Training campaign brings wastewater options to Missouri communities

by Laurie Klappauf
NETCSC Contributing Writer

Between October 1999 and June 2000, a team of trainers in Missouri hit the road with trunks full of binders and loads of expertise to help small communities evaluate their wastewater options. Their venture shows how experienced trainers can successfully take an “off-the-shelf” course and make it their own to meet the varied needs of local audiences. In this case, trainers used the National Environmental Training Center for Small Communities’ (NETCSC) “Assessing Wastewater Options for Small Communities: A Course for Local Decision Makers.”

Christopher King, C.E.T., director of the Center for Environmental Education and Training at the St. Louis University School of Public Health, and Lorene Lindsay, C.E.T., a private consultant, delivered 16 one-day sessions of the course to 361 participants in all corners of the state. As a result, many local officials feel better versed in the options and resources available to them, and some have even put together successful funding proposals.

This training campaign began a few years ago when King led a series of two-day “train-the-trainer” versions of the course throughout U.S. Environmental Protection Agency (EPA) Region 7, which includes Missouri. At about the same time, officials at Missouri’s Community Development Block Grant (CDBG) program were seeking a course to teach technical, managerial, and financial principles to local officials and others involved in providing water and wastewater services. When the CDBG program issued a request for proposals, King’s group at St. Louis University applied for and received the contract to teach the “Assessing Wastewater Options for Small Communities” course all over the state.

And just what was the appeal of King’s proposal? “It didn’t make wastewater rocket science,” said Tim Rickabaugh, technical assistance advisor with the Missouri CDBG program. “We wanted a course in layman’s language so the mayor could take it back and explain it to others.” He said other strengths of the course included the case studies, quality of presenters, organization of the manual, and the contacts it provides.

CDBG officials picked up the cost of the courses and marketing brochures from their training budget, but went a step further to get local support and promotion for the courses. They asked leaders at the state’s 18 Regional Councils of Governments to host the courses and to advertise—in their newsletters, at local coffee shops, through their mailing lists, and in other communications and contacts with local officials.

By all accounts, the courses were a success. “I thought it was a good course—I would go to another one. I’ve been to a lot of courses, and this was informative. I’d give it an ‘A’,” said Lewis Henderson, administrator for the village of Indian Point in the Ozarks region of southwestern Missouri.

“Everyone on my staff attended, and they all came away with something, even those continued on page 4
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NETCSC co-sponsors training at NM finance conference

The New Mexico Infrastructure Finance Conference is set for May 30 to June 1 in Albuquerque.

The National Environmental Training Center for Small Communities (NETCSC) will co-sponsor a one-half day training session featuring portions of selected modules adapted from the course, “Managing a Small Drinking Water System: A Short Course for Local Officials.”

Trainers from the U.S. Environmental Protection Agency Region 6 Environmental Finance Center at the University of New Mexico will adapt and present NETCSC’s training materials to meet its audience’s technical, managerial, and financial training needs.

For more information about NETCSC’s drinking water course, contact Sandra Fallon, training specialist, at (800) 624-8301 or (304) 293-4191, extension 5582, or via e-mail at sfallon@wvu.edu.

NDWC’s new On Tap magazine premieres

The National Drinking Water Clearinghouse (NDWC) announces the publication of its free magazine, On Tap. The new On Tap combines the NDWC’s two popular newsletters, On Tap and Water Sense, to give readers up-to-date, water-related news in one place. The first issue premiered in May.

The NDWC, funded by the U.S. Department of Agriculture’s Rural Utilities Service, collects, reviews, and distributes information about rural and small community drinking water systems across the country and the environmental issues that impact them.

“We are committed to keeping community leaders, water industry professionals, and others who are involved with clean water issues informed,” says Sanjay Saxena, NDWC program coordinator.

On Tap will include articles about assistance programs for drinking water systems (those serving fewer than 10,000 people), regulations, products, technologies, and health, finance, and management issues relevant to America’s small communities. The premiere issue of On Tap examines distribution systems (Item #DWQUNL01).

If you would like to subscribe to On Tap, contact the NDWC at (800) 624-8301 or (304) 293-4191, or send e-mail to ndwc_orders@mail.nesc.wvu.edu.

NETA schedules 23rd annual conference in Rhode Island

The National Environmental Training Association (NETA) will hold its 23rd Annual Conference and Workshops June 9 to 13 in Providence, Rhode Island.

The event will feature instructional technology sessions and workshops, as well as three pre-conference workshops—“Delivering Effective Training,” “Implementing an Environmental Management System,” and “Advanced Instructional Technology.”

For more information about the conference or to register, contact NETA at (602) 956-6099 or visit its Web site at www.ehs-training.org.

AWWA to hold annual meeting in Washington, D.C.

“The New Horizons in Drinking Water” is the theme of the American Water Works Association’s (AWWA) Annual Conference and Exposition to be held June 17 to 21 in Washington, D.C.

Billed as the most important drinking water event in the world, the conference will feature workshops, technical tours, and educational sessions covering every aspect of drinking water, more than 500 product and service exhibits, and networking opportunities for attendees.

For more information about the event, contact AWWA at (800) 926-7337 or visit its Web site at www.awwa.org/ace2001.
The National Environmental Training Center for Small Communities (NETCSC) and its sister organizations have launched a Web site for tribal communities. The National Tribal Environmental Network, or NTEN, is now online at www.nten-nesc.org.

This new Web site is one result of meetings between tribal environmental professionals and NETCSC, National Small Flows Clearinghouse (NSFC), and National Drinking Water Clearinghouse (NDWC) program coordinators over the past year and a half. These organizations and the National Onsite Demonstration Program make up the National Environmental Services Center (NESC) located at West Virginia University.

“This Web site is a response to tribal environmental professionals’ request for increased communication among tribes and to the public regarding their environmental issues,” says John Mori, Ph.D., NESC director.

The NTEN Web site includes a listing of all federally recognized tribes and other tribes, links to environmental training organizations and colleges/universities that serve tribes, links to tribal assistance groups, information about funding sources for tribes, articles about tribal environmental issues, and links to tribal Web sites.

According to Mori, NESC also will host Web sites up to one megabyte in size at no charge for tribes and tribal organizations. NESC has a template ready for tribes and tribal organizations to use to create a low-cost Web site. Those seeking more information about this service should contact the NTEN Webmaster at webmaster@nten-nesc.org.

To learn more about NESC’s tribal initiative, contact Mori at (800) 624-8301 or (304) 293-4191.

The National Small Flows Clearinghouse (NSFC) recently released a CD-ROM, which offers a comprehensive collection of resources about onsite systems and small community wastewater treatment. Titled Wastewater Resources for Small Communities, this CD-ROM is easily accessible in a Web-based format that puts a wealth of information at the user’s fingertips.

The CD-ROM contains 350 articles from the NSFC’s publications since 1989, including information from the Small Flows newsletter, the Small Flows Quarterly magazine, and the Pipeline newsletter. An educational information section includes the poster, Onsite Wastewater Treatment for Small Communities and Rural Areas, which describes 23 different wastewater treatment technologies. It also provides a series of brochures on septic systems in both English and Spanish.

The CD-ROM also features a series of fact sheets the NSFC developed under the U.S. Environmental Protection Agency’s (EPA) Environmental Technology Initiative. The fact sheets detail 13 different wastewater treatment technologies with both technical and general fact sheets for each topic.

Other resources available on the CD-ROM include information about the NSFC’s vast selection of products, statistics on the status of septic systems in the U.S. detailed by state, and the full text of EPA’s Response to Congress on Decentralized Wastewater Treatment Systems.

The CD-ROM is PC-compatible and requires a 486 or Pentium® processor and Microsoft Windows® 95 or later. The software needed to read the files (Adobe Acrobat Reader and Internet Explorer) also is provided on the CD-ROM.

Wastewater Resources for Small Communities (Item #WWCDGN162) costs $14.95, plus shipping. To order, call the NSFC at (800) 624-8301 or (304) 293-4191 or e-mail nsfc_orders@mail.nesc.wvu.edu.

The National Environmental Health Association’s (NEHA) 2001 Annual Educational Conference and Exhibition is set for June 30 to July 3 in Atlanta, Georgia.

This event for environmental professionals features eight specialty conferences, including sessions about drinking water quality and onsite wastewater systems.

For more information about the conference or to register, contact NEHA at (303) 756-9090 or visit its Web site at www.neha.org.
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with many years of wastewater experience,” Rickabaugh said. “Every time we did a wrap-up, people took different things away—different technologies or financing opportunities. They also got opportunities to network.”

What led to success?

Just what elements contributed to this success? Here are some of the items noted by sponsors, presenters, and participants.

Local support and promotion. First of all, you have to get people to come. “The key is having local assistance—have some representative in the regional area who would promote the program or course,” King said. Particularly for a state-wide or larger training effort, it’s important to partner with local or regional groups. In Missouri, CDBG worked with the Regional Councils of Governments, also known as planning commissions in some states. Other “partner” groups might include county governments and the local Rural Community Assistance Program.

Personal contact from credible leaders within these organizations often provides the push that busy local officials need to sign up for training. “It was that personal contact that made the difference,” King said.

The reputation of the course or sponsor also makes a difference, according to Lindsay. “It’s not just personal contact, but if people had prior good training experiences, they would be more likely to attend.” In other words, organizations that consistently provide high quality training improve their odds for repeat customers.

“It’s also important to get notices out to a broad group of people,” Lindsay said. “The times we didn’t have a lot of response, we didn’t reach a broad range of people.”

Diverse group of participants. Getting a wide range of people paid off. Participants at the Missouri trainings included local officials—especially those trying to establish new systems, health department personnel, state outreach providers, contractors, wastewater operators, and consulting engineers, as well as staff from the state Rural Development office, planning commissions, state agencies, and rural electric cooperatives.

“Having a diverse group like that is a benefit [for this kind of course],” King said. “They can offer different perspectives. It helped participants to step outside of their own perspective and understand what motivates people to do things.

“One thing we emphasize is relationships and the importance of clear, honest communication—between officials and citizens, or officials and engineers—so the project can go smoothly,” continued King. “So a lot of emphasis is on trying to understand the other’s perspective and prevent conflicts from arising in the first place.”

Participants with diverse expertise can also add to the content, he noted. Operators, for instance, can validate the technical information.

Elaine Kahler, city clerk of Kimberling City, said she learned a great deal from the exchanges between presenters and other course participants. “It enlightened me tremendously on what was out there already—the people and technology—and the problems people have had both in geography and technology,” she said. “Our particular area is very hilly and others are very level, so what works in one area may not work in another due to terrain or rocky soil.”

Comprehensive curriculum. NETCSC’s “Assessing Wastewater Options for Small Communities” course covers a broad spectrum of information, but in simple, understandable language. “It’s one of the most comprehensive looks at the big picture of wastewater issues and decision making,” said MaryAlice Dunn, NETCSC training specialist. The course doesn’t just address technical issues or financial topics, but pulls it all together. “This has consistently come out as a strength of this course,” she said.

“The course does not favor one technology over another,” she continued. “It examines an array of choices from small package plants continued on next page
to private onsite septic systems.”

The course also emphasizes the cost of maintenance and repair over the life of the system, she said.

This big picture look at all aspects of wastewater treatment is crucial to a system’s ability to operate effectively over the long term. Both King and Lindsay emphasized this need for good, long-term management. “It doesn’t matter so much how you put your system together—which technology you use—but the message is, you have to have maintenance, and you have to have management,” Lindsay said.

Indeed, it was this emphasis on technical, managerial, and financial capacity—or “TMF,” as Rickabaugh calls it—that CDBG wanted to share with communities in the state.

Flexible curriculum. A flexible curriculum allows trainers to vary each session to meet the needs of that particular group, noted Lindsay. The first thing she does when she trains is to ask participants what they hope to get out of the course.

“If there are a lot of county officials interested in onsite systems, I can focus on that technology for that group,” she said.

Some flexibilities in NETCSC’s “Assessing Wastewater Options for Small Communities” course include:

• stand-alone modules;
• case studies that may be used directly or replaced by a state- or region-specific case;
• a PowerPoint® presentation (on disk or from NETCSC’s Web site) that can be modified;
• appendices with supplemental technology descriptions and overhead masters, so the course can be modified to meet the needs of those in attendance;
• assessment instruments that can be used to assess various aspects of participants’ wastewater systems;
• a broad range of content, so topics of most interest can be emphasized; and
• a list of additional resources and contacts as well as quick reference sheets that participants can use to build their knowledge in the specific areas that interest them.

Lindsay noted that she was invited to Kansas to present this course, but the sponsors wanted to use a case study from their own state in place of the example in the NETCSC curriculum. “People want to hear about what’s happening in their own state,” she said.

Tap into state or local “experts.” In the Missouri trainings, the organizers brought in state officials or other “experts” to present certain segments of the curriculum. For instance, CDBG’s Rickabaugh or financial staff from the Department of Natural Resources (DNR) usually presented the financing options. And a group from the DNR’s Technical Assistance Program talked about applicable regulations.

This was another way that the course was tailored to provide state-specific information and also allowed agencies to describe their relevant programs and outreach.

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Assessing Wastewater Options for Small Communities: A Course for Local Decision Makers

“Assessing Wastewater Options for Small Communities: A Course for Local Decision Makers” is designed as a whole course, but its flexible components can be used in many ways. It can be presented as a “train-the-trainer” course or directly to local officials as a course for local decision makers.

Developed by the National Environmental Training Center for Small Communities (NETCSC), this course contains the following modules:

Module 1 – Introduction to Wastewater
Module 2 – The Facility Development Process
Module 3 – Viability and Assessment
Module 4 – Regulatory Requirements
Module 5 – The Consulting Engineer
Module 6 – Selection of Wastewater Technologies
Module 7 – Financing Options
Module 8 – Project Commitment

These modules are supplemented by a bibliography and six appendices:

Appendix A – Overhead Transparency Masters
Appendix B – Assessment Instruments
Appendix C – Wastewater Technologies
Appendix D – Technology and Finance Quick Reference Sheets
Appendix E – Publications and Other Resources
Appendix F – Sample Request for Proposals

The entire training package, which includes all of the materials listed above, costs $79, plus shipping. To order, call NETCSC at (800) 624-8301 or (304) 293-4191 and request Item #TRTPCD06.
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Timing. Is there some recent or upcoming development that could be linked to training? In Missouri, the three major water and wastewater funding agencies—CDBG, DNR, and Rural Development—formed a Water and Wastewater Review Committee approximately two years ago to coordinate infrastructure funding and project reviews better. Information about this new committee and its funding process was communicated at all of the Missouri training sessions. Presenters emphasized the need for communities—especially those seeking funds—to demonstrate their technical, managerial, and financial capacity to function effectively over the long-term.

According to Rickabaugh, the new review process has reduced the average time from the date a project was first proposed to the date it was actually funded. This time span used to range from two to three years, prior to the committee, to 266 days, as of fall 2000, he said. “People will go to training when it’s something they need and it relates to them—but the key is having materials that are timely,” Lindsay said. Another timely topic is drinking water, she said, as new provisions take effect that require more training for operator certification and recertification.

Selling points. The course offered some tangible benefits that also helped attract participants. First of all, it was free, as CDBG covered the cost. Secondly, participants—particularly operators—could earn continuing education units (CEUs). King worked with the Missouri DNR Technical Assistance Program to ensure that this course would provide certification credits for Missouri wastewater operators.

Dunn explained that any course NETCSC co-sponsors offers “official” CEUs, or continuing education credits issued from West Virginia University, where NETCSC is based. However, operator certification requirements vary by state, and most training courses must be pre-approved by the state’s operator certification agency to be accepted by that state. NETCSC’s “Assessing Wastewater Options for Local Communities” course is approved for such certification program credits in three additional states (New York, Texas, and Oregon), Dunn added.

Locating courses in different parts of the state and the single-day course length were additional selling points, Dunn said. “There is an advantage to participants when the sessions are offered within a short driving distance to their community. Many local officials have other jobs. Operators in small communities may be the only staff available, so being away from the job is a challenge.”

Feedback is positive

“We had a lot of positive feedback from all sectors, especially local officials. Some said, ‘I wish we would’ve had this three years ago,’” said King. “The most common thing people said,” added Lindsay, “is they didn’t know there were so many possibilities for dealing with their problems.” This was true for all aspects of the course, she said. “The technologies, financing—and ways to put together financing packages, what kind of assistance is out there for free, and how to work with consulting engineers.”

According to Kahler, of Kimberling City, “It helped me understand our project more. So when it’s being discussed, I have a better idea of what they’re talking about.”

And Rickabaugh has even seen some concrete results. “Proposals we’re seeing now seem better, more focused on what they’re trying to accomplish and applying TMF,” he said. He knows of at least two communities where someone attended the course and then submitted proposals that were funded.

For more information about NETCSC’s “Assessing Wastewater Options for Small Communities: A Course for Local Decision Makers,” see the Fall 2000 issue of E-train or visit NETCSC’s Web site at www.netc.wvu.edu. You also may contact MaryAlice Dunn, NETCSC training specialist, at (800) 624-8301 or (304) 293-4191, extension 5538, or via e-mail at mdunn@wvu.edu.
For trainers, technical assistance providers, and small community decision makers

Presented by the National Environmental Training Center for Small Communities (NETCSC)

August 6–10, 2001

Mountainlair Training and Conference Facility
West Virginia University
Morgantown, West Virginia

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Learn how to:

- run community water, wastewater, and solid waste services like a business;
- improve a system’s technical, financial, and managerial capabilities;
- meet new regulatory requirements;
- adapt financial accounting and reporting to meet Government Accounting Standards Board 34 (GASB);
- prepare capital improvement plans for small community infrastructure; and
- train local decision makers with specially designed materials and effective techniques for the classroom, at a distance, or one-on-one.

Institute Highlights

Assessing Wastewater Options for Small Communities: A Train-the-Trainer Course
August 6–7, 8:30 a.m. to 5 p.m.

This course prepares trainers and technical assistants to deliver both state- and geographically specific training in a group or one-on-one and to provide technical assistance and resources specific to small communities. Numerous options from conventional septic systems to small wastewater treatment packages are covered. Adult learning theories and delivery strategies will be discussed throughout the session. Topics include introduction to wastewater, facility development, working with consulting engineers, regulatory requirements, wastewater technologies, financing options, and project commitment. Wastewater facility tours will complement the course.

Instructors are Christopher C. King, M.S., C.E.T., director of the Center for Environmental Education and Training at St. Louis University School of Public Health, St. Louis, Missouri; and Lorene Lindsay, M.S., C.E.T., Silver Springs Environmental Services, Lake Ozark, Missouri.

Training Adults in Remote Classrooms: Demystifying Distance Delivery*
August 6, 10 a.m. to 5 p.m.
(*To be confirmed)

Participants will examine adult learning principles in a highly interactive videoconferencing environment. The session will be held in one electronic classroom and broadcast simultaneously to a remote classroom. Using state-of-the-art equipment, the course will cover how to adapt training materials and visual aids to a videoconference format, how to use strategies applicable to this setting, and how to engage learners at a distance. (An additional fee of $119 applies to this course.)

Assessing Wastewater Options for Small Communities: A Videoconference Course for Local Officials
August 6, 6:30 to 9:30 p.m.

This course, delivered via state-of-the-art two-way videoconference, will assist local decision-makers in the assessment, selection, and actions related to wastewater options in communities with fewer than 10,000 residents. Topics include an
introduction to wastewater, the facility development process, assessing community needs and resources, and wastewater technologies. Instructors will present the course at a site in Morgantown, West Virginia, while broadcasting to a remote classroom in Shepherdstown, West Virginia. Participants in both classrooms will be able to see and interact with instructors and other local officials, as well as actively participate throughout the session.

Instructors are Christopher C. King, M.S., C.E.T., director of the Center for Environmental Education and Training at St. Louis University School of Public Health, St. Louis, Missouri; and Lorene Lindsay, M.S., C.E.T., Silver Springs Environmental Services, Lake Ozark, Missouri.

### Training Strategies for Achieving Results
**August 7, 8:30 a.m. to noon**

This train-the-trainer course offers instructional strategies for delivering the course, “Managing a Small Drinking Water System: A Short Course for Local Officials,” to local decision makers. Topics include determining desired training results, using performance objectives, effective learning activities, questioning techniques, and coping with varying experience levels in the classroom.

Instructor to be announced.

### Capital Improvements Planning and Long-Term System Capacity: A Course of the Environmental Finance Center for Region 3
**August 7, 1:30 to 4:30 p.m. and August 9, 8:30 to 11:30 a.m.**

This session presents an overview of preparing a capital improvements plan (CIP) and how the CIP relates to the water, wastewater, and/or solid waste system’s sustainability. Also emphasized is why a CIP is important even for a small community, how to prepare a CIP for the first time, and how to build public support for the plan.

Instructor is Jean S. Holloway, training manager, U.S. Environmental Protection Agency, Region 3, Environmental Finance Center, University System of Maryland, College Park, Maryland.

### Managing a Small Drinking Water System: Responsibilities, Regulations, and Technical Capacity
**August 8, 8:30 a.m. to 5 p.m.**

This course examines local officials’ responsibilities and liabilities for providing safe drinking water to their communities. A brief history of drinking water regulations, a review of current and future requirements, and technical capacity provisions of the 1996 Safe Drinking Water Act Amendments also are included. Technical issues to be covered are the basics of a drinking water system—source water, source water protection issues, treatment and distribution processes—and key operation and maintenance (O&M) issues, including treatment and distribution system O&M, sampling/testing, operator training, recordkeeping, and system evaluations and assessments.

Instructors are Jean S. Holloway, training manager, U.S. Environmental Protection Agency, Region 3, Environmental Finance Center, University System of Maryland, College Park, Maryland; and Philip Walsack, rural development specialist—environmental, Rural Community Assistance Corporation, Carson City, Nevada.

### Managing a Small Drinking Water System: Financial Capacity
**August 9, 8:30 a.m. to 5 p.m.**

This session focuses on basic financial management issues and practices that will help local officials run their small water systems like a business and achieve financial capacity. Financial management topics include budgets, accounting options, rate structures, the process of setting and changing rates, building customer support for rate increases, cost recovery techniques, and annual audits. Also included are how to identify and choose financing options for system projects or upgrades and the funding application process.

Instructor is Bill Jarocki, director, U.S. Environmental Protection Agency, Region 10, Environmental Finance Center, Boise State University, Boise, Idaho.

### Solid Waste Management Options for Small Communities
**August 9–10, 8:30 a.m. to 5 p.m.**

This overview course helps local decision makers make informed decisions about designing and implementing solid waste services. Topics include recycling, composting, landfills, combustion, waste stream characterization, collection sites and routes, transfer stations, litter prevention, and source reduction. The course is structured to allow both decision makers interested in the course content and trainers interested in presenting the course to participate. Breakout sessions will allow local decision makers to discuss the content in greater detail or to guide trainers on offering the course. A solid waste facility tour will complement the course.

Instructors are Rhonda Sherman-Huntoon, M.A., solid waste extension specialist, North Carolina State University, Raleigh, North Carolina; and Gerald Doeksen, Ph.D., regents professor and extension economist, Oklahoma State University, Stillwater, Oklahoma.

### Managing a Small Drinking Water System: Managerial Capacity
**August 10, 8:30 a.m. to 5 p.m.**

This course covers key administrative and management practices that will help local officials...
achieve and maintain managerial capacity. Topics include business plans, capital improvement plans and restructuring, managing people, and key elements of communicating with the public, including public communication methods, keeping community members informed about water issues, and responding to community concerns.

Instructor is Tommy Ricks, development/management specialist, Community Resource Group—Southern Rural Community Assistance Program, Crystal Springs, Mississippi.

**Luncheon Panel Discussion: Onsite Wastewater Management—The Wave of the Future**
*August 8, noon to 2 p.m.*

This panel discussion will address core concepts, principles, policies, practices, and procedures of onsite wastewater management. Experts representing a diverse range of onsite perspectives and experiences will share key insights into effective onsite management initiatives.

Moderator will be Graham Knowles, program coordinator for the National Onsite Demonstration Program at the National Environmental Services Center.

**Panel Discussion: What on Earth Is GASB 34 and Why Should You Care?**
*August 8, 2 to 5 p.m.*

A panel of experts will discuss the Government Accounting Standards Board Statement No. 34 (GASB 34), which sets new financial accounting and reporting standards for state and local governments. Panel members will answer questions and explain the meaning of GASB 34, how it will impact small community environmental systems, and what types of resources are available to help small communities meet the requirements. This session is co-sponsored by the National Drinking Water Clearinghouse and NETCSC.

**Facility Tours**
*August 8, 9 a.m. to 5 p.m.*

Tours to a small, centralized wastewater treatment plant, a demonstration site for onsite wastewater treatment, and solid waste recycling processing facilities are planned.

**Who should attend?**

The Institute training courses are designed for those who train or provide assistance about environmental system management to local/elected officials and decision makers in small communities. Trainers and assistance providers as well as small community decision makers who are new to the job or new to wastewater, drinking water, and solid waste management issues will benefit from the Institute. The courses will help attendees increase their understanding of the topics, master effective training strategies, and learn how to use NETCSC’s training materials.

**Registration Fees**

The general registration fee is $229. The videoconferencing course, “Training Adults in Remote Classrooms: Demystifying Distance Delivery,” requires an additional fee of $119.

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**Institute Schedule of Events**

**Monday, August 6**
8:30 a.m. – 5 p.m.  Assessing Wastewater Options for Small Communities: A Train-the-Trainer Course
10 a.m. – 5 p.m.  Training Adults in Remote Classrooms: Demystifying Distance Delivery
6:30 – 9:30 p.m.  Assessing Wastewater Options for Small Communities: A Videoconference Course for Local Officials

**Tuesday, August 7**
8:30 a.m. – 5 p.m.  Assessing Wastewater Options for Small Communities: A Train-the-Trainer Course
(continued)
8:30 a.m. – noon  Training Strategies for Achieving Results
1:30 – 4:30 p.m.  Capital Improvements Planning and Long-Term System Capacity: A Course of the Environmental Finance Center for Region 3

**Wednesday, August 8**
8:30 a.m. – 5 p.m.  Managing a Small Drinking Water System: Responsibilities, Regulations, and Technical Capacity
noon – 2 p.m.  Luncheon Panel Discussion: Onsite Wastewater Management—The Wave of the Future
2 – 5 p.m.  Panel Discussion: What on Earth Is GASB 34 and Why Should You Care?
9 a.m. – 5 p.m.  Facility Tours
6 – 9:30 p.m.  Barbecue at Coopers Rock State Forest

**Thursday, August 9**
8:30 a.m. – 5 p.m.  Solid Waste Management Options for Small Communities
8:30 a.m. – 5 p.m.  Managing a Small Drinking Water System: Financial Capacity
8:30 – 11:30 a.m.  Capital Improvements Planning and Long-Term System Capacity: A Course of the Environmental Finance Center for Region 3

**Friday, August 10**
8:30 a.m. – 5 p.m.  Solid Waste Management Options for Small Communities (continued)
8:30 a.m. – 5 p.m.  Managing a Small Drinking Water System: Managerial Capacity
Location
The Institute is held at the Mountainlair Training and Conference Facility located on West Virginia University’s downtown campus in Morgantown, West Virginia. Morgantown is 75 miles south of the Pittsburgh (Pennsylvania) International Airport. Commuter air service to Morgantown is available.

Exhibit Hall
The Institute’s Exhibit Hall will showcase services and resources for small community/small system wastewater, drinking water, and solid waste topics. Exhibitors will include:

- the National Environmental Training Center for Small Communities, the National Drinking Water Clearinghouse, the National Small Flows Clearinghouse, and the National Onsite Demonstration Program. Together, these organizations offer the most comprehensive information and resources in the country about small community water and wastewater issues.
- U.S. Environmental Protection Agency Region 3 Environmental Finance Center (University of Maryland) and Region 10 Environmental Finance Center (Boise State University). These EFCs provide financial management resources and information for small community environmental projects.
- E-train (a free quarterly newsletter) and other products, the Internet, and presentations around the country about small community water and wastewater issues.
- The National Environmental Training Center (NETCSC) is a nonprofit organization that helps environmental trainers, assistance providers, and local officials improve the quality of drinking water, wastewater, and solid waste services for small communities. NETCSC offers environmental training sessions and training curricula for small communities, as well as extensive information about environmental courses, resources, trainers, training organizations, and training activities across the country.

NETCSC training experts dispense information through a toll-free hotline, publications such as E-train (a free quarterly newsletter) and other products, the Internet, and presentations around the country at conferences and meetings.

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Co-sponsors for the 2001 Environmental Training Institute for Small Communities include:
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- Center for Environmental Education and Training, St. Louis University School of Public Health, St. Louis, Missouri
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Federal program aids small system operators

by P.J. Cameon
NETCSC Contributing Writer

A U.S. Environmental Protection Agency (EPA) training program for small wastewater systems is crucial to the effort to keep those systems in compliance with federal discharge standards.

Commonly referred to as the 104(g) program, the Wastewater Treatment Operator Training Program awards grants to training centers, state environmental agencies, and nonprofit groups, which in turn provide onsite assistance to system operators. Training personnel cover operation and maintenance, financial, and various technical issues that help these systems achieve and maintain compliance.

Hundreds of small wastewater systems receive 104(g) program assistance each year, according to the recent report, 1999 National Evaluation of the Wastewater Operator 104(g)(1) Training Program. The report was prepared last year by the Maryland Center for Environmental Training at the College of Southern Maryland.

A brief history

The 104(g)(1) training program began as a response to continued compliance problems that followed the huge federal investment in wastewater treatment infrastructure through the former Construction Grants Program. Officials found that the new infrastructure may not be effective without trained personnel to operate and maintain it.

The need for the training program is as significant as ever as treatment plants employ new strategies to become compliant or maintain compliance. These treatment strategies may require operational skills that the systems’ personnel do not possess.

The 104(g) program, by providing training at the site, is especially appropriate for providing assistance to systems with advanced treatment components.

Ramah, New Mexico

The assistance given to wastewater officials in Ramah, a town of nearly 800 people located in a scenic valley in western New Mexico, is just one example of how 104(g) technical assistance providers help small communities address their wastewater treatment issues.

Plant officials were concerned that Ramah’s unlined lagoon cells were allowing effluent to impact groundwater quality in the area, which often sees a three-foot water table. Personnel from New Mexico’s Water Utilities Technical Assistance Program (WUTAP) worked with system officials to help them explore treatment options, locate funding, and understand regulations.

“Ramah is a few weeks away from constructing a package treatment plant that will allow the facility to meet requirements for surface discharge,” says Robert George, a 104(g) trainer with WUTAP who has been assisting the community since 1985. “However, the town’s long range plan is to impound the treated wastewater and obtain a groundwater discharge permit so the effluent can be used for irrigation.”

According to George, 104(g) trainers serve as a sounding board for Ramah officials, “giving advice about their options, but the decisions are made by the town.” In addition to providing operator training, WUTAP trainers have helped Ramah officials realize the importance of having a consulting engineer, identify possible funding sources, understand complicated sludge regulations, and deal with a variety of technical issues.

A listing of organizations that provide 104(g) training to small systems is available from EPA’s Web site located at www.epa.gov/owm/tomm.htm. The report, 1999 National Evaluation of the Wastewater Operator 104(g)(1) Training Program, is also available on EPA’s Web site at www.epa.gov/owm/104g/npe.htm. A hard copy of the report may be obtained for a small delivery fee by contacting the National Technical Information Service at (800) 553-6847.

18th Annual Wastewater Operator Trainers’ Conference set

The 18th Annual Wastewater Operator Trainers’ Conference will take place June 10 to 13 in Philadelphia, Pennsylvania.

This year’s conference will include sessions about predictive and preventative maintenance, problem solving through alternate analysis, and several technology transfer sessions.

Curt Baranowski, project officer for the Environmental Protection Agency’s (EPA) Wastewater Treatment Operator Training Program, will discuss 104(g) success stories. Richard Phalunas, Ph.D., director of the National Environmental Training Center for Small Communities (NETCSC) will discuss how NETCSC can assist small communities.

For more information about the conference, contact Jerry Williams, director of the Environmental Institute at Delaware Technical and Community College, at (302) 855-5904 or via e-mail at jwilliam@outland.dtcc.edu.
Web sites explore distance education

Distance education is becoming a more and more attractive alternative for environmental trainers who need to reach diverse audiences that are often spread out over a wide geographic area. The following Web sites provide helpful information for trainers who want to explore the possibilities of using distance education.

American Society for Training and Development

The official Web site of the American Society for Training and Development (ASTD), this site, located at www.astd.org, provides information about periodicals, books, newsletters, research reports, and videotapes available through ASTD. It also provides an online virtual community for discussions, information exchanges, and networking for trainers.

Distance Education: A Primer

A University of Texas Web site, this site (www.utexas.edu/cc/cit/de/deprimer/bibliography.html) provides useful information about distance education technology and a bibliography of resources on distance education. Links to model programs as well as programs offered within the University of Texas system also are available.

Distance Education at a Glance

Presented by the Engineering Outreach Program at the University of Idaho, this Web site is located at www.uidaho.edu/evo/distglan.html. This site provides a series of 14 online guides based on Barry Willis’ books, Distance Education: Strategies and Tools and Distance Education: A Practical Guide.

Distance Education Clearinghouse

This University of Wisconsin Extension Service Web site at www.uwex.edu/disted/home.html provides articles written by authors worldwide, annotated lists, and collections of bibliographies. It also provides links to online journals, newsletters, and magazines about distance education, as well as electronic mailing lists and discussion groups.

Center for Excellence in Distance Learning

This Web site, located at www.lucent.com/cedl/index.html, provides information about distance learning technologies and articles related to distance learning. Examples of articles include “Strategies for Implementing Teletraining Systems,” “Designing for International Teletraining,” and “10 Tips for Implementing a Distance Learning Program.” This site also provides access to the Distance Learning Alliance.

Distance Education and Training Council

The Distance Education and Training Council (formerly the National Home Study Council) is a nonprofit educational association located in Washington, D.C.

DETC’s Web site, located at www.detc.org, provides information about the distance study and correspondence field. It also provides access to the Accrediting Commission of the Distance Education and Training Council.

On-line Chronicle of Distance Education and Communication

This Web site (www.fcae.nova.edu/disted/) produced by the Nova Southeastern University provides an information exchange related to distance education and online communication. It also provides links to other distance education resources, providers, and relevant online journals, magazines, and newsletters.

United States Distance Learning Association

The United States Distance Learning Association (USDLA) is a nonprofit association striving to promote the development and application of distance learning for education and training. USDLA’s Web site, located at www.usdla.org/, provides information and links to distance education as well as access to ED: Education at the Distance, the official USDLA’s journal published electronically 12 times per year.

Wired Learning in the Classroom & Library Publications and Presentations

This Pacific Bell Web site provides a list of publications, presentations, and links related to videoconferencing. The site is located at www.kw.pacbell.com/wired/pubs.html.

For more information and resources about distance education, order Distance Learning and Environmental Training: A Resource Guide (Item #TRBLGN19) from the National Environmental Training Center for Small Communities. The guide costs $7.20. To order, call NETCSC at (800) 624-8301 or (304) 293-4191 or send e-mail to netc_orders@mail.nesc.wvu.edu.
Many environmental trainers want to learn more about videoconferencing. This distance learning technology offers trainers the potential to reach many learners over wide geographical distances at the same time. The potential of bringing state-of-the-art training to small towns and rural areas makes videoconferencing an attractive option for trainers and learners alike. However, the equipment, technological considerations, and training implications of using videoconferencing can intimidate even the most experienced environmental trainers.

Fortunately, the manual, Videoconference Techniques for Environmental Trainers, can help. This resource provides a basic understanding of the technology involved with videoconferencing as well as helpful information for the more advanced videoconference trainer. Developed by George Maughan, Ed.D., president of Training Consultants, Inc, the manual is easy to use and provides plenty of illustrations. Sample planning and assessment forms will help trainers understand how to plan for and conduct videoconferencing.

“The manual is arranged into modules to allow trainers to turn to the section they want to review,” says Maughan. “Short content sections provide succinct overviews of most aspects of planning and using videoconference systems for environmental training.”

Some of the topics covered in the manual include:
- Training at a Distance,
- Distance Learning Technology,
- Learner Attitudes,
- Interactive Strategies, and
- On-Air Problems.

This information will help to alleviate many of the fears and concerns trainers might have about using this new technology. To help trainers get up to speed on the topic, Maughan has included a listing of videoconferencing system/equipment vendors as well as a glossary of key words associated with the technology.

For those trainers who are undecided about using videoconferencing for a particular training session, the manual offers a 20-question checklist to help with this decision. The questions include everything from logistical concerns (such as participant registration) to facility planning (staffing and skills necessary for the training). Helpful worksheets allow the trainer to assess the capacity of an existing videoconferencing system, plan the sequence of content material, and learn how to interact with students at remote sites.

Videoconference Techniques for Environmental Trainers may be used as a self-study aid or as a complement to an actual train-the-trainer session. The manual will help trainers plan strategically for using the technology as well as tailor subject matter and adapt information for video delivery. Using this workbook will help trainers to build their confidence in using videoconferencing technology.

Maughan used the manual as part of the videoconference course, “Training Adults in Remote Classrooms: Demystifying Distance Delivery,” which was held last August as part of the Environmental Training Institute for Small Communities in Morgantown, West Virginia. “Each module was brought to life through examples and demonstrations. Participants at a distance used the manual in the flow of the videoconference, marking up the margins and completing some of the exercises,” says Maughan.

Videoconference Techniques for Environmental Trainers (Item #TRBLGN21) is part of Maughan’s Training Effectiveness Series, developed specifically for environmental trainers.

The manual is available from the National Environmental Training Center for Small Communities (NETCSC) and costs $15.00. For more information about the manual or to place an order, call NETCSC at (800) 624-8301 or (304) 293-4191.
Why local officials benefit from training

Editor’s Note: The National Environmental Training Center for Small Communities (NETCSC) is celebrating its 10th year of service to America’s small communities. In this issue’s look back at the past, we revisit an article by Gerald Doeksen, Ph.D., regents professor and Extension economist at Oklahoma State University in Stillwater, Oklahoma, that appeared in the March 1993 E-train.

In his original article, Dr. Doeksen examined the many issues that local officials faced in the small community of Antlers, Oklahoma, and outlined why it is so important that local officials receive training. With the help of Fred Eilrich, assistant Extension specialist at Oklahoma State University, we have updated the article to reflect Antlers’ situation eight years later. We found that Antlers’ population has decreased, the town’s operating budget has increased, there are a few new faces on the city council as well as a new city manager, and a major economic development effort is underway.

According to Doeksen, turnover in local government and increasingly complicated environmental regulations makes the need for training even more pressing today. Hamilton Brown, director of training and technical assistance for the National Center for Small Communities, a division of the National Association of Town and Townships, agrees.

“Eighty percent of local officials serve on a part-time or volunteer basis, and many of them do not have any background in the issues they will make decisions about. Local officials need training that is accessible and presented in language they can understand. If they cannot understand the nature of the problem, they are not going to be able to make sound decisions to solve the problem and to sell their decisions to the public.”

Antlers is a typical small community located in southeastern Oklahoma and serves as the county seat of Pushmataha County. In 1990, Antlers had a population of 2,706, and like most small, rural communities, its population is getting even smaller. The estimated population for 1999 was 2,591 citizens. Antlers’ economic base is primarily agricultural and the community is striving to survive in an era of difficult economic times.

The community is operated by a city manager directed by a five-member city council, all of whom had full-time jobs during their tenure and thus conducted their community work after hours. (Antlers is unique in that three of its council members have been involved in local government for at least 10 years. More often, local officials in small communities have little or no experience with running and managing a community.) The council consists of a retired car dealer, a retired state highway department employee, a retired school secretary, a self-employed businessman, and a homemaker. They are extremely dedicated Antler citizens who want to provide the best services possible for the community residents. The city manager has been on the job for about one year and has no prior experience in city management.

The importance of the job of these council members takes on greater magnitude when we look at the budget they oversee. The annual budget for Antlers is about $1.4 million. With this, the community provides water, sewer, solid waste collection and disposal, police protection, a fire department, and construction and maintenance of streets, parks, etc. In short, running a small community is big business, involving a large amount of public dollars.

The annual budget of Antlers does not include money for the large capital investments that the community has to make. City council members are ultimately responsible for making decisions about these investments—the largest often being decisions relative to the water and wastewater treatment plants. Decisions on capital investments often infer taking on a large amount of debt.

Even though the city council members have a city manager and other staff members to help them, it is imperative that they receive training that will assist them in making the important decisions they are required to make. Their job is extremely difficult, and they will need to make informed decisions on many issues.

For example, the knowledge they need ranges from understanding the open meeting law to understanding the merits of various alternative water treatment facilities. For the latter, they are not expected to be engineers, but must be sufficiently knowledgeable to make the decision that will be most appropriate for the community.

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Editor’s Note: The following resources are available from the National Environmental Training Center for Small Communities (NETCSC). To order, write to NETCSC, West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064; call (800) 624-8301 or (304) 293-4191; fax (304) 293-3161; or e-mail netc_orders@mail.nesc.wvu.edu.

Solid Waste Management Options for Local Officials
Sponsored by the National Environmental Training Center for Small Communities

Course Content: Most small communities no longer use the local landfill as an open dump. The solid waste stream may contain recyclable, compostable, and hazardous materials from residences, businesses, and industry. “Solid Waste Management Options for Local Officials” will help local leaders assess their current and future needs, identify options, and develop a program that is right for their community.

This curriculum covers the following topics:
- collection—location, routes, frequency, facilities/equipment;
- transfer stations—types, siting;
- source reduction;
- recycling—storage, recovery, marketing;
- composting—backyard, centralized, other options;
- landfills—public versus private, siting, design, monitoring;
- combustion;
- local, regional, and federal government roles; and
- solid waste management planning.

Training Package: This curriculum is divided into five modules for approximately nine contact hours. It consists of a trainer’s guide and participant’s manual. The trainer’s guide contains the participant text plus instructional notes and overhead masters. In most cases, the trainer will need to tailor the curriculum to meet local needs. The participant’s manual contains practical information about solid waste management, and includes checklists, case studies, and exercises.

Item #TRTPCD24
Complete Training Package....................$66.00
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Item #TRSWCD53
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Why local officials benefit from training

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In addition to understanding the budget-making process, funding options, and capital budgeting and planning, the council members must understand how local governments work. They must understand community business operations; zoning laws and how to plan land use; and they must have a basic understanding of all the services which the community of Antlers provides for its citizens—water, wastewater, solid waste, police, etc. It also would be useful if these decision makers were trained in conflict management. Many of the issues they deal with are emotional ones for the residents who will come before the council to argue for or against an issue.

Antlers’ council members now are involved in economic development issues to make improvements and to meet the ever-changing challenges faced by rural communities with a decreasing population and a sinking economic base. Citizens and leaders of Antlers have joined with others from throughout the county to form a leadership team—the Pushmataha Development Initiative. The training received by members of the team proved to be quite successful as an industrial park was formed and new businesses were recruited to create jobs and boost the economy. However, this success has revealed new challenges and resulted in a need for additional training so that grants may be secured to provide the necessary infrastructure to continue these economic development efforts.

In summary, training is imperative for local officials. If community leaders receive this training, it will be easier for them to make informed decisions and use the local dollars efficiently. If they are not trained, it is the residents of the community who will suffer the consequences of poor decision making, perhaps for many years to come.
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E-train seeks editorial review board members

**E-train**, the National Environmental Training Center for Small Communities’ (NETCSC) quarterly newsletter, is in its ninth year of reaching a national readership with news and feature articles about small community environmental training issues. Because NETCSC is committed to continuing to produce and distribute a high-quality publication, it is seeking members for its new *E-train* editorial review board.

Board members will review *E-train* issues and provide comments and recommendations for improvements; recommend technical, training, and non-technical news and feature articles; identify relevant issues, trends, debates, and ideas; and serve as a resource for timely information, new ideas, and article leads. The review board will be composed of five to eight at-large members who reflect the diversity of the newsletter’s readership and three ex-officio members, including the *E-train* editor, NETCSC’s director, and NETCSC’s U.S. Environmental Protection Agency project officer.

Board members will serve a three-year term. Board members’ service is gratis, but members will be reimbursed for expenses, such as travel or postage, that are incurred by serving on the board.

For more information about the *E-train* editorial review board or to submit a letter of interest, please contact Richard Phalunas, Ed.D., NETCSC director, at (800) 624-8301 or (304) 293-4191 or via e-mail at rphaluna@wvu.edu.

Cut or copy this coupon and send it to the *E-train* editor at the address below or fax it to (304) 293-3161.