

Tennessee Backflow
Prevention Association
PO Box 1393
Gatlinburg, TN 37738

Happy Holidays!



TBPA



Your Association
working for safe
drinking water
in Tennessee

Backflow Preventer Repair Seminars

Coming in 2000:

Kingsport
Jackson
Murfreesboro/Nashville
Knoxville

Provided By
The Tennessee Backflow Prevention Association



One-Day Seminar -Lunch Provided
Class Size Limited - Pre-Registration Required
\$50.00 TBPA/ABPA Members
\$95.00 Non-Members (includes 1yr. membership)



**A Continuing
Series**

Stay tuned to upcoming newsletter for schedules!

**Professional
Instruction**

Tennessee Backflow News

Fall - Winter
1999



**NEXT
MEETING**

**10:00 AM
Monday
January 10,
2000
Gallatin
Public Utility
Offices**

Directions to
Meeting Inside On
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INSIDE

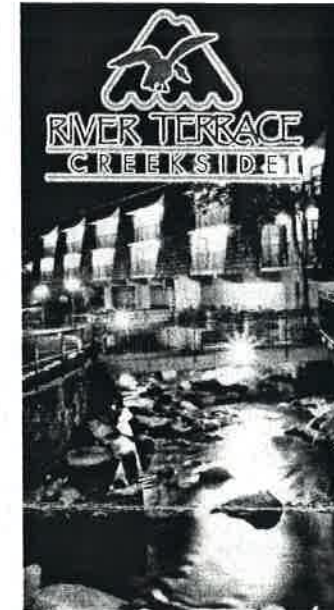
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Next Conference Set For Gatlinburg

TBPA Conference 2000

Beautiful Gatlinburg Tennessee will be the site of the next State Conference of the Tennessee Backflow Prevention Association. The meeting will be held Thursday, March 23 at the River Terrace Creekside. The facility is a quaint hotel complex straddled across LeConte Creek just off the main Parkway in downtown Gatlinburg. The conference sessions will be held in the newly remodeled state-of-the-art convention facility on the same property.

Spouses and companions will have plenty to do in Gatlinburg as the City trolley service picks up right at the property and travels the entire city of



Conference 2000 Location on beautiful LeConte Creek in Gatlinburg, Tennessee

Gatlinburg and other locations. Shopping and sightseeing are always popular in Gatlinburg. Many specialty shops are within walking distance or just a short hop on the trolley from the hotel.

Just a stone's throw from the hotel is Gatlinburg's only operating micro-brewery at the Smoky Mountain Brewery. A part of the Calhoun's Restaurant family, the Brewery has plenty of good food on the menu. Other fine restaurants are within walking distance of the conference location. Register soon - please see the insert on pages 7 and 8 of this issue. Come join the fun in Gatlinburg this spring!



President's Message

*David Kellogg, President
Tennessee Backflow
Prevention Association*

At last - Buster Backflow has arrived. I have just received the first copies of the Buster Backflow coloring books from ABPA headquarters. This coloring book may be used in conjunction with TBPA brochures, newspaper ads and videotapes to provide a wide variety of public information and education. One of the most important functions of the Tennessee Backflow Prevention Association is to increase public awareness about the hazards of backflow and the methods to prevent drinking water

contamination through education. The date and cost of the Buster Backflow coloring books has not been announced - so stay tuned.

During my second terms as President of the TBPA, I am looking forward to seeing our chapter achieve several goals, with one of these goals being a significant growth in our membership. Currently, our membership stands at 135 and we are seeing a consistent growth from both the municipal and private sectors. Along with this growth we are anticipating an increased participation in Chapter activities by our membership. The Chapter committees - including training & education, bylaws, nominating,

newsletter and awards - always welcome participation by any member.

Other areas in which I would like to see growth and improvement include having more benefits provided to our membership, as well as the advancement of backflow prevention in the State of Tennessee. The success of the repair classes that were held recently in East, Middle and West Tennessee and the efforts of the training and education committee to develop statewide backflow prevention standards are characteristic of our commitment to this industry.



Tennessee Backflow Prevention Association



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David Kellogg, President	City of Gallatin	615-451-5922 gpu@edge.net	615-452-0568
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Paul Causey	ABPA Administra- tive Director	409-862-7606 pscausey@leexnet.tamu.edu	409-862-7607 ABPA Headquarters

The Tennessee Backflow News is published quarterly by the Tennessee Backflow Prevention Association, whose members have a common interest in protecting the drinking water from contamination through cross connections. Your ideas, experience and expertise are invited and needed by the TBPA to insure a balanced approach to backflow prevention in the State of Tennessee. Your participation and support will continue to help shape the future of this industry in Tennessee.

Opinions expressed in articles, letters or advertisements in this publication are not necessarily those endorsed or supported by the TBPA. The content of this newsletter is not to be considered as legal or professional advice. Dues are \$45 annually, and are payable to the TBPA Treasurer. Annual dues include \$15 for Tennessee and \$30 for National ABPA dues. National membership is required for Tennessee membership.

The TBPA Treasurer address is:

Tennessee Backflow Prevention Association
Becky Thompson, TBPA Treasurer
c/o MSUD, PO Box 175
Madison, TN 37116-0175

All other info requests and inquiries, including newsletter items and advertisements can be directed to:

Tennessee Backflow Prevention Association
Attn: Dale Phelps, Secretary
c/o City of Gatlinburg
PO Box 5, Gatlinburg, TN 37738-0005

TBPA/ABPA MEMBERSHIP FORM

Tennessee Backflow Prevention Association
American Backflow Prevention Association

NAME: _____
COMPANY: _____
ADDRESS: _____
CITY/ST/ZIP: _____
PHONE: _____
FAX: _____
CHECK ONE: RENEWAL: _____ MEMBER # _____

NEW: _____

TBN Dec-99



ABPA DUES: \$30.00
TBPA DUES: 15.00
ANNUAL DUES TOTAL: \$45.00

Please remit total to:
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Becky Thompson, Treasurer
c/o Madison Suburban Utility District
PO Box 175
Madison, TN 37116-0175

*Includes bi-monthly ABPA News Magazine
and quarterly Tennessee Backflow News
Pre-payment of dues required to process application.
Membership is non-transferable. National ABPA mem-
bership required for state TBPA membership*

Got The Backflow Disassembly Blues?

*Reprinted With Permission From
The University of Southern Cali-
fornia Foundation For Cross Con-
nection Control and Hydraulic Re-
search - Summer 1999 Issue of
CrossTalk*

Disassembling Assemblies

Once in a while a tester will incredibly difficult time removing internal components from a backflow preventer. Once the component is finally removed, the tester can discover no reason why the component wouldn't come out in the first place. The culprit in these cases is possibly a phenomenon called hydraulic lock.

Hydraulic lock works on the same principles as a suction cup. When a suction cup is applied to a surface, especially after being moistened, it sticks. The suction cup can hold steady, even when being pulled with great force. When a suction cup is put in place, most of the air between the suction cup and a smooth surface is evacuated. When the suction cup is lifted, the center of the cup lifts off the surface first. As it is pulled away, it creates a vacuum between the cup and the smooth surface. Since the edge of the cup is sealed against the smooth surface, no air can come in to break the vacuum. Only by great force, or lifting the edge of the cup, can the vacuum be broken and the suction cup lifted.

This exact same phe-

nomenon can occur inside of a backflow preventer. The rubber disc material acts as the suction cup. Depending upon the geometry of the assembly the disc may get "stuck" in position, when pressure is dropped upstream of the check valve. This, in essence, is the same as with a suction cup. The chamber upstream of the check valve acts like the volume under the cup of the suction cup. As one tries to pull the check valve out, it is held in place by the suction upstream of the check.

When disc compression occurs, the seat can be pushed into the rubber disc material of the check valve. If the region just upstream of the check valve is sealed (like the suction cup), a hydraulic lock can make it very difficult to remove the check. With a backflow preventer it is difficult to imagine reaching in and pulling the side of the disc up off of the seat. With most assemblies there isn't enough room to do this. Often the geometry of the assembly makes it difficult to get a good grip and apply a great amount of force to pull the check valve out. Besides, the tester doesn't really want to use very much force for fear that some components may be damaged in the process. So, how can the tester solve this dilemma?

Unlike the suction cup, the backflow preventers have a built in way to break the hydraulic lock-the test cocks.

Simply open the test cock upstream of the check valve. This will allow air into the chamber upstream of the "stuck" check valve and break the vacuum. The tester should always be careful when opening a test cock. Once the test cock has been opened, the hydraulic lock is broken and the check valve should be easily removed. If the check valve is still very difficult to remove, the tester should not force it. This could be caused by a damaged or deformed part. The tester should be very careful not to damage the check valve or the seat in the process of trying to remove the check valve. It is not uncommon for testers to damage one of the seats of the assemblies while trying to remove or insert the check valve moving member (i.e., poppet or clapper). Seats are often made of bronze or engineered plastic, which is fairly soft in relation to other metals. If the repair person is careless, they could damage the seat so that the check valve would leak.

"If the region just upstream of the check valve is sealed (like the suction cup), a hydraulic lock can make it very difficult to remove the check"



Many backflow preventers are in hard to reach places - making it even harder to repair



Cross Connection Supervisor's Checklist

By Les O'Brien, CET

If your city is small (less than one thousand metered customers) it is conceivable that you, as the cross-connection control supervisor, also serve as the public works director, and you may share the same office with the police chief. But if you work in a large city (greater than 50,000 metered customers), you will need an administrative clerk, an inspector, and a couple of backflow technicians to help you with your duties.

Following is a checklist of a cross-connection supervisor's responsibilities: Prepare a written ordinance or service contract. If you do not have a program in place, you must prepare an ordinance that will serve the public health and community needs. If you already have a written ordinance or service contract you should review this document to see if it is current and does not conflict with other ordinances, policies, or plumbing codes. You must determine if your ordinance or service contract contains all of the elements of your state's safe drinking water regulations. Remember, your ordinance can be stronger than your state's regulations - but never weaker. Your ordinance can also be stronger than your adopted minimum plumbing code.

Review plans for new construction. You must inform the developer, architect, engineer of any new construction and inform them about your system's requirements concerning backflow protection.

Access plumbing permits, building permits, and zoning changes. Single family houses are often converted to professional offices. These changes cannot occur without a change of zoning. Any new construction on existing structures normally requires a building or plumbing permit.

Test new backflow prevention assemblies. You should be notified about the installation of every new water meter in your system.

Test backflow prevention assemblies and devices annually. Whether your utility's employees or the local contractors perform the tests, you are responsible for insuring that the tests are performed accurately and on time.

Decide who is qualified to repair backflow prevention assemblies. You will decide what type of training and how much training will be required. You should stay in constant contact with your contractors. You must insist that they repair assemblies not just replace them.

Remaining visible in the community. It helps to be seen in your vehicle "making the rounds." Contractors need to know that you do not just sit behind a desk in an office.

Keep records of all backflow assemblies and devices in your system. If you work for the utility company, you may be responsible only for assemblies installed on service connections. If you work for a building or plumbing inspection department, you are responsible for all backflow preventers past the point of service.

Inspect each building constructed before you started your program. You should inspect each building for

cross-connections: you will find many cross-connections. You will decide how to accomplish this monumental task, how many inspectors you will need, and where they can get training. You will need to establish which customers are the most hazardous to your system.

Decide which individuals should receive training other than the inspectors. You will decide how much training and where the training will be provided.

Decide how you will generate funds to operate your program. One possibility is to require a permit fee for the installation, testing, or repair of the backflow preventer.

Educate your customers. Make contact with your customers using face to face meetings, letters, bill stuffers, door knob hangers, and advertisements in the local newspaper. You must inform each customer who has a backflow preventer installed on their service about the hazards of thermal expansion.

Write an emergency procedures plan. This involves contacting all individuals who are part of the emergency team and brief them on their duties.

Maintain credibility. Clean up your own backyard first. Inspect your company's properties, making sure the appropriate backflow prevention assemblies are installed. Your utility/company must comply with your ordinance, policy or service contract before you can ask your customers to install backflow preventers. Do not forget to inspect your water plant.

Enlist help to run your program. Here are a few people who can help you: utility personnel involved with water services, individual(s) who take the applications for new service, contractors: plumbing and pipe-fitting, fire protection, lawn irrigation, mechanical (HVAC), and utility engineers: civil, mechanical, fire sprinkler, health officials, plumbing inspectors: city, county, state and provincial, and federal utility inspectors code enforcement officials (they usually inspect older buildings for code violations), customers.

Get to know these people. You will be visiting with each of these groups, explaining your program and enlisting their help.

Summary:

If you accomplish all of these tasks, there is still no guarantee that you will not have a cross-connection incident in your community. Your best bet is to accomplish as much as possible and to document everything that you do. You want to be prepared for the day that you may have to defend your program to a judge. If you have done your job effectively, you can be proud that you have done everything in your power to protect the health and welfare of your customers.

The above article appeared in the July 1995 issue of OPFLOW vol21 no7, published by the American Water Works Association. (AWWA)

Tennessee Training Calendar



- **The Tennessee Association of Utility Districts (TAUD):** Cross Connection Renewal Classes for Municipalities and Basic Cross Connection Training Classes for contractors are available. Other classes may be available. Call Dwayne Culpepper at TAUD, 615-896-9022 for further information.
- **Memphis Light, Gas & Water (MLGW):** Classes are held in the greater Memphis Tennessee area on an annual basis. Call 901-528-4720 for further information.
- **Plumbers and Pipefitters Local Union 572,** Nashville, Tennessee: Backflow Classes for Apprentices and Journeyman, contact Mike Trigg at 615-254-7235 for further information.
- *To list or update your training class here please contact Dale Phelps at 865-430-1372*

Upcoming Events

- January 10, 2000 – TBPA Meeting – Gallatin, TN
- March 23, 2000 – TBPA Conference 2000 – Gatlinburg, TN
- April 29 – May 3, 2000 – 16th Annual ABPA International Conference – Vancouver, WA/Portland, OR

Tennessee Department of Environment and Conservation – Cross Connection Control Training Classes

Fleming Training Center
2022 Blanton Drive
Murfreesboro, TN 37129
615-898-8090

The classes offered by the Fleming Training Center are free of charge to any person who wishes to attend. Written registration is required, however, a minimum of thirty days in advance of the class. Confirmation letters for all classes/seminars will be sent out to registrants approximately three weeks prior to class and will contain pertinent details regarding exact location, class content, and materials. For information on class content for Cross Connection Control Workshops call Mr. Robert Lashlee at 615-532-0164

Cross Connection Control Workshop (BASIC) (4 days) (Textbook: None) Classes are at the Fleming Training Center in Murfreesboro unless otherwise indicated.

January 11 - 14, 2000
March 14 - 17, 2000
April 11 - 14, 2000 - Knoxville
May 9 - 12, 2000 - Kingsport
June 6 - 9, 2000
June 27 - 30, 2000 - Jackson
July 25 - 28, 2000
August 15 - 18, 2000 - Kingsport
September 12 - 15, 2000 - Knoxville
October 10 - 13, 2000
November 14 - 17, 2000

Cross Connection Control Workshop (RENEWAL) (2 days) (Textbook: None) Classes are at the Fleming Training Center in Murfreesboro unless otherwise indicated.

February 9 - 10, 2000
April 10 - 11, 2000 - Knoxville
May 8 - 9, 2000 - Kingsport
June 26 - 27, 2000 - Jackson
July 19 - 20, 2000
August 14 - 15, 2000 - Kingsport
September 11 - 12, 2000 - Knoxville
December 6 - 7, 2000



Next Meeting: January 10 In Gallatin

The next meeting of the Tennessee Backflow Prevention Association will be Monday, January 10, 2000 at the Gallatin Utility Administration Building at 10:00 AM.

DIRECTIONS:

From I-40: take highway 1095 into Gallatin, at first light turn left (SR109 Bypass), first light turn right (Hancock Street), the building is approximately 1 mile on the right.

From I-65: take Vietnam Veterans Boulevard into Gallatin, turn right at Maple Street, through light, building is on left.

The Tennessee Backflow Prevention Association last met October 29, 1999 in Murfreesboro, TN. An Awards Committee was formed con-

sisting of TBPA members David Birkholz, Grady Gentry, Brent Ogles and Chairperson Angel Goike. The first TBPA Awards will be given at the Gatlinburg Conference in March 2000.

A Bylaws committee was re-established with Larry Stinnett as Chair, and the entire TBPA Board as members. The TBPA Bylaws are to be reviewed and recommendations made for any possible changes.

The Training and Education Committee was re-named as including Grady Gentry, Dale Phelps, Dwayne Culpepper, Robert Lashlee, and Brent Ogles as Chair.

A motion was approved to lengthen the State Conference to one and a half or two days in length and include an

evening banquet, beginning in 2001. A detailed financial report was presented and included a balance of \$6,080.64 as of October 29, 1999.

President David Kellogg reported that the USC Foundation had refused to allow the TBPA and the State to use the test procedures adopted at the 1999 TBPA Conference, due to an apparent copyright violation regarding the similarities between the two procedures. The TBPA will explore other options and report to the membership with our options as soon as possible. The purpose of the standardized test procedure is to endorse one specific method of testing backflow assemblies for instructional classes and certification exams in the State of Tennessee.



ABPA Survey continued . . .

(Continued from page 3)
control program should be weighed against the cost of investigation, system clean up and the intangible cost in lost consumer confidence.

The consumer cost, such as, the installation, testing and maintenance of backflow prevention assemblies is not addressed in this summary, although included in the survey responses are water systems that install, test and maintain backflow prevention assemblies at the service connection. ABPA intends to collect additional data on consumer costs in a future survey.

The need to mandate the enforcement of programs allows existing programs to concentrate their efforts on enforcement and not

spend their time defending why they are operating a program. Mandating cross connection control programs will cause programs with less than desirable enforcement practices to commit to protecting the drinking water from potentially harmful sources such as backflow.

Public water systems should seek out the best quality of water available and ensure it's original quality by testing to standards. Public water systems should also treat vulnerable surface water or ground water influenced by surface water with a higher degree of care and monitoring. Public water systems should construct the water facilities to the highest construction standards.

In addition, to protect the pub-

lic health as well as the investment of time, money, and care in system infrastructure and monitoring; and due to the fact that hundreds and hundreds of documented backflow incidents have circumvented the existing level of protection: **Public water systems should be required to have and maintain an effective on-going cross connection control program.** In order to focus limited water system and state resources on the implementation of the program and not defend why the program is needed, this requirement must be made by the federal government in order to place it on equal footing with all the other federally mandated drinking water standards.



ABPA 1999 Survey of PWS CCC Programs

This report in its entirety can be found on the ABPA website - www.abpa.org. We have reprinted just the conclusion section here.

Conclusions

The intent of the Safe Drinking Water Act is to assure that everybody will be able to have safe drinking water. Even with the multitude of monitoring and treatment requirements the drinking water can still be unsafe to drink. A backflow incident has the potential to adversely affect water quality. This affect can be a minor taste and odor complaint or a lethal dose of some substance. The duration of the incident could compromise the drinking water for a short moment or could be an on going hydraulic problem. The need to identify and correct these potential hazards is important to maintaining safe drinking water in the distribution system.

Contamination of the potable water supply by cross connections is largely undetected, not investigated, not properly documented, or not reported. Even so, there are numerous incidents that illustrate the hazards and occurrence of backflow. Included in this document are exam-

ples of how every regulated contaminant group has found a pathway into our drinking water even with the drinking water standards in place and the required monitoring accomplished.

Many states have recognized the need to implement a cross connection control program. Without proper protection and operator training in place, a backflow incident may happen and a consumer complaint filed. In response the water system may simply flush the line without finding the source of the problem. A hidden danger with cross connections is that some contaminants can present a long-term health risk by exposure to contaminants that can be harmful; without correcting the situation with proper cross connection control the potential for contamination and risk is still present.

With the replacement of aging distribution systems the potential for more incidents of backflow could be expected due to main replacement and repair. The need to replace an aging infrastructure in the water industry has led to the forecast of billions of dollars being spent to comply with requirements of the Safe Drinking Water Act. A cross connection control program helps assure

that the money spent on the distribution system allows it to operate without contamination.

The April 1998 Association of State Drinking Water Administrators' Survey of Best Management Practices in Community Ground Water Systems has recognized the desirable effects of an effective cross connection control program and confirms that cross connection control is more than just a good engineering practice. The 1999 ABPA State Program Survey results indicate that 81% of the states would not object to a general requirement for cross connection control.

The data from the 1999 ABPA Water System Survey shows that the small water system annual cost on average is \$6,057, the large system cost is \$92,596. The average cost to respond to a backflow incident is 61 to 494 man-hours (\$1,830 to \$14,820). In some cases the cost of response to a single backflow incident has exceeded \$100,000 dollars, in a least two cases the entire distribution system was replaced at millions of dollars. It clearly seems that prevention is the only viable way to deal with potential backflow situations. The cost of a cross connection

(Continued on page 10)

42% of all surveys conducted find a cross connection

51% of all survey respondents have experienced a backflow incident.

Your Input and Opinion Is Asked For!

*Becky Thompson, Inspector
Madison Suburban Utility District*

There seems to be a lot of misunderstanding by the members of the Tennessee Chapter of the American Backflow Prevention Association regarding the quarterly meetings that are held in various parts of the state. It is apparent from lack of attendance or involvement of the members that they view the meetings as Chapter Board Meetings only. This is not the case.

The quarterly meetings are designed for every member to meet with other people involved in the cross-connection field. Yes, we do discuss financial issues but we would discuss more items if more of you became involved.

A portion of a meeting is used to discuss the financial portion of the

chapter and other discussions on issues that can or will effect all of us in the backflow industry. The financial portion is important and does effect the members but the meetings are for you, the members, regardless what is discussed. It's your membership dues and conference fees that arc working for the chapter. You should be interested in how your dues are used instead of relying on just the Board members to handle them.

There are a lot of things we could do at these meetings if our members would participate. We could have technical sessions or just discuss problems that you are experiencing in your program or out in the field. We can not address these issues if you do not tell us or get in there and participate.

The Chapter needs help. We

have a newsletter that is put out quarterly and we need news items to put in the our newsletter. If you don't want to tell us your name or location that is fine. We can make the article anonymous. Do you know all that needs to be known on how to handle customers or backflows or any other thing regarding backflow prevention? I know you don't.

You may think that an issue you found an answer for is not important. THAT IS NOT THE CASE! Anything you can share with another tester or inspector may help them solve u long time problem. Get involved!

Help the Tennessee Chapter of the American Backflow Prevention be one of the best. This is your Chapter too!



"Mandating cross connection control programs will cause programs with less than desirable enforcement practices to commit to protecting the drinking water from potentially harmful sources such as backflow."



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MIKE TRIGG
Training Coordinator
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225 Ben Allen Road Office: 254-1104
Nashville, Tennessee 37207

TBPA Conference 2000

Tennessee Backflow Prevention Association

The Fifth Annual Conference of the Tennessee Backflow Prevention Association will be nestled in the Great Smoky Mountains in beautiful Gatlinburg. We promise you an educational and informative conference with topics that will provide you with the knowledge and tools to assist your backflow prevention and cross connection control efforts.



**Thursday
March 23, 2000
8:00 AM – 4:00 PM**

**River Terrace Creekside
Hotel & Convention Center**
125 LeConte Creek Drive
Gatlinburg, TN 37738
www.riverterrace.com

- Returning to speak by popular demand will be legal expert Attorney Douglas Creagor. Be sure to bring your legal questions and liability issues for Mr. Creagor to address.
- ABPA President Jack Poole will bring us up to date regarding what is going on in the Association and current ABPA projects.
- Noted backflow expert Jim Purzycki will address the current state of the backflow prevention industry and his view of the future. Jim was recently awarded the Lifetime Achievement Award by the ABPA.
- The first annual TBPA Awards for Excellence will be awarded at the luncheon.
- The best backflow trade show in Tennessee, with all the manufacturers and vendors with the good stuff.
- Testers – bring your test kit, a water column will be available for a free accuracy verification.
- Tennessee Certified Distribution Operators – This one-day meeting will renew your Distribution I or II Certification.
- We're saving a spot for you – but hurry and register!

<p>Conference Fee \$50 TBPA Members \$100 Non-Members Late Registration Fee \$25</p>	<p>Lodging Fee \$54 per night Plus Applicable Tax Please Contact Hotel</p>
<p>Complete this form and mail with payment.</p>	<p>1-800-521-2040 (865) 436-4865 e-mail: rivert@riverterrace.com</p>

TBPA Conference 2000

Tennessee Backflow Prevention Association

How to get there:

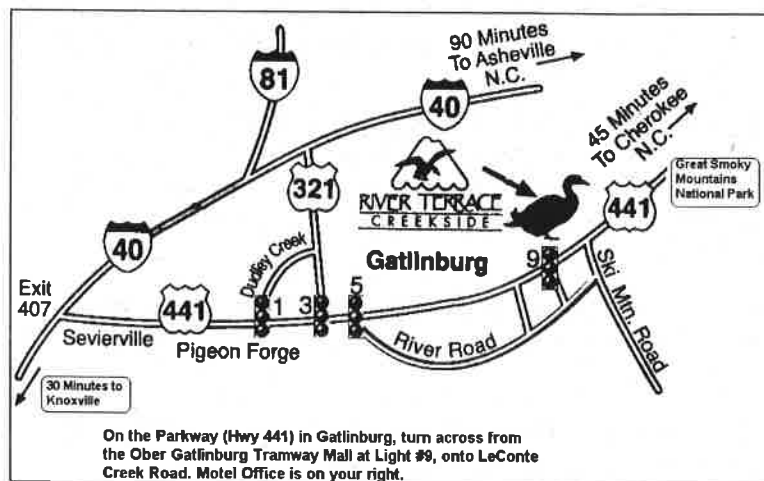
From Middle or West Tennessee: On I-40 just east of Knoxville take Exit #407, drive thru Sevierville and Pigeon Forge to Gatlinburg on Hwy 441 south. A good alternate route to avoid heavy traffic would be Exit #364 off I-40 just west of Knoxville, taking Hwy. 321 toward Lenoir City, cross over I-75, then follow directions from the south (below).

From the South: On I-75 just south of Knoxville take Exit #81, drive thru Lenoir City, Maryville, Walland and Townsend into Pigeon Forge on Hwy 321. Then take 441 south to Gatlinburg. *For a super scenic route, you can bypass Pigeon Forge and take Scenic Highway 73 from Townsend to the Little River Road in the Smoky Mountains National Park. This will bring you right into Gatlinburg!

From Upper East Tennessee or the Carolinas: On I-40 near the North Carolina side take Exit #440 near Newport. Take Hwy 32 south to Cosby, then 321 west to Gatlinburg. For a scenic route take the Foothills Parkway at Exit #443 off I-40.

For more info contact:
Dale Phelps (phelpsdale@yahoo.com) at 865-430-1305 or Dave Birkholz (treebirk@worldnet.att.net) at 865-458-2091

Gatlinburg Chamber of Commerce:
1-800-267-7088



Conference Agenda - Thursday March 23, 2000

7:00 AM	Continental Breakfast, Exhibit Hall Opens
8:00 - 8:45	Opening Session
9:00 - 10:00	Mid Morning Session
10:15 - 11:30	Late Morning Session
11:30 - 1:00	Luncheon, Exhibit Hall Open
1:00 - 2:00	Early Afternoon Session
2:15 - 3:15	Mid Afternoon Session
3:30 - 4:00	Closing Session
4:00	Door Prizes - Adjourn

Inspectors Column

By: Becky Thompson
Inspector, Madison
Suburban Utility District

Eleven years ago, when I first came into the backflow prevention field, I was amazed at how little training the installers had regarding the installation and repairs of the backflow preventers. This was in the industry as a whole. The installers could install a backflow preventer but they did not know why or what they were for, much less, repair one. The installations would not meet the guidelines for a proper installation and the customer would experience constant problems with the devices.

We at Madison Suburban Utility District began encouraging people to become certified who were involved with the installations and repairs of backflow preventer. We felt this would give them a better understanding of the operation of a backflow preventer along with the knowledge to

understand the results of a backflow test report. Our final mission was to receive better installation of the backflow preventers and less cost for our customers when their backflow preventers would need repairing.

Tennessee Association of Utility Districts (TAUD) heard the different Utilities concerns regarding this issue of uneducated plumbers. So they developed a two evening course designed for the installers or repairers only. (The four or five day course the State offers could not fit into the plumbers' schedule because of their demand by the general public.) This course provides the plumbers with information on how a backflow preventer works and they have to test two types of backflow preventers. This does not make them an expert but it opens the service man's mind to the operation and the need for proper installations and repairs of these devices.

This course has received a lot of criticism by various people around the state. These people may be seeing installers who have the opinion they know it all but that is not the idea behind the course. We all experience those people who think they know it all but the final outcome is the work they provide and generally their work will show how much they actually know.

I would like to take my hat off to TAUD for the accomplishment their classes have provided the service people in my area. I am receiving better installations, better repairs and more contact from the plumbers, fire sprinkler contractors and the irrigation contractors. The one area that is receiving the most reward for their accomplishments, is the customer.

We all know this short class is not the total answer but it is a beginning that is paying off for those of us that see the difference.



Inspectors Column

Articles by
Cross Connection
Inspectors, Plumbing and
Mechanical Inspectors

"What's That Stuff In My Water?"

A problem with a faulty part in some water heaters has caused some water quality complaints. The part, called a dip tube, is an internal pipe that extends from the cold water inlet to the lower part of the tank. Approximately 14 million of these defective parts manufactured between August 1993 and October 1996 have been deteriorating over time in water heaters. The plas-

tic dip tube apparently flakes apart and clogs faucets and pipes with plastic chips, which has prompted many water customers to call their water suppliers with complaints about contaminated water. A class-action lawsuit to allow customers and contractors to re-coup some expense for replacing this defective part has been established. For more information

visit www.diptubeselement.com or call 800-329-0561.

The white particles in the water from a dip tube are plastic, so they will burn or melt under heat, they will not react to acid, they do not float on top of the water, they do resemble eggshells, and they tend to get caught in faucet aerators and showerheads.

