply with new requirements.
- Dr. Spath noted that the law binds EPA to a certain approach in determine affordability. Ms. Dougherty said the question is how to define affordability. Should affordability determinations be made on the basis of the lowest common denominator? Congress struggled with this same problem and left it for others to decide.
- Dr. Spath said that the language is still a work in progress. Ms. Ray will develop some language with the help of the three subcommittee chairs, and the language will be finalized at the upcoming conference call.

The workgroup began to discuss the recommendation to re-evaluate the allocation formula for distribution of the Drinking Water State Revolving Fund (DWSRF).

- Mr. Baker began by offering two points about the DWSRF:
 - The establishment of a disadvantaged community program and criteria for its use is done at the state level as part of DWSRF implementation. He strongly believes it should stay at the state level.

 He questioned the need to re-evaluate the allocation formula. In Ohio, he noted, the vast majority of loans are made to small systems, while the vast majority of DWSRF funds go to the largest systems.

Mr. Baker noted there was some discussion by the Council of modifying the DWSRF allocation formula, but he would want further analysis of need before he would support any changes. He also said he has a number of concerns about the premises behind the recommendations and again raised the need for more analysis. He proposed dropping the two recommendations at this time.

- Ms. Dougherty expressed concern about changing the allocation formula. She said each state gets at least 1 percent of the annual DWSRF appropriation from Congress. The rest of the Congressional appropriation is allocated to the states based on the most recent needs survey, which EPA conducts every 4 years. In order to change the formula, EPA would have to go to Congress. She noted that 35 percent of the 20-year need is for small systems serving fewer than 5,000 persons; 40 percent of money goes to systems serving fewer than 10,000 people; and 16 percent of dollars have gone to "disadvantaged" systems.
- Dr. Spath commented that in California, most of the money goes to large systems, but the largest number of loans are made to small systems. He said he wasn't sure the Affordability Report's discussion of the DWSRF reflected what is actually happening.
- Mr. Young noted that changing the allocation formula was an issue that one person on the subcommittee had. There were two state representatives on the subcommittee that could not be at meetings, and the rest of the members felt they could not speak to this issue. Ms. Dougherty pointed out that the workgroup voted 12 to 6 to recommend revising the allocation formula, and for the recommendation to be changed, there would have to be a motion to change it.
- Ms. Dougherty noted that the CWA allotment formula is part of the statute and has not been changed in many years. Consequently, it no longer reflects the true need found in the states. She warned the Council about suggesting changes in the DWSRF language because Congress might end up putting language in the statute that undercuts NDWAC's attempt to reflect small system needs differently.
- Dr. Spath also noted that the vote on reformulating the DWSRF was 13 to 0.
- Mr. Baker mentioned that it seems as though the subcommittee recommendation takes away some of the states' discretion for determining disadvantaged communities, something to which he is opposed. Ms. Surgeon clarified that this was not the intent of the recommendation. She liked the specific language in the recommendation, and added

that the purpose of the recommendation was to emphasize the importance of states' discretion in determining what qualifies as a disadvantaged community. Mr. Baker said that he would be glad to work on recommendation language with Ms. Surgeon.

- Dr. Spath reiterated that Mr. Baker and Ms. Surgeon will work on specific language for that recommendation. He asked the group, in regards to the reallocation formula, if the subcommittee's recommendation makes sense in light of Ms. Dougherty's warning to the Council.
- Mr. Baker suggested that if allocations are based on the result of the Needs Survey, as long as the needs survey accurately reflects the actual needs of small water systems, the formula already meets the criteria set forth in the subcommittee recommendation. He added that additional language should perhaps emphasize that the needs survey should accurately reflect the needs of water systems. Ms. Surgeon agreed and said that the real issue is the accuracy of the Needs Survey's measurement of small system needs.
- Dr. Spath agreed that the wording of the recommendation should be directed more to how the needs survey is conducted instead of the allocation formula.
- Mr. Florquist asked EPA what the return is from small systems on the needs survey. Ms. Dougherty explained that the current Needs Survey will only model small system needs. In earlier surveys, site visits were made to collect data from a randomly selected sample of small systems, so the small system response rate was 100 percent.
- Dr. Spath asked EPA if the needs as determined by the current survey will include arsenic. Ms. Dougherty responded that no, arsenic will not count until the next time around, but she added that arsenic will not likely make a difference in the needs of the systems. She also noted that the states have the opportunity to review the preliminary Needs Survey assessments and to document their own assessments of drinking water system needs.
- Dr. Spath stated that Mr. Baker and Ms. Surgeon will work on drafting language for each of those recommendations and share that wording with the subcommittee chairs.
- Dr. Spath then summarized the three issues in the Affordability Report that the NDWAC will attempt to develop language on:
 - This issue of whether variances are appropriate.
 - The issue of an affordability ceiling.
 - Language on disadvantaged communities and state revolving funds.

He asked that draft language be distributed to the Council, which will hold a conference call to come to closure on the language and on the Affordability Report.

- Dr. Griffiths moved to thank all of the members of the affordability working group for all of their hard work on what he called an "extraordinarily difficult and intricate project." Dr. Spath seconded the motion and congratulated the work group on a job well done.
- Dr. Spath closed discussion on the Affordability Workgroup Report and introduced Mr. Ephraim King to present an update on EPA regulatory activities.

IX. Update on Regulatory Activities - Ephraim King, Director of Standards and Risk Management Division, U.S. EPA

- Mr. King gave an overview of where EPA is with regulations, and discussed the three areas of the SDWA standard-setting cycle which include SDWA priority contaminants, the 6-year review, and future contaminants.
- He noted that, since the early 1970s, Congress has determined in environmental legislation which contaminants EPA is to regulate. In the Contaminant Candidate List (CCL), EPA now has the opportunity to go beyond that.
- Mr. King also noted that the SDWA standard-setting process is "hugely collaborative" and involves scientists, engineers, environmental groups, and others. The regulatory process for stakeholders is a place where issues come together.
- Mr. King outlined the standard setting process which consists of:
 - Science.
 - Economic Analysis (focus heavily on costing issues; need to spend more time on benefits such as cost of illness and willingness to pay for infants, fetuses, teenagers, and elderly).
 - Technical Guidance.
 - Implementation Assistance (help systems come into compliance).
 - Stakeholder Outreach. (EPA has held 31 MD/DBP meetings since 1997; includes regulators, engineers, economists, etc.)

- Mr. King noted that the regulatory determination process is much more than setting MCLs and developing treatment technologies. He outlined the 6-year review of existing regulations, and said that new science allows EPA to revisit these 34 regulations in a meaningful fashion.
- Mr. King reviewed the regulatory work being conducted for the CCL. The first round of regulatory determinations will be by mid-2003. CCL2 is due in 2003. The NDWAC CCL Workgroup is reviewing the National Academy of Science's recommendations to new approaches, such as starting with a smaller universe of 2,000 or 3,000 contaminants.
- Mr. King summarized where EPA is in terms of rule making. The Ground Water Rule (GER.) will be out this year, LT2 and DBP2 will be proposed later this year and finalized in 2004. Other contaminants of concern include radon, per chlorate, MTGE., CCR, and TSE. EPA has focused efforts to respond to concerns with the Arsenic Rule and is working to implement it. Ms. Dougherty added that the arsenic cost panel has affected how EPA does costing for all rules. The group provided EPA with good input on how the Agency needs to be more transparent.

Questions and Comments

- Mr. Schwartz asked if the Council can expect to receive review reports from the new evaluation of costing and implementation. Mr. King responded that the Office of Research and Development (ORD) is managing this effort, and he believes that much of the information is publicly available. Ms. Dougherty added that it might be useful to have Sally Gutierrez from ORD at the next Council meeting to discuss their implementation of the recommendations.
- Ms. Thorp asked if obtrusion is being considered by EPA. Mr. King replied that the Office of Prevention, Pesticides, and Toxic Substances (OPTS) has come out with a revised risk assessment for obtrusion, but some issues regarding cancer studies are yet to be resolved. Results are expected in the early fall.
- Ms. Thorp continued that there is a situation where high levels of obtrusion are left in source waters. She is concerned about this issue and is interested to know if the Council can speak out about that program. Mr. King offered to come back and share the results of those tests and update the Council on the activities associated with obtrusion. Mr. King added that some of the research indicates that the health endpoints are changing, and that they need additional study. Ms. Dougherty added that OPTS has implemented a limited registration program for manufacturers of obtrusion that requires them to monitor source waters where obtrusion is being used. If monitoring triggers a certain level of concern, then the manufacturers are responsible for additional work, including working with the community to eliminate obtrusion from the watershed. If a second incident of

contamination is detected, then activities involving obtrusion are banned in that watershed. This is the first time there has been pesticide action with regards to source water, and this represents a fairly dramatic change in the way in which pesticides monitoring is conducted.

- Dr. Spath asked if there is a possible trend to deal with other pesticides in the same way. Ms. Dougherty responded that AWWA has commented on this registration program. Dr. Spath noted that it is significant that the focus is on manufacturers and source waters.
- Mr. Taylor asked about a date for the Radon Rule. Mr. King replied that no date has been set due to budget cuts and that EPA is prioritizing those rules close to promulgation including LT2 and DBP2.
- Mr. Baker thanked Mr. King for the presentation. He appreciates the increased level of stakeholder involvement, and added that the 6-year review should be a priority over finalizing the radon rule.

Dr. Spath thanked Mr. King for the presentation and introduced Dr. Graciela Ramirez-Toro to discuss the activities of the CCL Working Group.

X. Contaminant Candidate List Workgroup - Dr. Graciela Ramirez-Toro

- Dr. Ramirez-Toro gave a status report and outlined the next steps for the CCL workgroup. She mentioned that there have been over 20 conference calls and 3 meetings since the NDWAC meeting in November 2002. The working group has divided itself into 3 subgroups: Data, Methods, and Microbes.
- Dr. Ramirez-Toro said that the workgroup's mission is to develop an approach for creating the CCL. The working group has finally reached consensus on a general, three-step approach for building a universe of contaminants for the CCL. The CCL universe will include those contaminants that have demonstrated or have potential occurrence in drinking water, and those contaminants that have demonstrated or potential adverse health effects:
 - The workgroup will create and update the universe by constructing a CCL Universe database of known contaminants.
 - Surveillance monitoring will be instituted to identify new and emerging contaminants.

- A nomination and evaluation process for new and emerging contaminants will be instituted.
- EPA is working on a pilot project of this approach, includes 23 data sources.
- Dr. Ramirez-Toro said that the workgroup suggests using a gate approach to screen from the universe to the Pre-CCL (CCL), and then using a scoring process to go from the CCL to the CCL.
- The FAR group is now called the Microbes group. Each of the members will write a section of the final report which applies to microbes.
- Dr. Griffiths added that the working group members believe they can meet their deadline.
- Ms. Thorp commented that the subcommittee is following "reasonably closely" how the NRC panel did its work. She mentioned that the subcommittee may not be able to address the immense data problems, but will likely be able to develop some principles and guidelines for EPA to follow when creating the CCL.
- Dr. Griffiths added that it has become clear to the Microbes group that gnomic tools will be useful in coming up with occurrence and potency data, and that the FAR concept is only one application. New science may significantly change this approach in the future.

Questions and Comments

- Dr. Spath asked if the group investigated additional routes of exposure including inhalation. Dr. Griffiths replied no, that the group has focused on anything that is and has the potential to be in water. Dr. Ramirez-Toro added that if contaminants have some pathway into water, such as deposition through air, they are being considered.
- Ms. Dougherty noted that the CCL group is very diverse and extremely knowledgeable. She added that the recommendations that come out of this group must be transparent and manageable in order for EPA to be able to implement them. There is a strong commitment on the part of the group to ensure that the process is transparent to the public.

1st BREAK (Recess 10:02 a.m. to 10:20 a.m.)

Dr. Spath reopened the meeting and introduced Elizabeth Corr and Jay Rutherford to discuss the ASDWA State Capacity Report.

XI. ASDWA State Capacity Report - Ms. Elizabeth Corr, OGWDW, and Mr. Jay Rutherford, ASDWA

- Ms. Corr introduced Mr. Rutherford, the president of ASDWA, to discuss the report.
- Mr. Rutherford presented an overview of findings of the soon-to-be-released report. The findings are that "without additional resources, state drinking water programs will not be able to meet their full responsibilities under the SDWA, nor ensure that public health will continue to be protected as expected."
- Mr. Rutherford noted that most states were still struggling with implementation of the 1986 SDWA Amendments when the 1996 Amendments took effect. The 1996 amendments changed how state drinking water programs worked by replacing the traditional "find and fix" approach to problems embodied in MCLs to a stronger preventative approach to drinking water regulation.
- Mr. Rutherford said state programs are now more proactive in their interactions with the regulated community, and some drinking water rules have established an almost 1:1 customized approach. The emphasis on capacity development and on operator certification (which was not required before 1986) also had an impact on state programs.
- Mr. Rutherford presented a graph of expenditures and needs from 1988-2006. He noted that the jump in needs from 1998 to 1999 is due to the 1996 SDWA Amendments coming into play along with the DWSRF, and the jump in expenditures from 1998 to 1999 is due to set-asides from the DWSRF. Mr. Rutherford said that a barrier to resolving the state resource needs crisis is that access to the 10 percent set-aside requires a 100-percent match from states, and many states cannot meet this match.
- Mr. Rutherford presented four recommendations, and requested on behalf of ASDWA that the NDWAC consider supporting these recommendations contained in the report. ASDWA hopes to have the final report ready for distribution within the next 2 weeks:
 - Make DWSRF set-aside funds more available to state drinking water programs by removing the dollar-for-dollar match for 10 percent set-aside. Allow all source water protection activities to be funded from the 15 percent set-aside for wellhead protection. This recommendation would have no impact on the federal budget.
 - Work with state policy makers to eliminate hiring freezes and remove staffing caps, especially when funds are available.
 - Prevent any deterioration of existing resources and close the gap by raising resources or reducing needs.

• Find methods to make state drinking water programs more efficient, through greater participation by states in development of new regulations and enhancement of data management systems. For example, EPA is modernizing the SDWIS database and also has developed SDWIS States software.

Questions and Comments

- Mr. McLane asked if there is a program where states can petition to move funds from the DWSRF to source water protection programs. Mr. Rutherford answered that it is possible to shift funds, but that he doesn't know of any states that are doing that. Ms. Dougherty added that EPA published guidance for using other sources of funding for source water protection programs. Dr. Spath noted that funds might be shifted from other programs besides the DWSRF.
- Mr. McLane asked what kinds of source water protection activities would the set-aside funding go towards. Mr. Rutherford replied that it would depend on the state's need, but could include program staff funding and to help with source water area delineation. Mr. McLane strongly supported the proposals and added that the more flexibility that the states are given in terms of funding, the better.
- Ms. Surgeon congratulated ASDWA on the report. She asked if any states are doing well. Mr. Rutherford responded that, in general, larger states seem to be in a better position than smaller states. However, most states are reporting significant shortfalls. Ms. Bridget O'Grady of ASDWA added that across the board, states have issues with regards to resources. No one state is at peak performance. Dr. Spath added that an important issue is the worsening fiscal situation for most states. Ms. Surgeon reiterated her support for the report.
- Ms. Ray mentioned that the 15 percent set-aside is a problem for states to use because of their specified time limits. It is difficult to use that money to hire someone for a short period of time, so most of the time Kentucky used the money to fund the contracting out of work. She added that the state match is critical.
- Mr. Baker asked if the wellhead protection set-aside is part of the 15 percent and if there was discussion of expanding that. Mr. Rutherford answered yes, that this is included in the second part of recommendation number one.
- Mr. Baker asked if there were any additional recommendations in the report besides the four that were presented to the group. Mr. Rutherford responded that the four recommendations are what ASDWA decided were most relevant to the NDWAC.

- Mr. Taylor said that the graphic depicting the expenditures and needs of the states shows the funding gap growing suddenly after 2001 and asked what is driving the large increase. Mr. Rutherford surmised that this represented a "piling on" of regulations from the 1996 SDWA Amendments on top of the base programs that the states must still implement.
- Mr. Taylor asked if the ASDWA report speaks at all to the regulated community picking up any of the costs. Mr. Rutherford responded that they didn't look at that. He noted that some states require regulated communities to pick up costs for monitoring.
- Dr. Spath asked for a sense of the Council in regards to ASDWA's request for support.
- Dr. Griffiths, Mr. Baker, and Ms. Surgeon supported the four recommendations. Ms. Surgeon said she liked the idea of moving on the four recommendations presented by ASDWA, then reviewing the whole report when it becomes available and moving on that as well.
- Ms. Thorp said she would want t think about strategic ways to get money. Ms. Surgeon asked if ASDWA is concerned about the current political climate being a time in which to move. She sees the issue as academic since there is a need to educate legislators about what is going on in the drinking water industry. Mr. Rutherford responded that in the current political climate, it is difficult to get additional funding, but recommendation one would not add a financial burden. He added that it is beneficial to add voices other than the states' on this issue and noted that the Council could recognize the need for resources in its statement of support for ASDWA's recommendations. Ms. Thorp commented that she supports the recommendations.
- Dr. Spath asked if the Council could recommend the need for resources without endorsing all the action items. Mr. Baker said it is just a matter of how a letter of recommendation would recognize the gap as indicated by the survey and report, as well as noting recommendations put forward to encourage EPA to close the gap.
- The Council discussed issues of timing with the publishing of the report and crafting a NDWAC support letter. Dr. Spath concluded that he will work with Ms. Surgeon and Mr. Baker to draft a cover letter to go to EPA, and that the language will be agreed upon at the conference call that is being scheduled to discuss the remaining affordability issues.
- Mr. Rutherford noted the time to deal with this topic may be now, since the PWSS program and DWSRF are not yet funded, but will be soon.

XII. Final Thoughts/Review Action Items/ Next Steps

- Dr. Spath asked Mr. Baker to discuss the language he drafted for the strategic plan. Mr. Baker handed out the draft language, which included three recommendations for EPA's 2003 Strategic Plan:
 - NDWAC supports and recommends that EPA retain the CWA and SDWA integration measures included under Objective 1 of Goal 2 in the final Strategy.
 - NDWAC strongly encourages EPA to provide much greater recognition of the importance of ground water in the Strategy.
 - NDWAC is concerned that by focusing strictly on environmental outcomes as measures of effectiveness the Strategy understates the importance of pollution prevention activities as well as efforts to further define baseline conditions needed for future decision making.
- Dr. Griffiths was concerned that the language did not speak to integration measures for public health outcomes. Mr. Baker responded that he could add human health measures into the paragraph, but that he was under the impression that environmental outcome measures included public health. Ms. Dougherty commented that EPA does not include waterborne disease outbreaks in the Strategic Plan. Dr. Griffiths followed up by suggesting that he feels the language can stay as it is. He added that the best way to broach this topic may be at the next meeting with the spokesperson from OMB attending.
- Dr. Spath asked for a motion to provide comments to EPA. The motion was accepted.
- Mr. McLane said he is leaving his job at the end of May and may have to resign from the Council before his term ends. He expressed his gratitude for having been on the Council.
- Mr. Baker pointed out at the last Council meeting that there was a presentation covering source water protection efforts, and the Council was directed to consider next steps. He was hoping the topic could be addressed at a later date. Ms. Dougherty commented that the SWP Conference is taking place in June in Washington, D.C.
- Ms. Thorp asked if obtrusion could be addressed at the next meeting.
- The Council discussed the scheduling and location of the next meeting, which will be held in November. Ms. Brenda Johnson, EPA, will coordinate by e-mail the dates of the conference. The Council decided to meet in Tampa, Florida.
- The meeting was adjourned at 11:50 a.m.