

**U.S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL FINANCIAL ADVISORY BOARD**

**Meeting Summary
March 7–8, 2006**

**Wyndham Washington Hotel
Washington, D.C.**

Audio Associates
301/577-5882

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MEETING SUMMARY

EFAB members present: Terry Agriss, Julie Belaga, John Boland, George Butcher, Don Correll, Michael Curley, Rachel Deming, Kelly Downard, Mary Francoeur, Jennifer Hernandez, Keith Hinds, Steve Grossman, Stephen Mahfood, Langdon Marsh, Gregory Mason, John McCarthy, James Smith, Dr. Andrew Sawyers, Cherie Collier Rice, Dr. Jim Tozzi, Billy Turner, and John Wise.

EFCN members present: Sarah Diefendorf, Heather Himmelberger, Jeff Hughes, Bill Jarocki, Mark Lichtenstein, Sam Merrill, Dr. Peter Meyer, Dan Nees, and Kevin O'Brien.

EPA staff present: Stanley Meiburg (DFO), Joseph Dillon, Director, Office of Enterprise Technology and Innovation; Lyons Gray, Chief Financial Officer (CFO), Vanessa Bowie, Director, Environmental Finance Staff, Alecia Crichlow, Sandra Keys, Timothy McProuty, Vera Hannigan, and Susan Emerson.

TUESDAY, MARCH 7, 2006

Introductions/Meeting Overview

Stan Meiburg, DFO

1:00 PM

Mr. Meiburg called the meeting to order, welcoming all Environmental Finance Advisory Board (EFAB) and Environmental Finance Center Network (EFCN) members present as well as invited speakers and audience members. He briefly described the chartered purpose of EFAB and noted that this public meeting would allow public comment at the close of the Wednesday meeting. He then introduced two new members: Jennifer Hernandez, Partner/Co-Chair, National Environmental Team, Holland and Knight in San Francisco, and Gregory Mason, Assistant Executive Director, Georgia Environmental Facilities Authority. Mr. Meiburg also mentioned a distinguished guest who had not yet arrived, John Howard, Chair of the National Advisory Council for Environmental Policy and Technology (NACEPT). EPA has asked Mr. Howard to work collaboratively with EFAB, in what should be a very productive partnership.

EFAB had been very productive since its August 2005 meeting, issuing its first letter on the financial test, thanks to the leadership of Mr. Barnes and Ms. Francoeur. That letter resulted in an Agency response and a great deal of interest. He noted that the Board had a full agenda that day, including draft reports on affordability rate design for households, useful life financing, loan guarantees, expanded definition of state revolving funds (SRFs), and a progress report on environmental management systems (EMSs).

He then welcomed Stephen Johnson, U.S. Environmental Protection Agency (EPA) Administrator, noting that he was the first Deputy Administrator to have met with the Board and this is only the third time that an EPA Administrator had addressed the Board. Mr.

Johnson is also the first Administrator to be selected from within EPA, where he has had a distinguished record and earned an EPA Distinguished Service Award.

Agency Priorities

Honorable Stephen L. Johnson, EPA Administrator

Mr. Johnson thanked those attending for their welcome and began by describing President Bush's charge to him in appointing him EPA Administrator: accelerate environmental protection, while maintaining the country's economic competitiveness. EFAB's advice is critical in achieving this goal. How can the Agency pay to address issues in all environmental programs? He expressed appreciation for EFAB's past and future work as playing an important role in reaching the President's stated goal for the agency. EFAB's recent reports, he said, had been very helpful.

The Administrator noted another contribution of EFAB: the Agency had recently recruited EFAB member, Lyons Gray to be its new Chief Financial Officer (CFO), recently confirmed by the U.S. Senate, who will bring the Agency significant State and EFAB experience.

Mr. Johnson then emphasized an area in which EPA will particularly appreciate EFAB's advice: water infrastructure needs. Whether in clean water SRFs, lead issues, or drinking water SRFs, these needs are great and will require far more funding than EPA's budget of \$300 billion can supply. The solutions will not be easy, but the nation needs to figure out how to pay for them. Mr. Johnson was aware that EFAB had been working on these issues for several months and is very interested in their ideas. He noted that NACEPT Chair, John Howard provides EFAB an opportunity to collaborate and accelerate environmental protection on water infrastructure issues, which are also on NACEPT's agenda. EFAB is but one example of how collaboration can lead to more progress than can conflict.

The Administrator then thanked outgoing EFAB members, John McCarthy and Lyons Gray for their contributions to EPA and awarded them special plaques.

Before moving on to the next speaker, Mr. Meiburg asked those at the table for brief introductions. Noting the several EFCN members at the table, he lauded the years of collaboration between the two groups. He then introduced EPA Chief of Staff, Charles Ingebretson as the next speaker. Before coming to EPA, Mr. Ingebretson served Honeywell as Governor of the Relations Council and counsel for the law firm of Bracewell and Patterson. He also served as General Counsel of the House Committee on Energy and Commerce, where he handled "with grace" a very volatile environment. He earned a Bachelor's Degree in Political Science from Duke University and a Law Degree from the University of Notre Dame. He is an expert on cross-collateralization and its history in Congress.

Cross-Collateralization: 1996 Safe Drinking Water Act

Charles L. Ingebretson, EPA Chief of Staff

Mr. Ingebretson first provided background on the evolution of amendments to SDWA. It took four years to develop and pass the act, but innovative financing was never a prime consideration and cross-collateralization was not considered; Congress was suspicious about transfers between the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA), because of competition among committees on the Hill, a situation that has never really changed. He noted that Clean Water SRF (CWSRF) management, in contrast to the Drinking Water SRF (DWSRF), had a longer time to develop and was, therefore, in better shape and managed on the House side by the Transportation Committee. In the mid-1990s, the House Energy and Commerce Committee wanted to modify the SDWA, as had been done for wastewater legislation, but there were too many jurisdictional fights. In addition, there was real interest in nurturing a new SRF separately from the big wastewater contractors and state folks who might draw the life out of the DWSRF. Similar concerns existed in the House Transportation Committee. Other reasons were the sense that States were not sophisticated enough on this kind of thing, although information contradicts this, and Congress did not want to compromise the core idea.

What has changed? The authority to transfer expired, but the act was permanently reauthorized in the appropriations bill. He then expressed the hope that EFAB could help EPA figure out how to get Congress back on track. States are now more sophisticated, and there are untapped resources in private markets. Jurisdictional problems still exist and probably will remain. Creation of the Homeland Security Department was the last major Federal shift in organization, and it takes a lot for Congress to change the order of the committees and their responsibilities. It is important to find other ways to help the committees work together. Mr. Ingebretson concluded that, given the President's commitment to fund the two SRFs at a responsible level, EPA should work hard to get the biggest bang for the buck.

Mr. Meiburg thanked Mr. Ingebretson for his perspective and insights on the history of the SDWA. EFAB has discussed expanded joint opportunities between the SDWA and CWSRF, but EPA has been concerned that some good may be lost in the process. He invited questions and comments from EFAB and EFCN members.

Ms. Agriss noted EFAB's concern in working toward adding efficiency and strength to the SRFs, for instance, by seeking joint operation of programs and even expanding them to other options, about getting "siloed" at the Agency level and in Congress. She hoped the Agency would keep an open mind on EFAB recommendations. She recognized that people, even in the Office of Water, can get protective of their programs; providing access by other people to one's program can create uneasy feelings. Mr. Smith noted that even EPA was initially very reluctant to create the DWSRF.

Mr. Wise pointed out that, given all the money that would be on the table, people had been concerned about the potential for mismanagement and scandal; but the track record should now provide EPA and the Hill with a sense of security and integrity now, and they should be open to considering operational mechanisms, such as cross-collateralization, transfer, or joint operations, which can be competently and capably managed.

The Ohio Water Development Agency, Mr. Grossman noted, had operated programs for water and wastewater side by side. The State has also leveraged the program significantly, loaning far more money than has been brought in through capitalization grants and repayments; but, future needs will be so great, the State needs to find ways to get more bang for the buck.

Dr. Sawyers agreed, saying reduced funds especially for clean water will restrict SRFs from moving ahead. Maryland will have to find other ways to finance customers. Municipalities are being asked to bear a much greater portion of the cost, but in many cases cannot afford it. He also noted that the way SDWA is written, states must fund projects in sequence, which prevents them from utilizing the funds the way they should; states would appreciate more flexibility on ordering projects funded.

Mr. Mason suggested looking into some states that have been very sophisticated in taking SRFs beyond their original intent. SRFs are often the only option small communities have. He noted that loans should extend beyond 20 years, because larger projects are being built.

Mr. Ingebretson asked for ideas on regional economies of scale. Could all of New England or the Midwest or the West, for instance, pool their money to increase their leverage?

Mr. Mahfood noted that there are many people out in the states working on innovative financing, but it will take many years to push these efforts through. Funds are now declining- and it is increasingly difficult to meet even the basic requirements of programs. He also asked what progress has been made on reducing earmarks. To which Mr. Ingebretson replied that there has been significant progress; the President's budget removes all earmarks that were appropriated and assumes they will not be renewed.

Reducing earmarks is important, Ms. Agriss said, but so is improving coordination among agencies, particularly for U.S. Department of Agriculture (USDA) Rural Utilities Service programs that can be tapped for small communities; they have a challenging time choosing among programs compared with taking advantage of multiple programs at one time.

The discussion turned to issues of regionalization, which raises many jurisdictional issues. Water infrastructure is a much more local issue than, for example, air transport. Regional collaboratives have formed in the Great Lakes and Chesapeake Bay, however. Collaborations among a few states to finance something similar to SRFs might be possible, barring jurisdictional issues. Regionalizing across state lines may not be possible for many reasons.

Mr. Wise suggested striving for closer synthesis between CWA and SDWA, not just on financing, but merging authorities from a watershed perspective, which would bring a huge payoff. EPA does have a program closely related to regionalization called the Watershed Protection Program. SDWA has some authorities that could benefit from watershed protection through source protection, well head protection, and the ability to fund private systems.

Ms. Himmelberger added that cross-state regionalization may be impractical, but much can be done in regionalization within states. She cited the example of New Mexico, which legislated that Albuquerque and the county in which it is located work together to form a regional authority to manage the metropolitan area's 70 water systems. Other areas of forced regionalization are on

arsenic and drought management. Many opportunities exist within states to take advantage of economies of scale; reaching across state borders can happen later.

Ms. Agriss suggested distinguishing between regional planning and actual financing. SRFs are financially strong; expanding them will not improve their financial efficiency; however, planning, particularly across state lines, is especially needed. Once planning identifies projects, the SRFs are there to finance them.

The Mississippi legislature, Mr. Meiburg added, is now considering a bill that pushes a Gulf Coast regional authority. Local communities are resisting it, because infrastructure is going to drive development patterns. For the Governor to have taken this on as part of his recovery and renewal initiative is a pretty significant development.

Mr. Meiburg then thanked Mr. Ingebretson for his insights on the history of SDWA as helpful in structuring solutions now. Mr. Meiburg then introduced the next speaker, Deputy Assistant Administrator Elizabeth (Beth) Craig, who has served at EPA in different positions since 1984, including being in charge of EPA's budget for four and a half years. She also once worked for the National Enforcement Investigation Center in Denver. Before EPA, Ms. Craig she worked with the Department of Health and Human Services as well as a nonprofit organization doing management training for health and development professionals in developing countries. She earned a master's in public administration from George Washington University and a bachelor's from Mary Washington College.

Office of Air and Radiation Priorities

Elizabeth Craig, Deputy Assistant Administrator, Office of Air and Radiation (OAR)

Mitch Greenberg, Smartway Transport Partnership Group, Office of Transportation and Air Quality (OTAQ)

Ms. Craig said she would speak on OAR priorities and then turn to her colleague, Mitch Greenberg, for a description of EPA's Smartway Transport program. Noting a nice balance between OAR's broader goals and EFAB's work, she handed out a chart that illustrated the full range of OAR programs. She briefly reviewed the following OAR priorities:

- *Implementing current programs*, especially in National Ambient Air Quality Standards (NAAQS), for ozone and particulate matter (PM) that is 2.5 micrometers or smaller
- *Continuing to develop major rules*, including (a) the model Clear Air Interstate and Clean Air Mercury rules that states can choose to promulgate and (b) two major on-road and non-road heavy diesel rules with significant potential benefits in emissions reductions and fuel changes.
- *Collaborating on a multimedia toxics program* through the grant program Community Action for Renewed Environment (CARE), in which EPA's waste, water, pesticide staff help communities assess and address toxic issues through current agency programs
- *Restructuring the air-monitoring network* to identify monitoring locations and their condition
- *Developing new major rules* for (a) air toxics residual risk and area sources, (b) mobile source air toxics, (c) locomotive and marine issues, and (d) small engines (Bond amendment).

- *Developing renewable fuel standards and working on diesel retrofit*, responding to the Energy Policy Act of 2005
- *Addressing climate change* through the voluntary Smartway Transport Program, Energy Star Program, and Asia-Pacific Partnership, in which the United States is working with five Asian-Pacific countries to find ways to reduce greenhouse gas (GHG) emissions
- *Continuing work on stratospheric ozone issues*, in particular working with industry on approval of alternatives to ozone-depleting substances
- *Increasing momentum and outreach on radon*, which recent research has shown to be double the anticipated risk
- *Developing a radiation monitoring network and emergency response* in association with the Department of Homeland Security
- *Continuing outreach work on asthma* in response to this rising public health issue.

Ms. Craig and Mr. Greenberg then fielded questions from EFAB and EFCN members.

Responding to a question from Ms. Francoeur, Mr. Greenberg said EPA was coordinating with the Department of Transportation (DOT) on a National Freight Policy for innovative financing to address congestion and air quality issues as well as work for energy savings. EPA is also working with (a) 21st Century Truck, an industry group sponsored by the Department of Energy (DOE), to look at futuristic goals for freight transportation, particularly fuel efficiency of small trucks, (b) the Smartway Transport Program, (c) Clean Cities Program, and (d) Clean Automotive Technology Program. Mr. Meiburg added that Mr. Greenberg was outlining new directions for the agency as the Mobile Source Program has expanded beyond setting emission standards for cars through these programs, as the technological limits for light-duty vehicles and trucks have been reached.

Before turning to Mr. Greenberg for a fuller description of the Smartway program, Mr. Meiburg noted that the Air Office had asked EFAB about this program at the August EFAB meeting. Ms. Belaga and Mr. Curley then met with Mr. Greenberg and Rob Brenner in the fall, which resulted in the draft charge from OAR on the Smartway program in their meeting folders. If EFAB and OAR want to move forward on this, EFAB could form a workgroup on the subject.

Mr. Greenberg then described the program in more detail. Its goal is to create a more efficient, cleaner freight transport sector, which is huge and growing; ports are congested and have air quality problems to solve and fuel to save. Many of the nation's 7 to 8 million trucks are old and still in the system, because such trucks can last 20 to 30 years. Every company's number one cost after labor is fuel, and for small companies, fuel can be the number one cost. The Smartway program is finding and applying innovative techniques for old trucks. The goal is 20 percent more fuel efficiency and decreased NO_x and PM emissions. A company can save \$1,000 per truck per year. Not all trucking companies are big ones, which have greater flexibility; most are small (six to 20 trucks) and have razor-thin margins.

The Smartway program sells a package of four innovative technologies to retrofit old trucks for greater efficiency. The \$7,000–\$12,000 package includes (a) an idle control device, (b) single tires to replace double tires at each position, reducing rolling resistance and weight and increasing fuel efficiency and truck weight capacity, (c) improved aerodynamics to reduce drag at the back and turbulent flow underneath, and (d) controls for PM emissions. These technologies

are bundled because the first three will produce enough savings to fund the fourth, which does not save fuel. Fuel savings would begin to pay off any monthly loan repayment the company needs to finance the package. Despite this, obstacles exist to companies purchasing the package, and OTAQ is looking for ways to reduce risk to and leverage funds for truck companies.

The Board and EFCN members then entered a lengthy discussion of the Smartway program.

Mr. Wise suggested working with ports to finance retrofit packages, instead of giving incentives to trucking companies to buy. Mr. Greenberg thought this was an interesting idea, although not all ports have the financial capital to support this.

Mr. Downard asked how much global source pollution comes from trucks. Mr. Greenberg said a total of six to eight million freight trucks produce the largest share of NO_x and PM emissions or 50 percent of mobile source diesel emissions. OTAQ is targeting the long-haul trucks.

Mr. Marsh asked whether any of the money budgeted for DOT could be used for making low-interest loans to trucking companies for the package. Mr. Greenberg said EPA is looking into this; the Energy Bill does mention grants and loans.

Mr. Hughes suggested that the program focus on solid waste trucks for demonstration projects, possibly using EPA solid waste innovation projects, because it might be easier to implement within the public sector. Mr. Greenberg noted that although the Smartway idea is very flexible, waste haulers probably do not do much queue idling, which is worse than straightforward idling; there are many ideas for fixing infrastructure that could help too.

Ms. Diefendorf cited one city supervisor in California who would probably like to bring the Smartway package to trucking companies, because of the impact of heavy-duty diesel trucks on the community. Perhaps several communities could pilot a project for trucking companies. Ms. Craig suggested in this case packaging Smartway with diesel retrofitting to reduce emissions through a couple of EPA's voluntary programs.

Mr. Meyer said that, if trucking companies could actually make money by purchasing the Smartway package, the package does not need to be sold at below-market cost, which means easier access to funding. He thought a regulatory element would be necessary to make the program work. Mr. Marsh asked what the potential regulatory impact would be of the diesel retrofit issue and what the timing was for the mobile air toxic rule. Ms. Craig answered that the rule is being proposed this year, so could not fully answer the question.

Ms. Francoeur asked how the program would benefit the large trucking companies, for whom capital access is not a problem. Mr. Greenberg said most of those companies are already Smartway partners and have created three- to four-year action plans for EPA. The big companies are actually just around 1 percent of the 500,000 U.S. trucking companies, of which 300,000 are very small enterprises, so they only handle 10 or 15 percent of the total mileage. The small companies, however, represent much of the emissions inventory of fuel consumption and do not have financial flexibility.

Mr. Meiburg concluded the discussion by asking any interested Board members to volunteer for the new workgroup to be formed on Smartway.

(Break)

Mr. Meiburg reconvened the meeting by introducing the newly arrived John Howard and Don Correll. Mr. Meiburg then introduced the next speaker, Assistant Administrator Ben Grumbles as someone who has been a great supporter of EFAB for many years.

Leveraging the Clean Water State Revolving Fund

Benjamin H. Grumbles, Assistant Administrator, Office of Water

Mr. Grumbles began by noting that the EFAB represents an “all-star” cast of aficionados on water issues. He would speak on three topics: water infrastructure, cross-collateralization, and innovative financing.

First, the Agency is committed, on the demand side, to the four pillars of sustainable infrastructure—better management, full-cost pricing, efficient water use, and watershed approaches to protection—using three tools: technology and science, innovation, and collaboration. A 2002 EPA report identified a \$224 billion infrastructure capital gap—\$122 billion for wastewater and \$102 billion for drinking water—just for capitalization, not operation and maintenance. If you factor in 3 percent real growth in revenue beyond inflation, those numbers fall to a low \$20 billion for clean water and about \$40 billion for drinking water; these are still large. EPA is continuing to provide seed money for capitalization grants, and SRFs are fostering the four “pillars,” particularly asset management, capacity development, and EMSs under the first pillar of better management. Asset management includes improving management of on-site and decentralized clustered systems, which comprise 25 percent of wastewater infrastructure. He stated the need for everyone to encourage a movement toward full-cost pricing and true value recovery. Innovative approaches to reducing demand on water and wastewater infrastructure are a particular priority. EPA is studying development of a water efficiency program, working closely with the Energy Star program on improving the marketability of water-efficient products. The fourth pillar on watersheds ties the first three pillars together and involves decentralized systems and source water protection. EPA just entered into a source water collaborative with 13 other organizations, ranging from national environmental groups to national utilities to state drinking water and clean water administrators, to emphasize watershed protection to reduce costs downstream. EPA is focusing on technology, innovation, and collaboration.

Regarding the tool of technology and science, Mr. Grumbles noted that the Administrator is a career scientist and strongly supportive of technology. Although not a “silver bullet,” technology combined with management practices and approaches and sustainability ethics are powerful. Sustainable infrastructure depends greatly on technology—for example, remote sensing for leaks or security breaches—including the technology of information exchange.

He then discussed the innovation tool. On the supply side, the Administrator is seeking the best ideas and realistic options for innovative financing and weighing their pros and cons. EPA is looking into private activity bonds and arbitrage restrictions, as well as other innovative

financing mechanisms and supporting states and local areas on sustainability through fees and other financing mechanisms. Taking the Chesapeake Bay as an example, Maryland enacted the “flush fee” two years ago to finance bay protection. This may be a model for other water bodies, such as Puget Sound. The Agency is looking for innovative financing in other areas, such as storm water issues, and is eager for new ideas on loan guaranties.

Mr. Grumbles also noted the importance of, but did not go into detail on, the collaboration “tool.” No progress will be made without reaching out to a wide array of actors. He concluded his presentation, saying that the Office of Water is working on many products to advance the four pillars through the three tools he had described. The Agency is now laying out and researching options, as well as looking for partnerships to advance innovative financing approaches. Mr. Meiburg then opened the floor for comments and questions.

Mr. Turner asked Mr. Grumbles to elaborate on the 80 percent of water quality issues that involve nonpoint source pollution. He replied that there was no clear dollar price tag on it. The line between point and nonpoint sources is evolving and continues to move. The 2000 Clean Water Need Survey said \$181 billion was necessary in the next 20 years to meet CWA requirements, of which \$8 billion was for nonpoint sources. The need survey tried to capture storm water costs under 402(p) as well, which is a growing cost burden. Both EPA and the public recognize that CWA implementation costs are significant; that is why sustainable approaches to infrastructure financing decisions are so important. The nation needs to recognize that more attention and resources should be devoted to storm water and runoff through a watershed approach.

Mr. Curley noted that EFAB’s affordability study addresses the issue of who will pay for the funding gap, which will be a great “chapter in the book” on full-cost pricing and gap payment. Mr. Grumbles said EPA was looking forward to working with EFAB on affordability as an important approach, but that one cannot religiously hold to the full-cost price; some limited situations may still require lifeline rates or some type of subsidy. He noted that 75 to 80 percent of water infrastructure investments for clean and drinking water are underground; technology is necessary to minimize disruption of citizens’ lives affordably. The biggest price tag and challenge for cities and communities is in modernizing infrastructure and complying with mandates on sewer overflows. Mr. Grumbles is working with the Enforcement Office on a combined approach on clean water permits and long-term control plans for a fixed schedule for updating and modernizing infrastructure and complying with mandates, in which affordability will be a big issue.

Responding to Mr. Wise on EPA working with USDA on ways to make funding sources into sustainable financing systems for farmers, Mr. Grumbles said EPA has for several years worked with USDA on finding greater synergy between USDA’s Natural Resources Conservation Service programs and EPA’s water programs. That is where there is a lot of funding to address watershed protection or water quality issues, particularly through programs under the Farm Bill. A focus on ecosystem needs and steering funds to targeted priority watersheds are key to reducing costs downstream for municipal utilities. Water quality trading is also a priority. USDA announced an initiative last summer to integrate market-based approaches, including trading to improve water quality and improving watershed conservation.

Mr. Jarocki asked Mr. Grumbles for assistance on innovative financing on a canal project in western Washington State and then suggested using comparisons of the cost of a like volume of gourmet coffee or gasoline to the same volume of water to give citizens an idea of how good a deal water supply is.

Mr. Marsh thanked Mr. Grumbles for EPA's support for the Thursday roundtable on watersheds and noted that, although the focus will be on nonpoint financing, many of the concepts to be discussed will be consistent with infrastructure finance, for example, equity in fees and taxes at the local level. He hoped the discussion would cover the total watershed context and not just focus on financing a specific gap in funding.

Mr. McCarthy asked Mr. Grumbles for his thoughts on how funding programs, such as community development block grants and so on, could be empowered to look at the household level. He said he would keep the household level approach in mind when considering drinking water affordability guidance for public comment. His staff is also looking at affordability in the context of CWA. The National Association of Water Control Agencies (NAWCA) suggested EPA revisit its affordability policies in long-term control plans and sewer overflows under CWA. This is a good opportunity to examine affordability at the household level.

Dr. Sawyers offered to discuss the affordability document with Mr. Grumbles after he has a chance to read it. He mentioned in particular the need to address affordability in pockets of poverty. Mr. Grumbles agreed that more work is necessary to increase access to safe drinking water and sanitation for pockets of poverty in Appalachia, for Native American tribes, and elsewhere in the continental United States.

Mr. Butcher wondered if the Board should recommend that EPA support useful life financing for SRFs, as it has done in the past. EFAB believes there is no financial reason not to delegate to each state the decision whether to limit loans to 20 years or to make longer amortization periods as long as 40 years available. Mr. Grumbles agreed that Congress continue to look at the issue; he has testified in support of extended term financing in the CWSRF context. He thought it important to find ways to encourage and emphasize leveraging and the best possible use of SRF funds. Dr. Tozzi reminded the group that the Administrator had specifically asked EFAB for recommendations on the cost of water infrastructure; EPA funds for it have been and will continue to be reduced. He asked Mr. Grumbles if EPA wants demand-side or supply-side options on reducing the gap in funding? Mr. Grumbles said EPA was open to a wide array of innovative supply-side financing tools, including loan guarantees. The Administrator had given a similar charge to the Great Lakes collaboration to come up with approaches to accelerate restoration and protection of water bodies that hold 20 percent of the world's fresh water supplies. He noted a book by James Levin called *From Walden to Wall Street* that embraces the private sector as a potentially strong ally on ecosystem restoration.

Mr. Turner ended the discussion on a positive note by noting the progress made. The American Water Works Association has launched "The Value of Water" program, and the Water Environment Federation has the "Water Is Life: Infrastructure Makes It Happen" program. NAWCA has the "Clean Water Miracle" program. The focus on full-cost pricing is getting out there. Asset management tools and EMSs are all somewhat generated by a focus on the four pillars.

Mr. Meiburg concluded the session by noting that EFAB now had a USDA field manager/expert witness in Dave Miller, who was present at the meeting and represented USDA in New York.

Workgroups Report Out

Mr. Meiburg noted that Jim Smith would report on combined operations of SRFs, instead of Sonia Toledo, who could not attend the meeting.

Combined Operations of the SRFs

Jim Smith

Mr. Smith began by noting that he could not attend the workgroup meeting, but did receive its report. Workgroup recommendations for combined operations of the SRFs that passed by the Board were fielded to the EPA State Board Group, a group of state officials who run both water and drinking water SRF programs and some related management and administration programs. The final workgroup recommendation was to advance them and get approval.

Mr. Meiburg noted that EFAB and EFCN members had the draft letter on combined SRF operations in their folders. The Board then reviewed some of the history behind the workgroup's mission, noting that members had voted for additional study that went beyond the anecdotal, although some workgroup members disagreed with this. Several EFAB members stated that they found the draft letter too "tepid"; it merely states that the workgroup did what it had been asked to do and that EPA should now take over on the issue, which seems rather weak, although this is true of many EFAB recommendations. One member pointed out that the idea had been studied for many years and is clearly a good one, but it is not EFAB's job to implement it; EPA needs to run with it. Several Board members thought the letter should be "beefed up," state its points more definitively and enthusiastically, and use a more affirmative tone to become a letter that the Board could coalesce around.

Mr. Meiburg suggested that they think about the issue overnight and return to it on Wednesday for a decision.

Sustainable Watershed Financing

Langdon Marsh

Mr. Marsh described the special Thursday roundtable on watershed financing as an exciting opportunity to put all ideas on the table—realistic options to raise charges at the local level for what and how and under what equity considerations to do it. They would look at the need to raise revenue locally to pay debt-service costs, bonds, and perhaps projects too. They expected to hear solid advice from several resource economists on ecosystem valuation techniques to make charges more equitable and, therefore, more acceptable. They would discuss collaboration issues: can you bring people together across boundaries for watershed protection? One example to be explored is the Maryland "flush fee." How politically feasible is it to get this through? Another example will be the McKenzie River Basin in Oregon, where they raise organic crops by funding a marketing and information operation. They expect to have a wide discussion on other ideas as "fodder" for recommendations on pilot demo projects through various organizations, on areas

needing research, and on existing models that add tools to the toolbox. The goal is to wrap it all up in a report for adoption by EFAB at its August meeting. Mr. Marsh said they expect 40–50 people to attend the roundtable.

Mr. Hinds described an effort in New Mexico in which all private utilities with fewer than 1,500 users are allowed to have automatic 2 percent annual increases in fees. Passage of this system was very difficult, but the system was necessary to allow private utilities to raise the money needed to comply with environmental improvements.

Mr. Turner noted a regulatory aspect of the watershed issue. The costs of bringing watersheds into compliance with wet weather types of issues are high. Regulatory agencies are reticent to deal with the issue by putting out what is viewed as a reduction in standards. Standards were originally designed around dry weather considerations and are now being applied to wet weather conditions. Watershed runoff brings organisms present on land into streams, where they cause violations. He was unsure there was an answer to the problem, but it was important to find a way to spread the word.

Mr. Marsh mentioned how Oregon got upstream farmers to grow filter strips, shade trees, and other approaches to avoid other extraordinarily expensive fixes. He had done an issue paper with an intern on the subject that he had provided the workgroup, will provide to roundtable participants, and would be glad to provide to EFAB members as well.

Affordability Rate Design for Households

Andrew Sawyers and John McCarthy

Dr. Sawyer and Mr. McCarthy then reported on the work of the Affordability Workgroup, which had completed and sent its report to the Administrator. The next question may be to address Mr. Grumbles' concern on addressing wet weather issues and affordability. The workgroup referred in its report to looking at how the SRF program could help address affordability, but had not decided to go in that direction. They are now waiting for a response.

Mr. Meiburg mentioned that the briefing for Mr. Grumbles went well, providing the Agency with a new way of looking at affordability. The EFAB report should have a profound effect on EPA thinking. He commended the workgroup on their work.

Mr. Turner also complimented the workgroup on its great report, which brought out new ideas for the utility community. Many want to do programs, but it is tough to get them approved. A new mechanism is necessary for getting the word out to industry. EPA could usefully direct the report to industry and related associations. He noted that the workgroup report encouraged EPA policy to look at the entire community. Mr. McProuty added that the report also points out the need for collaboration; the utility is responsible for addressing as much of the problem it can, but situations exist where poverty and the financial burden exceeds the utility's capacity, and some form of subsidy may be needed from some level of government. Mr. McCarthy also noted that many people who cannot afford the cost of water live in multiple-family dwellings and do not pay individual water bills. This is an example of the kind of sticky problems that need addressing.

First Day Summary

Stan Meiburg

Mr. Meiburg took a few minutes to summarize the main points made during the meeting that day. First, Mr. Johnson's presentation that day had put to rest the issue of whether the EPA Administrator appreciated the work of EFAB. Mr. Ingebretson had noted that some of the things people now argue about on joint operations, for instance, have been argued about for a long time, because, they are political problems that are difficult to resolve; finance by itself cannot always solve problems. Part of EFAB's job is to "take back" the financial perspective so that over time people start to change their views that the world is not what it was ten years ago.

The Board had also received a good presentation on innovative financing efforts, such as the Smartway program, and changes in the Agency's mission, such as in mobile sources. They had also heard from Ben Grumbles on the four pillars of sustainability in water infrastructure and three tools to promote them. He noted that much of EFAB's work on combined operations of sustainable water treatment financing and affordable rate design speaks in one way or another to those four pillars.

Mr. Meiburg concluded by noting that the Agency and EFAB will be looking for new realistic ways and ideas to address future challenges. He then adjourned the meeting for the day.

Adjournment

5:00 pm

WEDNESDAY, MARCH 8, 2006

Opening Remarks

Stan Meiburg

9:15 am

Mr. Meiburg convened the second day of the EFAB meeting, noting the next EFAB meeting was August 14–15, 2006 in San Francisco at the Hotel Nikko. He then introduced Sarah Diefendorf, EFCN president.

Environmental Finance Center Update

Sarah Diefendorf

Ms. Diefendorf said that each year she would use the March meeting as a "President's Choice" opportunity to describe a particular aspect of EFCN work and the August meeting to present an overview of EFCN. That day she focused on EFCN's Green Business and public recognition programs. Green Business is an EMS program for small and medium-sized enterprises (SMEs). According to EPA, EMSs are a form of continuous cycle planning for improving processes to meet business environmental goals. Such systems can be broad or narrow, are not easy to implement, and require top- to bottom-level support. EMSs take a long-term commitment to continuous improvement. One size does not fit all; each EMS is different for each company and each industry; they are not easily standardized and, therefore, not certified in any way. This means EMSs are not necessarily compliance driven. The company frequently does not quantify

results, for example, how much the business has saved or how much it is no longer using, etc. An EMS that financial industries can rely on must have external third-party certification.

Ms. Diefendorf then described a California green business program called the “Green Network,” consisting of 11 different counties with 11 coordinators working together. EPA brought her and others in to help these counties coordinate. California’s program is voluntary, which is important, because the Chamber of Commerce considered the program “backdoor legislation” and a “job killer.” The program is an on-the-ground program to help SMEs implement a type of EMS that promotes compliance by requiring it for certification. The program is free, which is important for SMEs. In California, the program is county based (state based in Hawaii and Arizona) and run either as a public agency or organization or a nonprofit. Most of the California programs and the state’s 800 certified businesses are in the Bay area. Ms. Diefendorf handed out checklists for SMEs specific to different industries. Certain industries, such as dry cleaners that use perchloroethylene, are not considered for certification. All certified businesses must meet certain regulatory standards and undergo on-site verification, in contrast to self-checking programs.

The California program has resulted in some savings, but no profits; waste reduction; increased compliance, for example, with worker safety and health; improved relations with customers and regulators; increased public recognition for SMEs; and a mostly standardized verification process. California hopes someday to offer Green Business SMEs some kind of certification incentive. Ms. Diefendorf summarized by saying the process of creating a Green Business in California is difficult and long; however, it is very measurable (in terms of energy use, water use, sick and injured employees, regulatory relief, emissions, and cost savings). California does not yet measure these, because it hesitates to bother businesses, has few resources, and it is difficult to measure 11 different programs with different priorities. So, there is currently no State—only county—oversight and no State disincentives to influence the county programs.

Hawaii’s Green Business program is limited to water use by hotels and involves a tiered system with different levels of certification. This means hotels reach one level and never go further, as they do not like being dictated to. Arizona has received an EPA grant to start a Green Business program, beginning with auto body shops. This received mid- but not top-level support, so fell apart in 2004.

Ms. Diefendorf listed a number of best practices for EMSs and Green Business programs: (a) go beyond compliance, (b) involve measurable, consistent, and transparent on-site compliance, (c) commit to ongoing improvements, and (e) receive top- to bottom-level support; all these lead to credibility in certification. Asked why the Green Business program does not include dry cleaners and metal platers, she said dry cleaners who use alternatives to perchloroethylene are included, but not those who use it, as its use is banned in Southern California anyway.

Mr. Wise noted the difficulty of finding a nexus between an EMS and financial performance. Much anecdotal evidence exists that an EMS does improve performance, including financial, but actual empirical evidence is lacking. One study has very mixed findings on cost savings or revenue-enhancing features of EMSs.

Mr. Meiburg was struck by the point that people tend to think EMSs are intrinsically good; but data that can be checked and verified and identify what is happening on the ground, however

much it is resisted. He also noted how this work again illustrates how the EFCs share and learn from each other.

EFCs have often seen a clear infrastructure “gap” in local government, Mr. Hughes added, between the “converted” and a few elected officials and career staff who have very different objectives. EFCs try to understand the needs and objectives of both groups to find interesting policy support tools that communicate points that EPA and others are making on the issue. EFCs are also doing everything from focus groups to interviews with officials on communication tools for collecting statewide information on indicators to ensure they can truly provide warning signs of potential local government problems.

Ms. Himmelberger then described the case of New Mexico, which has an intra-state collaboration among multiple state agencies and assistance providers dealing with water in the state, initiated by Governor Bill Richardson, focusing on financing water. The State had provided funding for water systems for the poor in the past. The Governor took this on as an issue, bringing agencies and other entities together to improve the situation. They came up with a 10-point plan for counties to get funding through loans and grants, although not for R&D, for which different criteria exist. The 10 points cover rate structures, asset management, water rights, and sustainable quantities, among others. Future *inter*-state collaboration is also possible. Ms. Himmelberger was surprised that the legislature passed New Mexico’s State Water Plan. Legislation is now being developed to change how funding is done.

In Mississippi, after Hurricane Katrina, Mr. Meiburg noted, EPA’s Region VI Office of Water worked with the States of Louisiana and Mississippi on a well-received compendium of all sources of systems available for water development activities in those states.

Mr. Jarocki then reported on a tool developed for the SRF Program called “Passing Track” to see the effect of financing; in the long term, has the SRF contribution increased financial capacity? This easy tool relies on only 14 figures in audit financial statements and allows the SRF Program to track capacity in the entire portfolio. The Community Development Block Grant Program wants to replicate the tool, which may become standard for all public contributors that work together to fund a project to report on its effectiveness—information that can be sent to a Congressional delegation or others who want to know about it. His EFC also does technical and financial Management Capacity Reviews before a loan is granted, tracking the same indicators ahead of time on, for example, credit worthiness, for unrated communities. These reviews state what a community will need from a financial management point of view to succeed in the long term. A third piece is to track, after a community receives a loan, whether it implements the financial techniques and whether it has been demonstrated in financial results.

Answering a question on collaboration or coordination among EMS certifiers, Ms. Diefendorf said there is competition among nonprofit organizations whom do variations of EMSs, for example, Green Seal, who is working with the State on hotels. Similar state organizations around the country are actually starting to work with each other.

She also responded to a question on what triggered the Chamber of Commerce’s perception of the plan as a “job killer.” She guessed that the success of the program might, it thought, force other companies to take it on, raising costs. Ms. Hernandez suggested the chamber was afraid the

next step would be mandatory not voluntary, which may be true, given the makeup of the State legislature. Although efforts to create some level of benefit for the companies did not succeed, she did think the effort did educate legislators on green certification.

Mr. Meiburg then introduced EPA Deputy Administrator Marcus C. Peacock, who had earlier served as associate director for Natural Resources, Energy, and Science at the Office of Management and Budget (OMB), where he developed the Program Assessment and Review tool. This tool received a Harvard award for innovations in American government. Mr. Peacock has also had practical grounding in the political system, including experience on the House Committee on Transportation and Infrastructure.

Performance Measurement

Honorable Marcus C. Peacock, EPA Deputy Administrator

Even while working at OMB, Mr. Peacock said he was aware of EFAB as one of the most valued advisory groups at EPA. He described two aspects of his current position: he fills in for the Administrator at events and he serves as chief operation officer, a big responsibility that underlies his appreciation for EFAB. Decreases in EPA's budget are stressing the organization, so EFAB is now even more important in helping EPA become more effective and productive with fewer resources. He looks forward to working with EPA's new Chief Financial Officer Lyons Gray.

Mr. Peacock then touched on three areas of EFAB work. First, he reiterated the Administrator's great interest in addressing *water infrastructure* issues, which is a top priority for the agency, can be controversial, and has raised debate on SRF capacity. EPA must find ways to raise more capital for water infrastructure. Mr. Peacock cited innovations such as Maryland's flush fee. Second, *financial assurance* is a complex area. The Office of Solid Waste and Emergency Response (OSWER) is working on a plan to address some of the issues EFAB, the General Accounting Office, and Inspector General have raised about financial assurance. EPA appreciates EFAB's work in this area. Third, he cited the many potential benefits, including health, of the *Smartway Transport* program. EPA needs to entice more firms to get involved in this program.

Mr. Peacock then discussed performance measurement. He is currently installing a performance measurement system at EPA, an agency with an \$8 billion budget that has no quarterly management report. He wants to initiate one in September for delivery in October. EPA has two lines of business: Headquarters is a large "document manufacturing machine" on important regulations, guidance, and reports to Congress, which needs to transform. The Regions focus on location-specific issues. He had asked four clusters of Regions to identify priorities, so EPA can track progress on a quarterly basis against their own priorities. This should help EPA achieve its goal of protection of human health and the environment faster and more rationally. He hoped to build on it and accelerate progress on the agency's goals.

Mr. Peacock then fielded questions from the group. Ms. Diefendorf asked how EPA would gauge Regions' performance and how that would feed back to the grantees. Will there be interplay between what grantees do, regional performance measurement, and reports back to headquarters? Performance measurement has two aspects, he said, tracking progress of Regions

on self-selected priorities and a broader organizational assessment. Next year, he will add performance measurement grants.

When asked how to measure nutrition loading, such as in the Mississippi River, on a quarterly basis, Mr. Peacock said they are trying for outcome measures, including quarterly, but they need to link outputs to outcomes. Mr. Hughes pointed out that outcomes depend on a variety of players, for example, EPA cannot control and is losing ground on urban sprawl and is simply trying to prevent a downward slide. How can progress be accurately measured? Some programs are penalized for this. Mr. Peacock replied that it was a matter of setting an outcome goal, for example, “the quality of the river will drop by 5 percent, not 10 percent, as expected.” It is important not to shy away from measuring performance; it just means that more needs to be done. In the end, programs, not personnel, should be measured, even when outcomes are not controllable.

Regarding the Administrator’s and EFAB’s own emphasis on water infrastructure, Mr. Wise asked whether the agency would prepare an overall strategic approach on water infrastructure from top to the bottom, from Federal to state to local levels? Such a plan would help EFAB in setting its own strategic agenda for effective support to EPA. Mr. Peacock said he would mention this good and sensible question to Mr. Grumbles.

Asked if EFAB should continue to struggle with the issue of arbitrage restrictions, when no relief seems possible, Mr. Peacock suggested shifting EFAB resources elsewhere, as these restrictions are not likely to be changed.

Mr. Turner asked how Mr. Peacock would develop a program to measure progress in the water and water infrastructure field in terms of levels of performances? Many performance measurements for drinking water and wastewater industries exist, but the gap is overwhelming. Mr. Peacock said many promising areas are being explored; for example, many technologies are available to decrease repair costs, for example, finding and repairing leaking pipes. The scope of the problem should change to finding ways to greatly reduce current costs or change the assumptions that go into that analysis.

Mr. Merrill pointed out that some outcomes are simply getting people together and building relationships. How can this be addressed through restructuring of performance measurements, and how can EPA evaluate long-term policy shifts? He cited the example of the root causes of sprawl as shifts in land use policies, which can take years to occur. How can EPA measure performance in this case? Mr. Peacock provided two answers: First, some things should be measured, even if imperfectly, for example, measuring meeting impact by guessing how many people each attendee will talk to about the meeting. Second, performance measurement systems do not just identify failures, but inform conversations better and identify ways to improve performance. He added that quarterly reports must always incorporate a qualitative discussion.

Asked how reductions in Federal funding for EPA will hurt state projects, Mr. Peacock replied that the Presidential request for \$3.4 billion represents a steady SRF volume of \$3.4 billion, which means putting in \$6.8 billion from 2003 through 2011; every time Congress pays ahead of that, it is going to be less than last year. SRF money does revolve, which is different than cutting

a program that relies on new funds to “keep the bathtub full” each year, when the drain is not plugged. The policy will not change and will probably decrease more.

In answer to a question, Mr. Peacock foresaw some kind of periodic review by broader EPA management to reassess its strategic plan based on performance measurements. The annual performance report is a good one; the quarterly report could eventually become public, which may influence the annual report. EPA also needs to test links between outputs and outcomes, but EPA does not track outputs yet.

On earmarks, Mr. Peacock said interest in reducing earmarks has been weak, but this is changing. The number of earmarks that EPA suffered last year has been reduced by almost half. Mr. Mahfood added many in the field would support EPA reducing earmarks.

(Break)

Workgroups Report Out

Mr. Meiburg reconvened the meeting by noting that the first workgroup to report had worked very hard the past six months on very important issues, such as water infrastructure.

Loan Guarantee Program and Application of Useful Life Financing Concept to SRFs

George Butcher

Mr. Butcher first reported on the activities of the SRF Loan Guarantee Workgroup. Failing to identify any significant benefits from a new loan guarantee program, the workgroup recommended against creating one. Loan guarantee programs in general provide limited benefit—that is, avoiding the cost of obtaining privately provided municipal bond insurance—to borrowers with market access. In the last paragraph of page one of the report, the bulleted paragraph that says “which includes most water and sewer systems” should read “many,” not “most.” Additional costs may be imposed on a borrower using a loan guarantee system, such as the Federal cost-cutting requirements, where applicable to SRF loan guarantees. Confusion in the market may be caused by the proliferation of programs, particularly for small borrowers. Two areas of additional study exist: Can existing loan guarantee programs be more effective, and could a new loan guarantee program targeting small unrated borrowers accelerate environmental activity in that sector?

Mr. O’Brien pointed out such programs have supply and demand side incentives. For rateable communities with access to funding, loan guarantees increase SRF loan attractiveness to city councils and utility boards. Mr. Butcher said limited benefit from loan guarantees would come from making the SRF Program more efficient, for example, by reducing vehicle loan costs. On the other hand, some existing obstacles—so-called cross-cutting requirements—are themselves obstacles that loan guarantees cannot overcome.

Mr. Dillon asked if the interest in loan guarantees was not in stimulating more activities and making more funds available, but in how to extend the loan period? Mr. Butcher agreed that giving a subsidy for the first 20 years and a loan guarantee for amortization of the loan beyond 20 years provided a nice package that facilitated subsidy provision and lowered overall cost by

extending the amortization period. EPA is not interested in loan guarantees to stimulate more interest in startups or creating funding, so much as benefiting existing projects. Mr. Dillon also noted that loan guarantees could also assist certain recipients whose ability to get loans has been capped, as it could still be provided above the level of the cap.

Mr. Tozzi pointed out that there were loan guarantee programs now in the government that are not being used at all. The Administrator, Deputy Administrator, and Associate Administrator all want *real* answers, not just a report. A billion-dollar gap exists, and the board is saying the nature of the gap needs to be addressed.

Mr. Meiburg suggested that part of the reason that various constraints make loan guarantees unattractive, compared with other sources of funding. Mr. Butcher added that private markets provide loan guarantees as well. The intent is not to disrupt the private market, which is working well, for the limited benefit of reducing the cost of already available guarantees.

Mr. Butcher said the workgroup had recommended that the Board send the report forward and endorse the workgroup's continued work on the two areas they had identified for further study. The Board members agreed to send the report to the agency, with minor amendment of the wording noted earlier and possibly offer a special briefing to increase the agency's receptivity to the recommendations.

Mr. Butcher then turned to the Application of Useful Life Financing to SRFs workgroup's report. First, the workgroup could not see any financial reason for EPA to impose requirements relating to the pace of recycling. Second, there is no financial reason for not allowing SRFs to make individual decisions. EPA should delegate to each state the decision whether to limit its loans to 20 years or make them longer.

The Board has previously concluded that use of extended amortization periods corresponding to the useful lives of finance facilities is a reasonable approach to making environmental facilities more affordable and allocating costs of environmental facilities among various generations of rate payers. An earlier EFAB report did not answer the question whether that general concept should be applied to SRFs.

A specific recommendation is, to the extent that a financing period beyond 20 years is currently authorized by statute, the Board recommend EPA approve requests by state SRFs for approval of useful life financing up to 40 years. Even though even longer financing periods might make sense, 40 years seemed like a significant improvement on what exists now, one that should not raise too many political concerns. The workgroup also recommended that, to the extent an extended financing period is not currently authorized by statute, EPA support a statutory amendment authorizing useful life financing up to 40 years. This second recommendation clearly applies to drinking water, and, based on EPA's determination proper interpretation of the CWA, may or may not apply to clean water.

Mr. Meiburg summarized the sense of the group that, in contrast to a loan guarantee program, which may be too constrained to be effective, the extended useful life type of loan would help SRFs work better. Mr. Butcher said it more strongly: even in the absence of cross-cutting in of additional requirements, a loan guarantee program would have a very modest benefit. This is

because, except for unrated entities, a very effective loan guarantee program is already privately available; whereas, adoption of useful life financing, both within the SRF context and more broadly, would make projects more affordable, therefore, creating the possibility of financing larger amounts of capital at the same cost.

Mr. Hughes asked what the cash flow analysis would look like with extended useful life financing? Capitalization may need to be maintained at a little higher level. Mr. Butcher noted that revolving the money more quickly does not provide more assistance; 20 years versus 40 years does not increase or decrease the value of the subsidy, but 40-year amortization permits lower debt service and, therefore, lower rates. Asked whether an extended term of financing would encourage states that are not currently leveraging to do so, Mr. Butcher said that has not been discussed. Mr. Sawyers thought a 40-year term might allow larger loans; the EPA's \$3.4 billion target would not necessarily change because you are taking out a larger loan. Longer terms in the drinking water program have not affected recycling of funds; it does address lower payments, potentially larger loans for smaller applicants who need the funding. Mr. Butcher noted that with the very big gap that exists in water infrastructure funding, financial devices such as this one only have a limited impact. The combined thinking of the two workgroups is that, even though useful life financing only makes a dent in a huge problem, loan guarantees cannot realistically make any dent. He also addressed Ms. Agriss concern, saying that states doing direct loans are really underutilizing their capital, which some people may say is irresponsible if they have needs beyond what they can fund. Means are available to increase the amount of funds that they have to more than offset any decrease in the amount of funds that are being recycled as a result of a longer utilization.

Mr. Downard reminded the group that extending useful life financing would not apply to the entire portfolio. There will always be a mix in the product base, and extension will make that workable and livable. It provides an opportunity to do some things for some places that could not otherwise afford it. Mr. Jarocki said it was a matter of affordability. Communities think they cannot afford the SRF. Lengthening the term allows them to decrease the annual cost, generating more revolving dollars. Extending useful life financing moves communities toward taking the money and helps solve certain problems in the SRF Program. Mr. McCarthy suggested that Mr. Peacock rethink the metric of \$3.4 billion in light of the actual subsidy being more when the term is longer.

Mr. Wise noted the useful life recommendations will have a stronger linkage to affordability issues, which is good. He suggested beefing up the primary recommendation. Mr. Hughes noted that the affordability report tried to take a message to the household level, whereas the useful life addresses community affordability. He said he would like to take some of the savings and create a kind of targeted household. The greatest beneficiaries of useful life financing are not those with affordability problems. Mr. Butcher noted that the report does not address refinancing, which is a significantly lower priority with the reduction in funds.

Mr. Meiburg summarized the sense of the board as generally supportive of the draft report's recommendations, but members needed some more time to look at the final wording. The board agreed to leave consideration of the report open through April 12 for comments by members before the workgroup put together a final draft to circulate to all members for approval in e-mail

replies. The board may want to extend its discussion of these issues to its August meeting, when they will plan for work for the year ahead and how to proceed in areas such as this one.

Mr. Butcher then returned to the Loan Guarantee Workgroup's draft concept paper, which touched on Ms. Agriss' concern on arbitrage relief. The gist of the paper is, instead of trying to change a law, change the facts so the law does not apply. Given the perpetuity requirement that applies to SRFs, all subsidies provided to borrowers ultimately come from either accumulated earnings already received or current investment earnings on SRF equity.

Use of investment earnings to pay debt service subsidies, either directly or indirectly, is what triggers IRS arbitrage restrictions. The idea is to provide the same subsidy, but for a purpose that does not create the arbitrage crossing. Two examples are providing capital assistance from accumulated or current earnings, so the perpetuity requirement would continue to be met, or provide operating assistance, again from earnings. If the subsidies were provided in the form of operating assistance, the result could, in fact, be the same as achieving arbitrage relief in full. Programs could be structured so that the investment of SRF equity is completely unrestricted.

This concept paper requires a significant amount of additional discussion before the workgroup could make a recommendation. The workgroup sought the board's encouragement to continue to investigate the issue and return with a report, if appropriate.

Mr. Sawyer thought it was a great idea that certainly needed more thought. He was not sold on the idea of using the additional funds for operating assistance, although it can be used for that purpose as well as administrative assistance. Certain criteria would need to be met, for instance, a demonstrable water quality benefit, but the additional funds would really provide additional benefit to the SRF Program and for catalyzing projects.

Mr. Meiburg summed up the sense of the meeting that the Board's next step was to set up a meeting with Mr. Grumbles fairly quickly to review loan guarantees, useful life financing for the SRFs, and this concept paper, and, given charges from the Administrator, Deputy Administrator, and Mr. Grumbles, start the process of future work. He asked if the Board was comfortable with following these steps, to which they all agreed.

Environmental Management Systems

Rachel Deming

Ms. Deming said that how to move forward on EMSs is a challenging question. Definitions of EMSs continue to evolve and have never been clearly defined. Creating benefits from EMSs is also a hurdle. The workgroup's charge was broad, and it was difficult to select a focus; however, even though EMSs are a difficult issue, there is tremendous interest across the agency to move forward on them.

The workgroup decided to focus on two questions and break the workgroup up into three subgroups on equity, debt, and insurance. The first question is: would branding some form of an EMS give the market segment something of value? Shana Harbour's office is doing something that goes in this direction: an EMS Plus System called "Performance Track" that goes beyond the traditional system by addressing a broad range of issues. To answer this first question, one needs to identify the performance indicators that an EMS or some branded form of this will

address. The American Chemical Society has a form of EMS they are trying to sell to different market segments. Working with them has helped inform the workgroup on some of the market issues. Ms. Deming thought the workgroup could come up with a list of indicators that coincide with what would be of value to the marketplace. She mentioned that Board member Helen Sahi, not present, could help guide this subgroup and Michael Curley on the insurance segment.

The second question the workgroup would like to address is: can EMSs assist in identifying, assessing, quantifying, and/or reporting risk in ways that are useful to the marketplace? EMSs are supposed to avoid surprises through constant assessment of performance and identifying risk factors. EMSs provide a platform to build in proposed regulatory changes or new information, for example, on toxicity of some chemical. The value of EMSs may be enhanced by upcoming required SEC financial disclosures for environmental liabilities. She suggested getting in touch with Shana Harbour and Tim McProuty if anyone wants to join any of the three subgroups.

Mr. Charles Kent then noted that, because an EMS is mostly a process, it is not ideal for the financial community. There is a question about whether information from an EMS can feed into information in a different model or decision.

Mr. Merrill asked, given anecdotal information and some analyses say it is not clear that environmental investments create financial value, when would the workgroup come to its own conclusion and what will it do if the answer is no? Ms. Deming responded that, if the answer is no, EPA will want them to figure out what the barriers are that prevent these investments from somehow being translated into the marketplace. But, they believe there is some value and interest “out there” in these tools; it has just been hard to quantify.

Mr. Meiburg summarized the discussion by saying that, since August, the workgroup had done a lot of work to refine the analytical framework for looking at the EMS question and has set up a subgroup structure in order to proceed. A number of EPA offices are obviously willing to support them. It was clear from the lively and robust discussion at the workgroup meeting the previous day that a high level of energy and enthusiasm underlies the group’s work. He then adjourned the meeting for lunch.

(Lunch)

Financial Assurance

Mary Francoeur

Ms. Francoeur said EFAB’s work on financial assurance had been a worthwhile two-year process, resulting in a final letter to the Administrator. The workgroup identified the issues involved and developed recommendations, but has not finished yet; it is a topic that can still be refined. The workgroup’s effort also brought EFAB two new and very important members in Ms. Rice and Ms. Deming. The letter to the agency represents a process and broadening of the board’s efforts. What is important is that the parties responsible for the potential costs have the capacity to pay and take a stance and approach. The workgroup’s next step is to move forward on the captive insurance issues, which is not quite financial capability but a sort of internal insurance. Ms. Rice and Mr. Curley have been looking at these issues. On June 27, 2006, a roundtable workshop will be held in New York to bring together a variety of parties and States to

discuss how they look at captive insurance as potential creditors and at industry and parties who use captive insurance and why they value it.

Many issues still remain to be resolved: insurance, bank facilities, different types of credit substitution mechanisms, the major issue of financial reporting and how those requirements relate to financial assurance requirements, and the question of costing. Corporate guarantees may be worth investigating. They had decided that corporate guarantees, their requirements, and the form laid out in regulations were fairly clear; much is not known about their effectiveness; however, the workgroup shelved the issue, because they did not see any problems in who is providing the corporate guarantee. As long as these guarantees have the financial capacity, meet requirements of the financial test, and meet regulatory requirements, they do not require much input by the board now.

Ms. Deming followed up by noting that the June 27 roundtable in New York may be of broader interest in terms of other issues, such as brown field redevelopment. Ms. Hernandez concurred, mentioning use of captive insurance in construction defect litigation risks for affordable housing providers, who have insufficient resources of their own to fund the insurance; this was quite a good vehicle for this particular risk. They also looked at captives for redevelopment agencies who have multiple insurers and also multiple projects for which they want to use captives to cover private developers in the redevelopment area.

Comments

Matt Hale, Director, EPA Office of Solid Waste

Mr. Hale was pleased with the final letter, which had thoughtful and helpful recommendations. The financial test is part of a larger picture. His office is looking broadly at the effectiveness of current financial assurance requirements and upgrading them, including improving implementation of current regulations and upgrading pieces of the regulations; the financial task issue relates to the latter. His office and many states, including California, have also been working on upgrading cost estimations. His office is also analyzing file information and followup to the Super Fund 120-day report; they are looking at whether to implement 108(b) of the Super Fund, which gives EPA authority to identify high-risk categories of industry and develop financial assurance to prevent Super Fund costs. They are also studying how many requisites end up on the National Priorities List or as targets of removal. If there are a significant number, does this reflect a failure of financial assurance or are there ways to improve financial assurance to reduce the burden on the Super Fund or the public taxpayer? Judgments on this will come later this year.

On regulatory issues, captive and other insurance issues are on the table. His office is committed to doing a plan by July, in which they will look explicitly at the kind of regulations that make sense and a path forward on the issues that EFAB is addressing.

The timing of EFAB's work on financial tests and captive insurance, particularly the June roundtable, therefore, is good. The financial test and captive insurance issues generate a lot of discussion. He then turned to Ms. Bromm for her input. Mr. Meiburg first thanked Ms. Bromm for her presentation with Rosemarie Kelly last August, which was a seminal event and very helpful to the board. EPA has identified financial assurance as one of its national enforcement

priorities. He hoped data collected as part of that will continue to provide feedback that will help the Board identify and make recommendations.

Comments

Susan Bromm, Office of Site Remediation Enforcement

Ms. Bromm first noted that the enforcement initiative is not about how many enforcement actions EPA takes, but whether EPA can get good compliance results for financial assurance. EFAB is raising a lot of attention on the issue, which is a positive development.

She said she also liked the recommendations on the financial test, which go a long way to address EPA concerns on enforcement and EPA's ability to assure compliance with these requirements. Capacity building is an ongoing effort to keep folks in the states and EPA knowledgeable enough to do a good job assessing compliance with these requirements.

The Enforcement Office has a pretty formal structure on managing enforcement priorities. Financial assurance is one of five or six priorities. The office sets goals for itself and has an enforcement strategy; the Regions make commitments on how they will fulfill the priority's goals. All the Regions are making good progress on their commitments, specifically on the "Resource Conservation and Recovery Act closure/post-closure financial assurance corrective action" and looking at Super Fund documents, such as consent decrees with financial assurance requirements. Many states, such as New York and California, have embraced this; it is very much a Federal/state effort.

Some enforcement actions are "brewing." Her office would like to interact with EFAB on them, as it learns more, and she looks forward to a productive working relationship.

Mr. Meiburg commended Mr. Barnes and Ms. Francoeur for their leadership on this project as well as Mr. Hale and Ms. Bromm for their steadfast support. Ms. Francoeur then added that EFAB members might consider commenting on a draft proposed rule making from the Government Accounting Standards Board on reporting environmental liabilities for potential environmental cleanups. The deadline for comments is May 1.

Innovative Environmental Financing Tools

Michael Curley

Mr. Curley reported on the work of the Innovative Financing Tools workgroup. He first mentioned that they expect a response shortly on the restoration letter they sent to the EPA Administrator. Regarding the Smartway Transport program, Ms. Bowie, Mr. Prouty, and Ms. Belaga, and Mr. Curley had met with OAR in November. The poor results of the program to date had led OAR to ask for EFAB's assistance. One problem was that increasing truck aerodynamics has had severe logistical problems, for example, trucks with aerodynamic features that cannot pull up to bays to unload.

More generally, 80 percent of trucking companies are small and have little access to capital; they create more pollution, but do not have good enough credit to obtain loans to address the problem. Many of the large trucking companies have lots of funding, but still do not participate in the

program. What kind of financial incentive would help? Reducing NO_x emissions can bring \$2,500–\$3,000 per ton; each of these trucks produce 3,500 lbs a year or 1.75 tons. A reduction in NO_x is about 20 percent, so that is about 700 lbs., or 35 percent of a ton, which means \$1,000 is left on the table. Collecting that NO_x credit from small trucking companies and monetizing it would represent a significant amount of money. These trucks are in service for 20 to 25 years. The present value—just the taxable rates of \$1,000 a year—is about \$7,500 in 10 years. If \$7,500 can be generated for a \$14,000 problem, this financial incentive is worth looking into.

A related question is that the devices that reduce CO₂ and NO_x also reduce fuel consumption; but, the devices that reduce PM have no impact on fuel at all, so the OAR wants to build a program that encourages truckers to buy the package of reduction systems, including for PM. Just telling truckers that the package will save money on fuel has not been enough to get them to buy the package.

The next step is to write a memo with what the Board thinks are correct assumptions as well as questions for OAR and build a bifurcated incentive program that provides small trucking companies with access to capital at low cost and some kind of incentive for large trucking companies. OAR is definitely interested in EFAB's ideas.

A third question concerned the Diesel Retrofit Program. A mechanism could be devised that allowed, for example, a utility with a nonattainment problem to collect NO_x credits by helping to pay for diesel retrofits for the city's fleet of garbage trucks.

Ms. Belaga explained Connecticut's "Feebate Program," which is of great interest in northeastern states that have signed a GHG agreement; the idea is to lower the sales tax on cars that do not contribute as many GHGs and charge more for cars that do. They are now watching to see how well it works. It may force the auto industry to increase CAFE standards. The only cost to the State is the rebate form, which is covered by the fee. Mr. Curley said the workgroup is looking at using vendors to finance retrofitting.

Board members also made a number of suggestions for the workgroup. It should consider that truckers save money by retreading their tires a couple times, but the single tires in the Smartway package cannot be retreaded or capped. The workshop should perhaps be in touch with tire manufacturers promoting the super single tires, such as Michelin. Another suggestion was looking at the potential of retrofitting school bus fleets, which could have a significant health benefit as well. Finding a way to finance such diesel retrofits for the benefit of schoolchildren and school districts could be a winner. Such a program was financed in Georgia through an outstanding enforcement action against Georgia-Pacific that required them to set aside \$3.5 million for achieving NO_x emission reductions.

Continued Discussion on Combined Operations of the SRFs
James Smith

Mr. Meiburg then returned EFAB to discussion of combined operations of CWA and SDWA SRFs from the previous day. Mr. Smith began the discussion by saying that he understood the Board's concern about sending a weak letter on the subject to the Administrator. He proposed redrafting the letter, having the chair review it, and then circulating it for Board review or go

forward with the letter as modified. Mr. Smith also suggested that Ms. Toledo and he could meet with Mr. Grumbles, Mr. Ingebretson, and Mr. Peacock to explain why the Board's points should not be considered threatening.

Ms. Deming questioned whether the workgroup should keep working on joint operations, given the tensions it had created? Mr. Smith responded that it was really up to the agency to act; EFAB would be available for advice. Mr. Meiburg added that it was professional courtesy to make sure EPA clearly understood EFAB's points; the Board would then have done its job and could always be available if EPA needed more advice or clarification. Mr. Hinds agreed that EFAB should not act as a go-between for EPA and the States on these issues. Ms. Francoeur noted that the States have indicated they wanted joint operations, so EFAB had delivered the message to EPA, outlining clear reasons to support the idea. Mr. Downard thought that, if EFAB believes joint operations are right, it should make a strong statement, despite the opposition, or EPA would drop the idea. In the end, Mr. Meiburg suggested and Board members approved modifying the letter as discussed, giving the Board two weeks to review it, and then sending a final version to the Administrator.

(Break)

Wrap-Up and Next Steps

Stan Meiburg

Mr. Meiburg spent a few minutes summarizing main points from the various presentations and discussions that day. He thought the group had been extraordinarily productive. Ms. Diefendorf's presentation on work in her Region on "green business" and how they are tracking outcomes from useful EMSs to help the agency was very enlightening. The way Mr. Jarocki's workgroup has been tracking results on SRF work also had something to teach the board. The main message is that EFCN's strength is how they work together.

Mr. Peacock had then described performance measurement at EPA, providing an opportunity for Board members to feed into the performance measurement process. The Board had agreed to send an update on loan guarantees to the agency. The Useful Life workgroup will circulate their document to the board for comments by April 12. It is pretty clear that the board needs to set up a meeting with Mr. Grumbles on a number of topics, not only loan guarantee and useful life issues, but also future EFAB missions. Many of the issues—including affordability—are converging. It is clear that, given the Administrator's charge to EFAB to engage with NACEPT on the infrastructure issue, EFAB will have more work and will be engaging in some high-level discussions with the agency to help frame an agenda.

The EMS workgroup has also made great progress, has created three subgroups, and identified two questions. The agency has great interest in this topic, on which thinking had matured since the Board took it up five years ago. There is great potential for progress there and he thanked Ms. Deming for pulling that group together.

The Financial Assurance workgroup has submitted a letter on the topic to the Administrator and organized a roundtable on June 12, 2006 in New York. The Board will discuss financial reporting and cost estimation at their San Francisco meeting. In addition, the Board agreed to

modify its letter on combined operations before sending it to the Administrator. Mr. Meiburg concluded by saying that the EFAB was one of the very few EPA advisory committees for which members not only regularly attend meetings, but work hard in groups and on reports. Very few other advisory committees have matched their efforts.

Public Comment Period

When no one in the audience took the opportunity to speak, Mr. Hinds suggested that EFAB develop some kind of orientation program for new EFAB members, saying he would e-mail his suggestions to Mr. Meiburg and asking other new members to do so as well. Mr. Meiburg said Ms. Bowie and her staff could follow up. Mr. Downard suggested the orientation also include members who have been reappointed once.

Mr. Sawyers then returned to the issue of combining operations on SRFs, suggesting the Board review the environmental SRF document, because there will be a requirement for some major changes. In light of funding reductions, pooling both the drinking and clean water funds is quite possible. EPA's structure would remain the same, but at the state level, it would be pooled and at the behest of the state to decide how the funds should be used based on priorities. A state such as Maryland could easily use an underutilized fund to supplement the other, if overextended. He recognized that the 30 percent transfer existed, but EPA might at least offer the option to states to prioritize areas.

Mr. Tozzi asked the Board to reconsider its organizational structure in addressing the Administrator's current charges to the Board. Some workgroups have submitted their reports and outlived their usefulness. Board members should develop options before that August through e-mail, etc. as there was much to consider; for example, EFAB had the opportunity for meaningful work on the demand side of the curve. Mr. Wise suggested also circulating a paper EFAB wrote several years ago on environmental revolving funds, part of a series of papers on SRFs, in the 1990s, as a template for how they should proceed. Mr. Marsh urged the Board to think about synergies from a watershed basis or at least the interconnection between point and nonpoint sources. Nonpoint finance could alleviate the gap in point sources. Mr. Meiburg agreed to respond to these matters before the August meeting.

Board members then thanked Mr. Meiburg for his excellent facilitation. Mr. Meiburg then adjourned the meeting.

Adjournment

(3:55 pm)

ATTACHMENT 1: EFAB MEMBERS

Designated Federal Officer:

A. Stanley Meiburg, DFO, EPA

Congressional:

Honorable Pete V. Domenici, United States Senate

State and Local:

Kelly Downard, Chairman Louisville Metro City Council

Honorable Vincent A. Girardy, Mayor, Peapack & Gladstone, New Jersey

Steve Grossman, Executive Director, Ohio Water Development Authority

Gregory R. Mason, Asst. Executive Director, Georgia Environmental Facilities Authority

Dr. Andrew Sawyers, Program Administrator, Maryland Water Quality Financing, Maryland Department of the Environment

Billy Turner, President, Columbus Water Works

Business and Industry:

Terry Agriss, Vice President, Energy Management, ConEdison

Donald Correll, President and CEO, Pennichuck Corporation

Rachel Deming, Associate General Counsel, Ciba Specialty Chemicals Corporation

Stephen Mahfood, President Mahfood Associates

Cherie Collier Rice, Treasurer and Vice President of Finance, Waste Management

Dr. Jim J. Tozzi, Multinational Business Services

Banking, Financial, and Legal:

George Butcher, Managing Director, Municipal Finance, Goldman, Sachs, & Co.

Michael Curley, Executive Director, The International Center for Environmental Finance, Towson University

Mary Francoeur, Director, Financial Guaranty Insurance Co.

Jennifer Hernandez, Partner/Co-Chair, National Environmental Team, Holland and Knight

Keith Hinds, Merrill Lynch & Co.

Helen Sahi, Director, Environmental Services Department, Bank of America

Greg Swartz, Vice President, Piper Jaffray & Co.

Sonia Toledo, Merrill Lynch & Co.

Justin Wilson, Waller Lansden

Associations, Organizations, Academia, and Public Interest Groups

A. James Barnes, Professor of Public and Environmental Affairs, Adjunct Professor of Law, Indiana University

Julie Belaga, Co-Chair, Connecticut League of Conservation Voters

John Boland, Professor Emeritus, Department of Geography and Environmental Engineering, The Johns Hopkins University

Langdon Marsh, Fellow, National Policy Consensus Center, Portland State University

John McCarthy, Shelter for Life International

Environmental Finance/Independent Consultants

James Smith, Bozeman, Montana

John C. Wise, Hidden Valley Lake, California

ATTACHMENT 2: ENVIRONMENTAL FINANCE CENTER NETWORK

Dr. Richard Barringer, Director, Environmental Finance Center, University of Southern Maine

Mark Lichtenstein, Director, Environmental Finance Center, Syracuse University

Dr. Sam Merrill, Projects Director, Environmental Finance Center, University of Southern Maine

Dan Nees, Director, Environmental Finance Center, University of Maryland

Jeff Hughes, Director, Environmental Finance Center, University of North Carolina

Peter Meyer, PhD, Director, Environmental Finance Center, University of Louisville

Kevin O'Brien, Executive Director, Great Lakes Environmental Finance Center, Cleveland State University

Heather Himmelberger, Director, Environmental Finance Center, New Mexico Institute of Mining and Technology

Sarah Diefendorf, Director, Environmental Finance Center, California State University at East Bay

William Jarocki, Director, Environmental Finance Center, Boise State University

ATTACHMENT 3: EPA ENVIRONMENTAL FINANCE STAFF

*Vanessa Bowie, Director
Vera Hannigan, Senior Program Analyst
Timothy McProuty, Senior Program Analyst
Alecia Crichlow, Program Analyst
Susan Emerson, Program Analyst
Sandra Keys, Administrative Assistant*