Securing environmental infrastructure has been a high priority for the nation since the terrorist attacks in September 2001. The recent natural disasters of Hurricanes Katrina and Rita only serve to reinforce the importance of emergency preparedness. Whether instigated by humans or delivered by Mother Nature, disasters will strike, and water and wastewater systems—no matter how large or small—need to be prepared.

A colorful new poster is now available from the National Environmental Services Center (NESC) to help small wastewater systems improve their security and be prepared to respond to an emergency. The vast majority of wastewater systems in the U.S. are small systems, and this poster is targeted toward systems that serve 10,000 or fewer people.

Funded by the U.S. Environmental Protection Agency (EPA) and developed by NESC and a panel of national wastewater security experts, Ten Steps to Maintain Critical Wastewater Services and Protect Public Health was designed as a tool for use by local officials and wastewater treatment operators to improve security and emergency preparedness in their communities.

EPA encourages all wastewater systems to conduct a vulnerability assessment and take appropriate steps to improve security and emergency preparedness. Following the 10 steps listed on the poster is a good start for any system.

“This top 10 poster is a supplement to existing wastewater resources and one that may be particularly useful in reaching those small wastewater systems that have been reluctant to conduct full vulnerability assessments,” says John Hoornbeek, Ph.D., NESC’s director of training. “The poster identifies 10 actions that apply to systems across the country, improve emergency preparedness and security among these systems, and can be implemented by smaller wastewater systems.”

The poster, which measures approximately 20 by 20 inches, lists in bold print the 10 steps systems should take to prepare for an emergency. It also includes 10 pocket cards that list the 10 steps and provide space to write an emergency contact list.

Hard copies of the poster are available at no charge for a limited time from NESC. To order, call NESC at (800) 624-8301 or (304) 293-4191 and request Item #PROJ8010. Printable versions of the poster and pocket cards can also be downloaded from NESC’s Web site located at www.nesc.wvu.edu/netcsc/netcsc_index.htm.

Additional information about improving security and emergency preparedness is available on EPA’s Web site located at www.epa.gov/safewater.
A maintenance check can sometimes catch problems before they affect water quality. NGWA provides well maintenance information and tips on its Web site, located at www.wellowner.org. A typical well maintenance checklist should include:

- a flow test to determine system output, including a check of the water level before and during pumping (if possible);
- a check of the pump motor performance (check amp load, grounding, and line voltage), pressure tank and pressure switch contact, and general water quality (odor, cloudiness, etc.);
- an inspection of well equipment to assure that it is sanitary and meets local code requirements;
- a test of the water for coliform bacteria, nitrates, and anything else of local concern; and
- a concise, clear, written report delivered to you following the checkup that explains results and recommendations and includes all laboratory and other test results.

To learn more about proper well construction, maintenance, and water quality, go to www.wellowner.org.

### Calendar of Events

#### Journal of Solid Waste Technology and Management and Widener University’s 21st International Conference on Solid Waste Technology and Management

- **March 26 – 29**
  - Philadelphia, PA
  - (610) 499-4042
  - www.widener.edu/solid.waste

#### U.S. Inter-American Association of Sanitary Engineering and Environmental Engineering’s 2006 Regional Conference—Emerging Technologies for Sustainable Environmental Quality

- **March 28 – 31**
  - Chicago, IL
  - (301) 252-7543
  - www.aidis-usa.org

#### National Rural Health Association’s 2006 Annual Conference

- **May 17 – 19**
  - Reno, NE
  - (816) 756-3140
  - www.nrharural.org

#### American Water Works Association’s 2006 Annual Conference

- **June 11 – 15**
  - San Antonio, TX
  - (800) 926-7337
  - www.awwa.org

#### National Environmental Health Association’s 2006 70th Annual Educational Conference and Exhibition

- **June 25 – 28**
  - San Antonio, TX
  - (303) 756-9090
  - www.neha.org

#### National Environmental Services Center’s 2006 Environmental Training Institute for Small Communities

- **July 25 – 28**
  - Morgantown, WV
  - (800) 624-8301 or (304) 293-4191, ext. 5536
  - www.nesc.wvu.edu/netcsc/netcsc_index.htm

#### National Onsite Wastewater Recycling Association’s Annual Conference

- **August 28 – 30**
  - Denver, CO
  - (612) 625-7243
  - www.nowra.org

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E-mail is printed on recycled paper.

Equal Opportunity/Affirmative Action Institution
RCAP offers security toolbox for small systems

The Rural Community Assistance Partnership (RCAP) now offers a simple, user-friendly resource to help small water and wastewater systems improve their security and prepare for disasters and other unforeseen events. Security and Emergency Response Planning Toolbox for Small Water and Wastewater Systems is available free for download from RCAP’s Web site located at www.rcap.org.

The security toolbox consists of five core modules plus appendices:

- a simple and practical vulnerability assessment (VA) guide for small water systems, which is also applicable to wastewater systems;
- emergency response planning (ERP) instructions for small drinking water systems;
- an emergency response planning template for small drinking water systems;
- emergency response planning instructions for small wastewater systems; and
- an emergency response planning template for small wastewater systems.

The instructions demonstrate how to conduct the procedures, and the templates are blank and identical to the forms in the instructions. The templates can be printed and completed by hand or saved on a computer and filled in by typing into the saved document. The templates also contain a page to certify that the process has been completed.

In addition, the appendices include resources, a glossary, an emergency notification and contact list, an eBulletin subscription form, and training presentations.

Some state agencies now require that small water and wastewater systems (those serving populations of 3,300 or fewer) certify completion of a VA and ERP. Certification of completing a VA and ERP is also a prerequisite for funding from the U.S. Department of Agriculture. RCAP’s security toolbox is designed to be a simple, user-friendly resource that can help small systems meet these requirements and operate and manage their water and wastewater systems securely and efficiently.

EPA publishes new CMOM guide for SSO


The guide is designed to encourage EPA regions and states to use a CMOM approach for implementing a performance-based strategy for handling sanitary sewer overflows (SSO).

According to EPA, this guidance document is a compliance monitoring tool for use by federal and state inspectors and a compliance assistance tool for use by the regulated community—owners or operators of sewer systems collecting domestic sewage. The guide will also be useful for consultants, third party evaluators, and compliance assistance providers.

The guide identifies some of the criteria used by EPA inspectors to evaluate a collection system’s management, operation, and maintenance program activities. Owners and operators can review their own systems against the checklist provided in Chapter 3 to reduce the occurrence of sewer overflows and improve or maintain compliance. EPA recommends that key board members and policy makers read the guidance to better understand the benefits of investing in a CMOM program.

The CMOM guide is available at www.epa.gov/npdes/ssos. Click on the “Featured Case Studies, Fact Sheets and Other Information Link.” A limited number of hard copies is being made available through the National Service Center for Environmental Publications at (800) 490-9198 and the Office of Water Resource Center at (202) 566-1729.

EPA Web site offers environmental information

The U.S. Environmental Protection Agency’s (EPA) National Service Center for Environmental Publications (NSCEP) recently announced that new digital services are available through its Web site, http://nepis.epa.gov/.

More than 13,000 environmental publications are maintained in the center’s online archive. Users may now:

- search full text of documents online and locate specific and related publications,
- use a new “bookshelf” feature to recall saved links to online documents for future visits, and
- create PDFs of scanned documents for downloading and printing.

Environmental publications can also be ordered from NSCEP in hard copy, DVD, CD-ROM, and video at www.epa.gov/ncepihom/index.htm or by calling (800) 490-9198.
Mississippi training program helps small communities respond to Hurricane Katrina disaster

by Jill A. Ross
E-train Editor

A disaster on the scale of Hurricane Katrina makes everyone stop and pay attention. Seeing vivid images of what others have lost serves to remind us of what is really important in life—the safety of our loved ones, having a roof over our heads, and having clean water to drink. The crisis also points to the importance of what environmental trainers and technical assistance providers do on a daily basis.

These environmental professionals were on the front line of disaster recovery efforts in small communities hit by the storm where they were able to see firsthand the magnitude of the devastation. However, they were also able to see the results of their prior efforts in helping communities prepare for an emergency. Nowhere is this more evident than in Mississippi, one of the states hit hardest by Katrina and one of a few states that emphasizes—and even requires—local drinking water system personnel to attend management training.

Lorraine Magee, training coordinator for Community Resource Group, Inc., wanted to know what effect the training her organization provides had on the local officials—small drinking water system operators, board members, and staff—as they dealt with the hurricane disaster. “Part four of our six-module advanced training program covers emergency management—both internal and external threats to the system,” says Magee.

Shortly after the storm, Magee mailed a survey to the 139 people who had attended CRG’s Advanced Capacity Training (ACT) Program. She received 28 responses that were nearly unanimous in their feedback—the emergency management training had a positive effect on their ability to deal with the crisis. From knowing what to expect after going through mock drills to making sure back-up generators were available before the storm hit, most respondents indicated that the training helped them to deal with the crisis.

Specific survey findings showed:
• 93 percent of respondents felt that the training heightened their awareness of possible threats to their water systems,
• 96 percent of respondents felt that they had a better understanding of the need for emergency preparedness after the training,
• 93 percent of respondents indicated that the training helped them to be better prepared before and after Hurricane Katrina, and
• 96 percent of respondents reported that the training was helpful and relevant to their job.

According to the survey results, the emergency management training helped the training participants be prepared for the disaster in a number of ways. Seventy-nine percent of respondents said they had an emergency response plan in place, 53 percent indicated they had an incident command system in place, 43 percent reported they had provided emergency training for system employees, and 43 percent said they had a recovery plan in place.

Here are just a few of the comments received from Mississippi small drinking water system staff in response to the survey asking how emergency management training helped them to prepare for Hurricane Katrina:
• “I felt that because of this training and other similar trainings, we were better prepared to address the situation after the hurricane.”
• “We did pretty well. We had a back-up generator so we were still able to provide water.”
• “Having the opportunity to walk through mock drills really made it much easier to implement during the actual disaster.”
• “We moved a generator on site prior to the storm.”
• “Our customers were very appreciative of the water district during the storm. Although telephones and electricity were out, there was never a loss of water thanks to our men working around the clock and doing a great job keeping the system going.”
• “I would highly recommend that anyone associated with utility or sewer attend these classes.”
• “The hurricane showed that even though we were prepared, we definitely need more.”

Tom Johnson, a trainer with the Community Resource Group, Inc., chats with participants during an Advanced Capacity Training Program workshop. Photo courtesy of Lorraine Magee, Community Resource Group, Inc.

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Mississippi emphasizes board training

Mississippi has been at the forefront in recognizing the need to train local officials. The state legislature passed a law in 1997 requiring that all drinking water system board members take an eight-hour training course within two years of being elected or re-elected. The Mississippi State Department of Health (MSDH) oversees this training program, which is conducted by CRG and other technical assistance agencies, including the Mississippi Rural Water Association and the Mississippi Water and Pollution Control Operators Association. This mandatory training provides an introductory level orientation to board members’ legal, decision-making, and system oversight responsibilities. Topics covered include setting rates, planning for the future, and how to conduct board meetings.

Response to this mandatory training was overwhelmingly positive. Many local officials, when exiting the training, expressed a desire for more in-depth training on the topics. In 2001, CRG partnered with the MSDH and the

Small communities face enough challenges in providing environmental services to their residents. Now communities affected by Hurricanes Katrina and Rita are facing challenges unlike any they could ever imagine—cleaning up the devastation and restoring service to customers.

West Jackson County, located along the Mississippi coastline, took the full force of the storm. “Our water system was not damaged too badly,” says Rhanda Hertling, office manager for the West Jackson County Utility District. “We were up two days after the storm. Our sewer, however, is a different situation. We use individual grinder stations at each house. We lost 1,000 of our 6,000 customers simply because their houses were blown away.”

Tommy Fairfield, Jr., general manager for the utility district, is overseeing the reconstruction of the sewer system with the help of his five-member board of commissioners. In 2004, Fairfield and Rodney Lamey, utility board chairman, completed the Advanced Capacity Training (ACT) Program offered by the Community Resource Group, Inc. Both men received the “Certified Water Works Manager” designation after completing the training.

Did the training help them to prepare for and deal with the consequences of the disaster?

“It most definitely helped,” reports Lamey, a retired school teacher who has been on the board for two years. “The things that we talked about that could happen, have happened. We’ve had to prepare for the storm, manage the disaster, and deal with insurance agencies.”

Lamey points out that the utility was prepared before Katrina. “The training really opened our eyes. We became a lot more concerned. We got hot and heavy on acquiring our generator. We also had a meeting with the power company. We wanted to find out where we were as a priority on their list. They assured us that they would work with us. That gave us more confidence,” says Lamey.

Fairfield agrees that the training helped. “The training makes sure you’ve taken a look at your insurances for risk management,” he says. “It helps you to run your facility more efficiently. It helps you before the disaster arrives.”

Fairfield admits there is a significant challenge ahead of the district as it works to replace the damaged grinder pumps for their customers who want to rebuild. “It took one full year to get the system in the ground and it’s only five years old. We can’t replace it overnight.”

Between utility staff and contractors, Fairfield reports that 60 FEMA trailers are being hooked up to wastewater service each week allowing residents to move back on their property.

Despite the challenges, Fairfield believes the utility is in good shape. “As far as adjacent communities, we’re able to pay our bills. We’re in good shape compared to them.”

Fairfield notes that the ACT Program prepared him and his management staff for all the questions—financial, insurance, personnel—that arose. “It’s real good training. If I had not had it, it would have made it more difficult when the catastrophe came up. By taking the training, we were more prepared.”

He also points out the importance of following through on the training. “You have to have the discipline to go home and do it,” he says. “They provided the manuals. I got the book out a number of times and looked at what we did, and therein lay the answer to the problem we faced.”

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Small community technical assistance providers were some of the first responders to the Hurricane Katrina and Rita disasters. Staff from the Rural Community Assistance Partnership (RCAP) played a critical role in assessing the damage to small community water and wastewater systems, helping systems get up and running, and coordinating the hurricane relief efforts with the many state and federal agencies involved.

Dinah Millet, a technical assistance provider with Community Resource Group (CRG), Inc., opened CRG’s state office in Plaquemine, Louisiana, the day after Hurricane Katrina. Her first order of business was coordinating status and damage assessments of water systems once areas were secured and open to the public.

“We attempted to reach each system by phone or through on-site visits,” says Millet. CRG assessment teams collected bacteriological samples at each operational system, instructed systems to post boil water orders, and assessed each system’s damage.

Millet was amazed at the damage she saw as she worked to contact the more than 100 community water systems in St. Tammany Parish. “There was no way the systems hardest hit could have possibly been prepared for what happened,” she says. “I was floored by what I saw.”

A few weeks later while communities were still coping with the consequences of Hurricane Katrina, Hurricane Rita delivered another blow of destruction. Yet in the midst of the devastation, Millet was impressed with the spirit of the communities as they dealt with the disasters. She cited Cameron Parish, a coastal community of approximately 9,500, as an example. “All the water systems are banding together. They are saying, ‘Let’s work together to solve this problem.’ They are not waiting for the government to come in and rebuild. They are coordinating with RUS, CRG, and other agencies to create a joint effort to find solutions and start working on it,” she says.

“This is how rural America is coping. They are focusing on the positive, looking at what they’ve accomplished.”

Jeff Cooley, a CRG trainer and technical assistance provider based in Alabama, was very involved in recovery efforts after Katrina. After assisting communities in Alabama and stabilizing the situation there, CRG sent Cooley to Mississippi where he assisted Tommy Ricks, CRG’s Mississippi coordinator and RCAP incident commander, with recovery efforts there.

Working in Bay St. Louis, a small coastal community decimated by the storm, Cooley coordinated the work of public utility crews and other professionals who had come from around the country to help. Crews came from San Antonio, Texas, Huntsville, Alabama, and other areas of the country. “We are working block by block, street by street to remove debris and fix water line leaks,” he says. “You can’t look at the big picture. You first look at it 360 degrees and you don’t know what to say. There is nothing here five blocks in each direction.”

Cooley’s task was to help coordinate the efforts of the U.S. Public Health Service, the Mississippi Department of Health, local utility departments, the Federal Emergency Management Agency, and the Mississippi Emergency Management Agency. “We are determining what the needs are and keeping it organized. We are using the Incident Command System—filling out forms, keeping logs, doing it the proper way. We are also assisting the utility crews in their efforts on the ground.”

Like Millet, Cooley was impressed with the positive attitude of the local community. “The spirit of the guys at the public works department is amazing. These guys have lost everything but they are coming to work and then having to go home and clean up there,” says Cooley. “People outside think there is no way to rebuild, but the prevailing spirit here is that they will rebuild.”

Cooley notes that the role of technical assistance providers will go well beyond the immediate clean-up efforts. “Our role in the recovery process will be long term. We will be helping folks get loans and grants to rehabilitate the existing systems and for new systems as they rebuild.”

Before the storm, both Ricks and Cooley were heavily involved in helping communities prepare emergency response plans. Ricks was pleased with how well many of the small communities he has worked with handled the crisis. “Many of our communities were better prepared for the disaster than were the agencies responding to it,” he says.
From a personal perspective, Ricks learned firsthand how important it is to be prepared. “I learned a lot. It’s one thing to study something and another to be out there doing it under pressure.”

Ricks emphasizes the importance of coordinating efforts among the various agencies and following the proper reporting protocols. “We used the National Incident Management System (NIMS) guidelines and the Incident Command System (ICS). So many people were brought into the recovery effort who needed a crash course on these procedures. This disaster brought to light how much of a need there is to provide meaningful NIMS/ICS training to local officials, operators, and technical assistance providers,” he says.

Ricks is working to apply what he learned through his Katrina experience. “In the end, I think our organization did a very good job in responding to the crisis,” he says. “But we need to assess our strengths and weaknesses so we can increase our ability to respond in the future to situations that require an emergency response.”

NESC training packages can help small systems

The National Environmental Services Center (NESC) offers several training packages that can help small systems manage their infrastructure effectively and prepare for and respond to emergencies.

Managing a Small Drinking Water System: A Short Course for Local Officials—This training package helps local decision-makers understand and implement management practices that will improve their ability to provide safe drinking water to their communities. The following components are available:

- Module 1: Local Officials’ Responsibilities for Providing Safe Drinking Water (Item #TRPMCD41, $4.95)
- Module 2: Regulatory History, Current and Future Requirements (Item #TRPMCD42, $5.85)
- Module 3: Basics of a Drinking Water System, with Video (Item #TRPMCD43, $26.80)
- Module 4: Drinking Water System Operation and Maintenance, with Video (Item #TRPMCD44, $26.80)
- Module 5: Administrative Management Practices (Item #TRPMCD45, $7.60)
- Module 6: Working with Consultants and Assistance Providers (Item #TRPMCD46, $5.60)
- Module 7: Managing People (Item #TRPMCD47, $7.30)
- Module 8: Communicating with the Public (Item #TRPMCD48, $5.85)
- Module 9: Financial Management (Item #TRPMCD49, $8.35)
- Module 10: Financing Options for System Projects or Upgrades (Item #TRPMCD50, $7.50)
- Participant Modules and Resource Pack (Item #TRPMCD40, $106.60)
- PowerPoint® Presentation/PC (Item #TRPMCD51, $15.00)
- PowerPoint® Presentation/Mac (Item #TRPMCD52, $15.00)

Due Diligence: Small Water System Security—This training module, designed for small community officials, provides guidelines for addressing the water system’s security and emergency planning and response activities, and describes the local officials’ role and responsibilities in the process.

- Due Diligence: Small Water System Security/ Participant Module and Resource Pack (Item #TRPMCD62, $32.00)

Preparing for the Unexpected: Security for Small Water Systems—This training package is specifically designed to help small drinking water utilities conduct vulnerability assessments and improve security and emergency preparedness and response capabilities. It addresses the unique security needs of small water systems, a wide range of potential security breaches and threats (including terrorist and intentional acts, as well as natural disasters and unintentional incidents and accidents), and administrative responsibilities of small system personnel and small community officials with authority for the drinking water system.

- Participant Module Only/Hard Copy (Item #TRPMCD56, $39.80)
- Participant Module Only/CD-ROM (Item #TRPMCD59, $35.20)
- PowerPoint® Presentation Only/CD-ROM (Item #TRTPCD60, $12.50)

For more information about these training materials, please contact Sandra Fallon, NESC training specialist, at (800) 624-8301 or (304) 293-4191, extension 5582, or sfallon@mail.wvu.edu. More information is also available in NETCSC’s product catalog located at www.nesc.wvu.edu/netcsc/netcsc_catalog.htm.

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Asset management update
Assessing small systems’ asset management training needs

by Cathleen Falvey
NESC Contributing Writer

The National Environmental Services Center (NESC) recently contacted water and wastewater systems and assistance and resource providers around the country in an effort to examine asset management practices in small communities. Most were contacted by e-mail and invited to participate in a Web-based assessment. A few individuals were interviewed by phone.

Carl Brown, of Carl Brown Consulting, LLC, a management planner, rate analyst, and trainer who works with water, sewer, and stormwater systems, conducted the assessment. He discovered that few small communities are familiar with the “formal notion” of asset management.

Asset management is a structured approach that relies on information about the condition, cost, and use of a system’s physical assets. Using asset management, communities get a more accurate, “holistic” picture of their system’s health and risks. With this information, communities are better able to prioritize and plan for system repairs, upgrades, and funding. Simply put, asset management helps systems to cost-effectively provide a consistent level of service to their customers. (For a more detailed explanation of asset management, please refer to the article, “Asset Management: A New Frontier for Utilities,” in the Fall 2004 issue of E-train, which is available on NESC’s Web site at www.nesc.wvu.edu.)

According to Brown, the assessment reveals that “most systems still need a basic introduction and training on what asset management is, how it would benefit them, and how they could develop programs specific to their situations.” Many respondents expressed a need for free or low-cost, one-on-one, on-site asset management assistance and training, and many were unaware of the resources currently available to them.

According to Brown, several systems cited the need to increase user rates as a priority. Some systems indicated that they would need an incentive to implement asset management, such as a regulatory requirement or a requirement from a funding agency.

EPA’s asset management agenda

Meanwhile, at the federal government level, efforts to improve asset management at water and wastewater systems took a giant leap forward in May 2005 when the U.S. Environmental Protection Agency (EPA), in partnership with the National Asset Management Steering Committee, sponsored the first Asset Management Collaborative Working Session. According to Steve Allbee, project director of the Gap Analysis for EPA’s Office of Water, it was the most extensive meeting on water sector asset management ever held in the U.S. with 140 attendees from 12 countries.

“The Working Session brought together a broad cross-section of key stakeholders representing utilities, consultants, professional and industry associations, researchers, and educators,” said Allbee. “It served as an opportunity to exchange information about the ‘state of the practice’ of asset management in the U.S. and around the world and facilitated a thoughtful dialogue on pathways for advancing the practices.”

The purpose of the Working Session was to identify a three- to five-year asset management agenda—a list of action items—to mobilize attendees, and which may become the mission of a future collaborative steering committee on asset management. (The top 10 asset management action items identified at the meeting are listed in the box at left.)

“By all measures, the session was very well received,” said Allbee. “We learned a great deal about what’s on the minds of those in the forefront of the transition to advanced asset management practices.”

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EPA’s Top 10 Asset Management Action Items

1. Develop best practices
2. Define asset management/Build business cases
3. Develop a central repository of high-quality data available to researchers
4. Develop an international training and resource clearinghouse
5. Develop level of service/Asset management business model
6. Research tools for cost-effective physical condition assessment, including design standards
7. Develop uniform national standards for condition assessment and asset reporting
8. Develop common/best practice for risk management framework
9. Make asset management plans required for any government funding
10. Promote culture change

Adapted from the U.S. Environmental Protection Agency’s Asset Management Collaborative Working Session Web site, www.epa.gov/owm/assetmanage/assets_wksession.htm.
Knowledge transfer needed

Knowledge transfer emerged as a prevalent theme in the Working Session discussions. Of particular interest to environmental trainers are action items 3 and 4, to develop a central data repository and a training and resource clearinghouse.

Allbee observed a growing desire to more effectively “coordinate, collaborate, and facilitate” the transfer of asset management knowledge. He says those in the forefront seem very keen on sharing their experiences.

“There were several similar ideas [at the Working Session] concerning how knowledge transfer can take place efficiently and effectively,” said Allbee. “In addition to calling for some form of training and resource clearinghouse, there were suggestions concerning a central repository for high quality data and tasks on collaboratively defining competency skill requirements. The common thread was the desire for improved knowledge management processes.”

According to Allbee, “Education and training issues permeated the whole session. The assets are not the only thing that is aging. The ‘Baby Boomer’ retirement cycle is hitting the water sector in a huge way. We had a massive expansion of technical and expert personnel enter the industry soon after the 1972 Amendments to the Water Pollution Control Act. Retooling and replacing the workforce will be one of the most significant challenges the industry must meet head on. Capturing and documenting the knowledge base represented by the departing generation and transferring critical information to a new generation will be a massive human resource undertaking.”

Opportunities for trainers

In addition to the possible creation of an asset management training and resource clearinghouse, EPA plans to continue its series of Advanced Asset Management Workshops. Allbee says that more than 1,600 mid- and senior-level utility managers and senior consultants have attended the two-day events held around the country.

“The workshops are very practical, ‘hands-on’ oriented, and focus on getting management teams comfortable with undertaking an asset management improvement program,” said Allbee. “They seem to be having substantial impact on helping organizations move forward.”

EPA co-sponsors the workshops with locally based organizations and is in the process of locking in partnerships, locations, and dates for 2006. The agency expects to provide eight to 12 sessions this year in locations around the country. Upcoming workshops are posted on EPA’s asset management Web site at www.epa.gov/owm/assetmanage/assets_training.htm.

“For environmental trainers, I see opportunities for them to broaden their offerings,” said Allbee. “We have always done quite well in what I would term the core knowledge areas, such as operator training. We will continue to need this set of skills. But, if we hope to move toward more sustainable approaches, I also see the need to increase the emphasis on several other skill sets to the point where they become part of the core competencies in our workforce.”

Allbee sees a need in communities for additional skills in the following broad categories: governance, asset management, business systems, and leadership.

“Managing a sustainable utility requires excellence at the traditional work, but also demands the acquisition of higher levels of expertise in these new branches of learning,” he said. “The environmental training community can play a role, but this requires accepting a broader sense of the training mission and perhaps the willingness to forge partnerships and collaborations that will bring about the essential skill sets and expertise.”

NESC offers new asset management resource guide

Small systems can save big money by practicing asset management. But as the National Environmental Services Center’s (NESC) recent asset management assessment revealed, few communities are familiar with the concept and most are unaware of the free and low-cost resources available to help them.

To help these small systems, NESC is now offering A Guide to Asset Management for Small Water Systems. This 25-page guide is designed to provide information and resources to small water and wastewater system personnel who wish to implement asset management programs. It includes profiles of publications, training opportunities, software programs, and Web sites.

To obtain a hard copy of this guide, contact NESC at (800) 624-8301 or (304) 293-4191 or via e-mail at netc_orders@mail.nesc.wvu.edu. Please request Item #TRBLMG06. Cost is $5.00 plus shipping and handling. The guide can also be downloaded for free from NESC’s Web site located at www.nesc.wvu.edu/netcsc/netcsc_index.htm.
Free asset management software helps small systems

The Maryland Center for Environmental Training (MCET) of the College of Southern Maryland has announced the availability of its free asset management software program for small communities. “Total Electronic Asset Management System” (TEAMS) was developed in partnership with Delaware Technical Community College under a grant from the U.S. Environmental Protection Agency. TEAMS works with Microsoft Office Suite version ‘97 and later.

According to Karen Brandt, MCET director, the software was developed and tested with help from four small communities in Maryland and Delaware. TEAMS helps systems to address five issues at the heart of an effective asset management program:

• What is the current state of the assets?
• What is the required level of service?
• Which assets are critical to sustained performance?
• What are the best minimum life cycle cost, capital improvement plan, and operation and maintenance strategies?

Mississippi training program helps small communities respond to Hurricane Katrina disaster

National Environmental Training Center for Small Communities (NETCSC) to develop a pilot program to provide more in-depth training for local officials. This training, based on NETCSC’s training package Managing a Small Drinking Water System: A Short Course for Local Officials, was well received by participants and laid the foundation for the ACT Program. “NETCSC was an invaluable partner in helping us develop this pilot training program,” says Tommy Ricks, CRG’s Mississippi state coordinator.

According to Magee, this program, which has been offered for two years, goes into more detail on each of the topics presented in the mandatory training. “The ACT training breaks out the training and goes a lot deeper into things. Participants are more involved—they get into groups and do various exercises,” she says.

Six separate six-hour courses are offered. They include:

• Module 1—General Management
• Module 2—Personnel Management
• Module 3—Financial Management
• Module 4—Emergency Management
• Module 5—Customer Service Management
• Module 6—Risk Management

Those officials who go through all six modules and score a 70 or above on the exam are then awarded the title of “Certified Water Works Manager,”” says Magee. Approximately 140 people have completed all of the modules thus far. Of these, approximately 80 people have achieved the “Certified Water Works Manager” certification.

The ACT Program is voluntary. All people who attend the mandatory board training are invited. Operators are awarded continuing education units for their participation.

Clearly, the state’s effort to train local officials is paying off. Not only were ACT program graduates better prepared to handle and respond to the Hurricane Katrina crisis as a result of the emergency management training they received, but other local officials can see the value of attending the training.

“Since the hurricane, people have been telling us that they’re happy that they had taken the classes,” says Magee. “They wished that more of their employees had taken it and they would like to have them trained before the next disaster strikes.”

For more information about Mississippi’s ACT Program, contact Lorraine Magee at (866) 299-7737 or l magee@crg.org.
A new report that outlines the findings of a major training needs assessment (TNA) conducted by the National Environmental Services Center (NESC) is available. The report, *Small Community Environmental Training Needs Assessment: A National Study of Drinking Water, Wastewater, and Municipal Solid Waste Educational Needs in Communities of Fewer than 10,000 People*, offers some valuable conclusions and insights that will be useful to those who work with small communities.

According to John Hoornbeek, Ph.D., NESC’s director of training, the report examines what training is presently available for small communities, environmental training issues that will need to be addressed in coming years, and current gaps in environmental training.

“NESC undertook this TNA to collect useful information to help us guide our future activities,” says Hoornbeek. “The results of this TNA will also prove useful to other organizations that provide assistance and training to small community audiences on public health and environmental issues.”

The TNA consisted of three major research efforts:
- determining what environmental training was currently available for small communities in the areas of drinking water, wastewater, and solid waste;
- identifying and analyzing national regulations and policies that are likely to affect small community environmental management in coming years; and
- interviewing individuals who manage small community environmental systems or provide training or technical assistance in small communities.

A central portion of the report lies in the comments received from individuals who were interviewed in each of the environmental areas—drinking water, wastewater, and solid waste. Interviewees included community personnel, such as local officials and operators, and those who work with local communities, such as technical assistance providers and regulators. These individuals were asked to identify the areas where they need assistance, their training preferences (i.e., how the training is presented), and what they perceive to be obstacles to training.

“We interviewed people from around the country, asking them a mixture of open- and close-ended questions,” says Craig Mains, NESC’s training specialist who coordinated the training needs assessment effort. “We established a dialogue with the participants and gave them the opportunity to tell us what problems they encounter and what they see as their training needs.”

Once the interviews were completed, Mains analyzed the responses and organized the training needs into three categories: training needs as identified by those who work in local communities, training needs as identified by those who work with communities, and training needs of both groups combined.

In addition to the rankings of training needs, many of the respondents’ actual comments are included in the report. “The quotations will allow readers to appreciate the variety of responses that we received,” says Mains.

Results of the TNA indicate that a reasonably well-developed training network—driven largely by certification requirements—exists for operators of environmental infrastructure in small communities. At the same time, the assessment found significant needs for small community training in a number of areas, including:
- financial and asset management,
- emergency preparedness and response,
- understanding and complying with regulatory requirements,
- wet weather flows and their effects on wastewater management,
- decentralized wastewater management,
- controlling illegal dumping of solid waste, and
- managing operational costs for recycling centers.

The TNA also identified some key challenges for the training and technical assistance community, including reaching under-trained audiences, such as local decision-makers, and making effective use of different training approaches and technologies.

The report includes a chapter addressing the challenges of small community environmental assistance; a chapter overviewing available environmental training; a chapter examining the potential effect of recent federal rules, regulations, and programs on training; and an appendix listing by state the number of small communities with fewer than 10,000 people.

To order a copy of the report, call NESC at (800) 624-8301 or (304) 293-4191 and request Item #TRBKGN29.
New Mexico couple crosses country to get training

By Jill A. Ross
E-train Editor

Just how far will some local officials go to get the training they need to run their community’s water system? In the case of Albert and Chris Garcia, the answer is 3,300 miles. Not only did they travel from New Mexico to West Virginia to get training, they made the trip by car and largely at their own expense.

What would motivate someone to go to such effort and expense in the pursuit of training? According to the Garcias, it was desperation. The couple had recently volunteered to sit on the board of the Villanueva Mutual Domestic Water Consumers Association. Located in north central New Mexico, this small water association has 67 connections serving 150 residents.

According to Chris, one man, Pedro Gallegos, had run the water association for 50 years. “He had a little general store, and folks paid their bills there,” she says. “He did the chlorination, looked after the well, and got a plumber to fix pipes when they went bad.” When Gallegos stepped down last year at age 95, “we had to actually act like an association,” says Chris. “We didn’t know what we were doing. It was an awful feeling.”

Despite having a Ph.D. in research economics and being a water policy consultant, Chris admits that she was completely overwhelmed by her new role as a member of the water board. “Before the training I didn’t have any idea where to start.”

Villanueva is one of 13 small communities in El Valle del Río Pecos that runs along the Pecos River between Sante Fe and Las Vegas, New Mexico. “Each of the communities is in the same desperate shape,” says Chris. “We didn’t have financial records. We had no books. We had no water meters. We had 50-year-old pipes. The rates hadn’t been raised in 50 years.”

Chris learned about the National Environmental Services Center’s (NESC) annual Environmental Training Institute, held July 26 to 29, 2005, from Blanca Surgeon, a technical assistance provider with the Rural Community Assistance Corporation (RCAC), who recommended it to her. Chris called NESC to inquire about a registration fee waiver, which NESC may grant to small community officials. But even after NESC provided a fee waiver, the trip was still quite an undertaking.

“The association couldn’t assist with travel money, so we drove,” says Chris. “It was how we could afford to get here.” To further minimize expenses, the couple drove straight to and from West Virginia without taking any time to sightsee or vacation. They attended workshops during the day and camped at a local park overnight. Chris points out that the association did contribute to their trip by funding the campsite rentals.

“*We’re not alone*”

Was it worth the effort to attend the Institute? “Absolutely!” exclaims Chris. “We’re not so desperate now.”

Albert, a retired postman and electrician apprentice, agrees. “The Institute has been very helpful. We got a lot of good pointers to bring back to the people here. I also learned that some people have the same problems as we do. We’re not alone.”

To maximize their time at the Institute, Chris and Albert each took different courses. Chris focused her efforts on the financial management courses, while Albert, who also helps to run Villanueva’s water system, attended courses on groundwater, emergency response preparedness, and managing small systems.

“Between the Institute and help from RCAC, now if we need something it is at hand,” remarks Chris. “Since we’ve been back, continued on next page
we’ve done a budget and put together a capital improvements plan—we had no clue before how to do this. We’ve reformed our rate structure. For 20 years the rate was $6.25 per month. Now it’s $15 a month.”

“We learned how to conduct a board meeting, to have an agenda. When you are prepared you have a better meeting,” notes Albert. “The training reinforces that you’ve gotta be solvent, know where you are going, plan ahead, have a budget, and inform people so they know what’s going on.”

Albert is proud of all they’ve accomplished since their trip to West Virginia. “We went from way at the bottom of the list. Our water rights are up-to-date, our water agreements are up-to-date, all delinquencies are up-to-date,” he says. “The work Chris has done has made people realize we have a good thing with our water and we need to keep it.”

According to Albert, the quality of the water is fine, but the pipes conveying it are in very poor condition. With RCAC’s help, the association has secured a $90,000 grant to start replacing the lines. However, this funding will cover only 10 percent of the pipes that need to be replaced.

Attending the Institute helped both Chris and Albert to understand the importance of having the finances of the system in order and how to do that. “We weren’t charging enough money. We had to get the rates up to maintain the reserves and afford new lines,” says Albert. “No one even complained when we raised the rates. We used the bulletin board at the post office for public education,” notes Albert. “We’re telling people where we’re at, educating them about what we’re doing. Before they were suspicious, but now our finances are up so people can see it.”

Only the beginning

“The Institute gave us a place to start from,” says Chris. Despite all the progress the water association has made in such a short period, the Garcias readily acknowledge that this is only the beginning.

In addition to finding funds to replace the rest of the water lines, the association is under a deadline to find a certified well operator. According to Chris, all the water associations in the valley are meeting regularly to work together to address the need for a certified operator. They are also putting together a joint request to the state legislature for funding to upgrade the systems.

The Garcias would like to get residents of the community more connected and involved with the water association. Having benefited so much from the training that they received, they would like to have the other board members get trained too. “I would love to try and get some of our other folks there in the future,” says Chris.

Albert points out that what he and Chris learned at the Institute is having a ripple effect with the other communities in the valley. “Chris is helping the other systems. She e-mails them about all she’s done and tells them who to contact.”

Why do the Garcias work so hard on behalf of the water association? “We’re responsible to the people even though we are volunteers,” says Albert. “We get gratification from being able to help people.”

E-TRAIN SPRING 2006

Continued from previous page

NESC welcomes new senior program administrator

The National Environmental Services Center (NESC) is pleased to announce the addition of Nadine Kelly to its staff. Kelly joined NESC in August 2005 as senior program administrator. In this position she oversees the administration of the training grant from the U.S. Environmental Protection Agency and works to develop new programs.

“I’m excited to be working in such a rewarding environment,” says Kelly. “It is very fulfilling to be using my management experience for a program that is doing such exciting and worthwhile work—helping people to take better care of our environment and serving communities like the one I grew up in.”

Kelly’s management background is impressive. She worked in hospitality management for 13 years, serving as an accounting manager for the New York Marriott Marquis in Times Square. She also helped to open the 1,015-room Roosevelt Hotel in New York City while employed by Interstate Hotel Corporation. She relocated to West Virginia in 1998 where she worked as director of finance for the Nemacolin Woodlands Resort and Spa in Farmington, Pennsylvania.

Prior to joining NESC, Kelly served as program coordinator for Industries of the Future—West Virginia. Funded by the U.S. Department of Energy, this program promotes Energy Intensive Industries within the state.

A native of upstate New York, Kelly holds a bachelor’s degree in business administration from the State University of New York at Fredonia.
Institute helps small communities across the U.S.

For the sixth year in a row, the Environmental Training Institute for Small Communities was a gathering place for small community environmental professionals and local officials. More than 115 people traveled from all across the country to Morgantown, West Virginia, to participate in the 2005 Institute held July 26 to 29.

“I have nothing but praise for the Institute,” says Jim Bailey, a Vista volunteer with the Maryland Rural Development Corporation. “I think anybody involved with water and septic systems should go.”

“Attending the Institute gave me the knowledge I needed to communicate effectively with public service districts and county commissions,” says Kelly Jo Drey, watershed coordinator for the Upper Guyandotte Watershed Association in southern West Virginia.

The Institute featured four days of workshops and tours led by nationally recognized faculty. Workshop topics included assessing wastewater options, emergency response preparedness, board training, financial management, funding environmental projects, budgeting, asset management, alternative wastewater treatment technologies, and the Groundwater Rule. Tours gave participants the opportunity to see a small wastewater treatment plant and onsite wastewater systems.

“All of the knowledge I received in my courses will be put to work immediately as I do my financial and managerial capacity assessments with the rural communities here in Arkansas,” says Constance Gwinn, a community development management specialist with the Community Resource Group, Inc.

In addition to the educational sessions, Jane Moore, deputy director of U.S. EPA’s Office of Wastewater Management, made the keynote address during the annual luncheon. Attendees also enjoyed a cookout at Coopers Rock State Forest and an “Evening with Exhibitors,” held in the Institute Exhibit Hall that showcased products, services, and resources available to help small communities.

“The networking was great,” says Frank Welch, director of public works for Shepherdstown, West Virginia. “I met people from Ohio and North Carolina. We all have problems, but it’s nice to have people to call and e-mail.”

The seventh annual Institute is scheduled for July 25 to 28, 2006.
The environmental training institute for small communities

July 25-28, 2006

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

Who should attend?
Local decision-makers, operators, small community technical assistance providers, state regulatory officials, environmental consultants and trainers, community development professionals, and anyone interested in small community health and environmental management.

The 2006 Institute will provide:
• Affordable training specifically designed to meet small community needs
• Multiple training events
• Access to national experts in the environmental field
• Opportunities to network with professionals from across the country
• The opportunity to preview training materials, videos, and educational resources
• An Exhibit Hall featuring services, resources, demonstrations, and consultants available to help small community trainers, assistance providers, and local officials

For more information:
• Visit NESC’s Web site at www.nesc.wvu.edu/netcsc/netcsc_index.htm
• Contact Craig Mains at (800) 624-8301 or (304) 293-4191, ext. 5583, or cmains@mail.wvu.edu
NETCSC Products

The National Environmental Training Center for Small Communities (NETCSC) offers the following products and resources. Please note that prices are subject to change.

To place an 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.

E-TRAIN SPRING 2006

Emergency Preparedness & Security

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<td>ASSET: Automated Security Survey and Evaluation Tool/CD-ROM</td>
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<td>TRBLGN25</td>
<td>Emergency Response Planning Resources for Small Water and Wastewater Utilities</td>
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<td>TRBLGN26</td>
<td>Emergency Response Plan Guidelines for Small and Medium Community Water Systems</td>
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<td>TRFSGN30</td>
<td>Large Water System Emergency Response Plan Outline: Guidance to Assist Community Water Systems in Complying with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002</td>
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<td>TRBLGN23</td>
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<td>Managing a Small Drinking Water System: A Short Course for Local Officials–Module 11: Due Diligence–Small Water System Security</td>
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<td>TRTPCD55</td>
<td>Preparing for the Unexpected: Security for Small Water Systems/Training Package</td>
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Environmental Management

Training Packages

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Training Aids

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<td>Protect Your Groundwater: Educating for Action</td>
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<td>Public-Private Partnerships for Environmental Facilities: A Self-Help Guide for Local Governments</td>
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Training-Related Information

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<td>Final Report: Training Needs Assessment</td>
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<td>Guide to Federal Environmental Requirements for Small Governments</td>
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<td>Small Community Characteristics and Human Resources Affecting Environmental Management: Building the Capacity of Small Communities Through Training</td>
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Drinking Water & Wastewater

Training Packages
TRTPEP06 Chlorine Residual for Operators/Training Package ........................................ $55.00

Training Aids
DWBKMG15 Practical Personnel Management for Small Systems .................................. $0.00
TRVTGN16 The Power to Protect: Three Stories about Groundwater/Video and Workbook .......... $39.85
TRVTPE17 Water Conservation: Managing Our Precious Liquid Asset/Video ....................... $13.50

Training-Related Information
TRBLGN04 Operator Training Opportunities ................................................................. $0.00

Wastewater

Training Packages
TRTPEP01 Activated Sludge/Training Package ....................................................... $120.00
TRTPEP02 Aerobic Digestion/Training Package ....................................................... $110.00
TRTPEP03 Anaerobic Digestion/Training Package ....................................................... $110.00
TRTPCD06 Assessing Wastewater Options for Small Communities/Training Package .... $102.70

Individual Components of TRTPCD06:
TRTGCD33 Assessing Wastewater Options for Small Communities/Trainer’s Manual .... $58.50
TRPMCD34 Assessing Wastewater Options for Small Communities/Participant’s Guide .... $59.80
TRSWCD35 Microsoft PowerPoint® Presentation (PC) .................................................. $10.00
TRSWCD37 Microsoft PowerPoint® Presentation (Mac) ................................................ $10.00
TRTPCD54 Assessing Wastewater Options for Small Communities/Training Package on CD-ROM .... $37.60
TRTPEP05 Centrifuge Test/Training Package ............................................................... $60.00
TRTPEP04 Concepts of Biological Treatment/Training Package ..................................... $117.00
TRTPEP09 Depth of Blanket/Training Package .............................................................. $90.00
TRTPEP11 Fecal Coliform-Membrane Filtration Procedure/Training Package .................. $95.00
TRTPCD16 Industrial Pretreatment and Hazardous Material Recognition for Small Communities/Training Package .......................................................... $111.80

Individual Components of TRTPCD16:
TRTGCD17 Industrial Pretreatment and Hazardous Material Recognition for Small Communities/Instructor’s Guide ......................................................... $66.30
TRPMCD18 Industrial Pretreatment and Hazardous Material Recognition for Small Communities/Participant’s Manual ......................................................... $55.90
TRTPCD10 Lagoons: Facultative and Aerated/Training Package .................................... $88.00
TRSWCD38 Onsite Sewage Treatment and Disposal System Interactive Training CD-ROM (Version 1.0) .......................................................... $135.00
TRTPCD09 Onsite Wastewater System Operation and Maintenance/Training Package .... $299.00

Individual Components of TRTPCD09:
TRTGCD10 Instructor’s Guides ....................................................................................... $55.90
TRRPCD12 Trainer’s Resource Package ......................................................................... $265.10
TRTPCD65 Microsoft PowerPoint® Presentation ...................................................... $12.50

TRTPEP14 Settleometer/Training Package ................................................................. $55.00
TRTPCD32 Troubleshooting and Optimizing Wastewater Treatment Systems/Training Package ................ $232.70

Individual Components of TRTPCD32:
TRTPCD27 Activated Sludge ........................................................................................ $98.80
TRTPCD28 Nutrient Removal ....................................................................................... $98.80
TRTPCD29 Attached Growth Processes .................................................................... $98.80
TRTPCD30 Lagoon Processes ..................................................................................... $94.90
TRTPCD31 Reference Text ......................................................................................... $52.00

Training Aids
TRBKOM11 Activated Sludge: Evaluating and Controlling Your Process ...................... $16.95
WWBKDM53 Alternative Wastewater Collection Systems ........................................ $64.50
TRPKOM01 Analysis of Biochemical Oxygen Demand/Video and Workbook ............... $45.50
WWPKPE55 Choosing an Alternative Septic System/Video ........................................ $13.00
FMSWFN16 Determining Wastewater User Service Charge Rates: A Step-by-Step Manual with Software .......................................................... $10.80
FMBLPP06 Developing Public/Private Partnerships: An Option for Wastewater Financing .......................................................... $0.00
TRBLFN06 Evaluating Municipal Wastewater User Charge Systems ......................... $9.90
FMBLFN29 Federal Funding Sources for Small Community Wastewater Systems ........ $0.00
TRVOM05 Identification of Filaments in the Activated Sludge Process/Video ................. $0.00
TRFSPE09 Landscaping Septic Systems ..................................................................... $0.75
WWBKOM41 Manual for Managing Septic Systems ................................................... $30.00
TRVTPCE02 Microlife in the Activated Sludge Process ........................................... $0.00
WWVTPE05 Planning Wastewater Treatment for Small Communities/Video ............... $10.00
WWBLFN39 Reducing the Cost of Operating Municipal Wastewater Facilities .............. $0.00
TRPKOM07 RTW Activated Sludge Troubleshooting Guide ........................................ $49.50
TRBKPE11 Septic System Owner’s Guide ................................................................. $4.00
TRVTPE12 Septic Systems Revealed: A Guide to Operation, Care and Maintenance/Video . $15.00
### Training-Related Information

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### Training Packages

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<td>Introduction to Groundwater Sources/Training Package</td>
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<td>Introduction to Surface Water Sources/Training Package</td>
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<td>Introduction to Water Treatment/Training Package</td>
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<td>TRTPCD39</td>
<td>Managing a Small Drinking Water System: A Short Course for Local Officials/Training Package</td>
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**Individual Components of TRPMCD39:**

- TRPMCD40 | Managing a Small Drinking Water System: A Short Course for Local Officials/Participant Modules Only | $106.60 |
- TRPMCD41 | Module 1: Local Officials’ Responsibilities for Providing Safe Drinking Water | $4.95 |
- TRPMCD42 | Module 2: Regulatory History, Current and Future Requirements | $5.85 |
- TRPMCD43 | Module 3: Basics of a Drinking Water System | $26.80 |
- TRPMCD44 | Module 4: Drinking Water System Operation and Maintenance | $26.80 |

### Training Aids

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<th>Course</th>
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<tr>
<td>DWBLFN12</td>
<td>Action Guide for Source Water Funding: Small Town and Rural County Strategies for Protecting Critical Water Supplies</td>
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<tr>
<td>DWBLGN24</td>
<td>Drinking Water Glossary: A Dictionary of Technical and Legal Terms Related to Drinking Water</td>
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<td>TRBLGN26</td>
<td>Emergency Response Plan Guidelines for Small and Medium Community Water Systems</td>
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<td>TRBLMG06</td>
<td>A Guide to Asset Management for Small Water Systems</td>
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<td>DWBKRG21</td>
<td>Lead in Drinking Water Regulations: Public Education Guidance</td>
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<td>TRSWOM14</td>
<td>Montana Source Water Protection Technical Guidance/CD-ROM</td>
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<td>TRVTGN14</td>
<td>Protecting Your Groundwater Supply: Putting the Pieces Together/Video</td>
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### Training-Related Information

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<tr>
<td>TRBLRG02</td>
<td>Regulatory Update Reference Materials</td>
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<td>TRBKMG07</td>
<td>Water Board Bible: The Handbook of Modern Water Utility Management</td>
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### Training Packages

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<tr>
<td>TRTPCD19</td>
<td>Economics and Marketing of Recyclables for Small Communities</td>
<td>$85.80</td>
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<td>TRTPCD05</td>
<td>Managing Groups and Conflict</td>
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<td>Solid Waste Management Options/Training Package</td>
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#### Individual Components of TRTPCD24:

- TRTPCD64 Solid Waste Management Options/Training Package on CD-ROM: $45.50
- TRPMCD25 Participant's Materials: $59.80
- TRSWCD53 Microsoft PowerPoint® Presentation (PC): $10.00
- TRSWCD26 Microsoft PowerPoint® Presentation (Mac): $10.00
- TRTPCD13 Reducing Commercial and Industrial Solid Waste for Community Solid Waste Managers/Training Package: $93.60

#### Individual Components of TRTPCD13:

- TRTPCD14 Trainer’s Guide on CD-ROM: $59.80
- TRPMCD15 Participant Manual: $52.00

### Training Aids

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<td>Business Guide for Reducing Solid Waste</td>
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<td>A Collection of Solid Waste Resources</td>
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<td>Decision Maker’s Guide to Solid Waste Management</td>
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<td>Down with Dumps (Part 1): Making a Better Community Landfill in Rural Alaska/Video</td>
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<td>Down with Dumps (Part 2): Rural Landfills Design and Operations/Video</td>
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<td>Full Cost Accounting for Municipal Solid Waste Management</td>
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<td>Landfill Technical Guidance Manual</td>
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<td>Making Solid (Waste) Decisions with Full Cost Accounting</td>
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<td>TRBLGN09</td>
<td>Media Interviewing Skills for Recycling Coordinators</td>
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### Training/Adult Education

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<td>Computer-Assisted Instruction in Environmental Training</td>
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<td>Coping with Varied Entry-Level Skills: Tailoring for All Learners</td>
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<td>Distance Learning and Environmental Training: A Resource Guide</td>
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<td>Evaluating the Results of Environmental Training</td>
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<td>Formative Evaluation of Environmental Training Programs</td>
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<td>Interactive Video in Environmental Training</td>
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<td>TRBKTR13</td>
<td>NETSCC Training Skills Handbook</td>
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<td>Questioning Techniques for Trainers: Developing Critical Thinking</td>
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<td>1995 Small Community Environmental Training Trends and Issues</td>
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<td>TRBLIN01</td>
<td>1992-2004 Index of E-train Articles</td>
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