Message from the President

I open this message with a cheerless announcement regarding the sudden and unexpected death of John Hamm. John suffered a fatal heart attack at his residence on February 5. John sat on the board of directors for the Chapter, representing Los Angeles County. John worked for the Long Beach Water Department for twenty years and was the supervisor in the water meter and backflow department. John loved to play country western music, ride his motorcycle and had a strong, loving relationship with his son, John Jr. If you did not attend the ABPA Conference in May of 2004 you missed John and his band giving one of the best evenings of entertainment at a Conference. John was a large man with a quiet disposition and will be missed by everyone that knew him.

June 1, 2005 there will be a repair seminar held at Palomar College in Escondido. Jim Purzycki will be giving a demonstration on repairing backflow prevention assemblies that are most common and those that are not so common. Bring your questions and a hearty appetite for this all day event.

Upcoming events also include the 21st Annual International Conference and Tradeshow that will be held in Orlando, Florida, May 8-11. This will be a great opportunity to combine work with an excellent vacation.

Also on the horizon is the Western Regional Backflow Conference that will be held in Las Vegas, Nevada and is scheduled for the week of October 23, 2005.

I would like to take this opportunity to ask for information for articles to be placed in the newsletter. If you have an area or item of interest that you would like to see placed in the newsletter please contact one of the board of directors, the secretary or me with your ideas. We have over two hundred members in our chapter and the amount of information that this organization can give not only to each other but also to the backflow prevention industry is immense.

Get involved with your chapter and help us get this information out there where it can be used.

Bill Laird, President
Southern California Chapter
Calendar of Events

June 1, 2005        ABPA Repair Seminar, Escondido, CA
Sept. 25-28, 2005   ABPA Western Regional Backflow Conference, Las Vegas

Benefits of ABPA Membership

There is a genuine need for education, cooperation and organization in the changing and growing world of backflow prevention and cross connection control. That need is met by ABPA, a non-profit organization founded in 1984. Our goal is to provide education and technical assistance to ensure safe drinking water through effective cross-connection control.

Our members include both new and experienced plumbing contractors, backflow prevention assembly testers, regulators from health departments and water suppliers and others with an interest in maintaining water quality standards. Chapter members receive a quarterly newsletter, reduced rates at seminars, and can participate in special “member only” tours. Your $65.00 payment includes $50.00 for National dues and $15.00 for local Chapter dues. Join today!

MEMBERSHIP APPLICATION FORM

Complete the application form and return with your payment (check or money order only made payable to Southern California Chapter ABPA) to:

Southern California Chapter ABPA
PO Box 712
Cypress, CA  90630

$ 65.00 ABPA Membership, includes $ 15.00 Chapter and $ 50.00 National dues (dues and contributions are tax deductible). Already a member of ABPA National? Just submit $ 15.00 SoCal Chapter dues.

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A Tribute to John D. Hamm

It is with great sadness that the Southern California Chapter reports that John D. Hamm passed away suddenly on February 5, 2005.

John worked for the Long Beach Water Department (LBWD) for 20 years and was introduced to backflow in 1999 when LBWD took over the testing and repairs of all external assemblies in the City. In 2001, he joined the ABPA. That same year he became a Board member of the SoCal Chapter as a Director for Los Angeles County, staying active in that capacity until his death. He generously contributed his knowledge about backflow and meters to anyone who had questions or a desire to learn more. At our National Conference in Long Beach, he was guest speaker at a well-attended session: Large Assemblies & Piping Installation Concerns.

John received several awards during his career:

- 1995 – 3rd Place: AWWA Meter Madness Spring Competition
- 1996 – Outstanding Achievement Award from City of Long Beach
- 1st Place: AWWA Meter Madness Spring Competition
- 1997 – Outstanding Achievement Award from City of Long Beach
- 1st Place: AWWA Meter Madness Spring Competition
- 1998 – Outstanding Achievement Award: City of Long Beach
- 2nd Place: AWWA Meter Madness Spring Competition
- 1999 – Outstanding Achievement Award: City of Long Beach
- 2001 – Outstanding Achievement Award: City of Long Beach
- Employee of the Year Finalist: LBWD
- 2002 – Outstanding Achievement Award: City of Long Beach
- 2004 – Job Well Done Certificate: LBWD

In addition to his career with LBWD, he had a second career with his band Snake Oil Willy. John was not only the organizer and lead singer of Snake Oil Willy; he also composed much of its music. His musical talent was recognized by the North American Country Music Association when he and his band received the following awards at National Competitions:

- 2002 – Most Promising Vocal Group of the Year
- Most Promising Male Entertainer
- 2003 – Vocal Group of the Year
- Most Promising Male Entertainer

Those who attended the ABPA National Conference in Long Beach were treated to some of his talent during and after the Awards Dinner and will remember his charisma and wide range of talent.

Whereas striving to be successful in both his careers was extremely important to John, his first love was his family. Our heartfelt condolences to his wife, Gwen, and children, Heaven (age 12) and John D. Hamm Jr. (age 9).
It was cold, windy and there was very good chance that rain would make an unwelcome appearance on March 22, that being the date of the Backflow Industry Products Fair. Although the weather was not our typical sunny California weather that did not deter the over three hundred attendees from enjoying a morning of information dedicated to the backflow prevention industry. Those that attended the event represented municipalities, water agencies, plumbing contractors, state and local agencies and the private sector testers.

This is a product fair that is directed specifically to the backflow industry and the vendors that presented their wares represented the best of the products available in this growing field. There were companies that offered security cages fabricated in many different type of metal, including stainless steel, aluminum and carbon steel. A new design that utilizes fiberglass for the security cover was also on display. As more emphasis is placed on water system security we will be seeing more of this type of enclosure being presented for protection of backflow prevention assemblies.

The actual testing of backflow prevention assemblies has changed very little in the last ten years. How the pertinent information is gathered, given to the water agency and is stored has changed. EngSoft Solutions is one of the leaders in the software field that is marketing to the backflow prevention tester and water agencies. Computer technology and software are finally addressing our industry and there are several programs that are available to the industry to compile information.

Testing backflow prevention assemblies requires specialty tools and there were several companies at the fair that produce the test kits for testing backflow prevention assemblies. The accessories that make it easier to test backflow prevention assemblies were in evidence and all those extra goodies are available to help the tester in his daily endeavors.

Without the manufacturers of the backflow prevention assemblies, there would not be an industry fair. Watts, Febco, Ames, Wilkins and Kennedy Valve were among the manufacturers that presented their products at the fair. The representatives of the respective companies were on hand to answer questions about their products and they handed out large amounts of written information regarding their products.

The fourteen vendors represented most of what is available in the backflow industry and we thank them for giving us the chance to peruse the products that are in the market place.

Some may say that the most important part of this event is the food. We will argue this point at a later time but there is little doubt that the importance of the In-N-Out Burger lunch is very much on the minds of the attendees. Three hundred thirty one meals were served by the In-N-Out Burger crew and there were no complaints.
Installation Criteria: Mechanical Concerns

Submitted by Jim Purzycki, Orange County Director

Final article in a three-part series explaining installation criteria for backflow preventers.

Once we get past the problems of hydraulics, we must look to the mechanical concerns of installing a backflow preventer. The first concern to evaluate is the installation orientation. Backflow preventers must be installed in the installation orientation they were designed and approved for (vertical, horizontal etc.). There are backflow preventers that can be installed horizontally, vertically and other orientations that can make an installation easier. The key point to realize is that they can only be installed in the orientation that the approval agency has determined they will work in. Some manufacturers may state that it is acceptable to them to install in other orientations, but we must be sure the list of approved assemblies approves the desired orientation. Some installations a vertical orientation will be more advantageous than a horizontal orientation. By placing a backflow preventer in an orientation other than what it is approved for may cause it to not work properly. To be sure, confirm with your list of approved assemblies but also consult your local administrative authority.

When installing any backflow preventer, it is important that it be installed into the piping system properly. The type of pipe and piping connections used are established in various piping codes for your specific area, and must be followed. The proper installation of braces, brackets, mounting pads or supports assures the installed backflow preventers will continue to work properly. It is important that all pipe, valve and fittings are of the correct material and installed as required. The weight of the assemblies, the attached piping and the force of moving water are all substantial and must be properly evaluated. Even the forces needed to take assemblies apart for servicing could cause problems if the piping is not securely installed.

Another key concern is accessability to the assembly once it is installed. The installation of the backflow preventer must be in a location where access is not restricted by piping, walls or any other restriction. All backflow preventers require some type of regular inspection and servicing. To assure this inspection and service can be done properly, an adequate work space must be left around the backflow preventer. This space will vary depending on the type and size of backflow preventer that is installed.

The installation of assemblies in areas where the entry or exit are restricted are considered confined spaces. Installing assemblies in areas that are classified as confined spaces requires specific entry and exit protocols by the technician to assure there is no danger entering into the confined space such as lack of oxygen or accumulation of dangerous gases.

The height the assembly is installed in relation to the surrounding grade is also important. Some assemblies have key minimum height requirements to assure the relief valve will not be submerged or engulfed. Most Plumbing Codes also establish maximum height requirements. Most codes state if installation heights greater than 5 feet must be used, a permanent work platform must be built around the assembly for servicing.

Installing assemblies that can discharge water (RP, RPDA, PVB, SVB) can lead to another set of concerns. Water that can discharge from assemblies does not usually cause any concern when installed outside. When assemblies are installed inside buildings, the discharge is usually piped away to a drain. This drain piping must be properly installed so a cross connection is not created between the drain and the assembly discharge. Most manufacturers of RPs also produce an air gap drain attachment that assures the proper separation is achieved from the relief valve discharge and the drain line. An air gap drain is designed to carry away an occasional dripping or mild discharge only. The full discharge of the RP is well beyond the capacity of the air gap drain attachment.

ARTICLE IS CONTINUED ON PAGE EIGHT
2004 was a banner year for certifying my proficiency in backflow testing. I certified with ABPA, AWWA, the Counties of Orange, Riverside and San Bernardino. I’m here to give you the “insiders” guide to get through it all ….. KNOW YOUR PROCEDURES! See, easy isn’t it? Now, to give you a little insight as to what you are going to experience during the examinations, I would like to offer you this report.

My first test was with our organization, the ABPA. I originally certified with them in 1995 and as per the requirements, I have to re-certify every 3 years, so this was my 4th time of going through the certification process. The cost of certification is $60 and involves a written and performance evaluation. I had to first pass a 100 question, multiple choice test on backflow theory, troubleshooting, rules and regulations. A minimum score of 70% is required before you will be allowed to go on to the demonstration portion of the test. The demonstration portion requires you to properly test 4 different types of backflow prevention assemblies while a proctor watches. The devices tested are the reduced pressure principle (RP), double check (DC), pressure vacuum breaker (PVB), and spill resistant vacuum breaker (SVB) assemblies. The SVB demonstration requirement was just implemented in 2004, even though the test procedure has been in the 9th edition of USC’s manual since it debuted in 1993. After passing this examination, my certification is again good for another 3 years, at which point I will have to repeat the process.

My next test was with the California-Nevada Section of American Water Works Association, and again it was a 3-year recertification test. This certification also costs $60 and involves a written and performance evaluation. The written test consisted of a 50 question, multiple choice test on backflow theory, rules and regulations along with a 25 question test on troubleshooting. (Note: New testers get a 100 question test on backflow theory, rules and regulations, along with the 25 question troubleshooting exam.) After passing these two tests (70% minimum on both individually to pass), I was allowed to demonstrate my proficiency in testing a RP, DC, and PVB. AWWA does not currently require the SVB as part of the hands-on experience, but I am told it will be required shortly, so be ready. Also, after you are certified as a backflow prevention assembly tester by the Cal-Nevada AWWA, you are eligible to apply for their Cross-Connection Control Specialist certification. This will require another test, but it will consist of only a written test on backflow theory, rules, and regulations and cross connection control program requirements. Contact the AWWA for more information on this Specialist certification.

The water districts within the counties of Orange, Riverside and San Bernardino depend on the County Health Agencies to examine and license testers that operate in their counties. This means another set of examinations for those of you who want to test backflows in these areas. All three health agencies require a new tester to take a written and performance examination. Recertification may require just the performance examination.

Orange County was the only agency that did not require a gage calibration report for my pressure differential gage, because they test the gages during your examination at their site. They have a setup to determine if your gage is accurately recording 1, 2, and 3 psi differentials. They have 3 sight tubes at the appropriate elevations to make sure your gage reads 3, 2, and 1 psid’s at a descending rate and they will make you repair your gage if it is more than .2 psi off. Otherwise, their demonstration test is like ABPA’s, but be on the lookout for simulated conditions like leaking shutoff valves. Remember, any backflow can misbehave at any time, so you must know how to proceed when you encounter different conditions. Also, be ready to answer questions from your proctor regarding the trouble shooting conditions that could develop during your test. Their certification is good for 2 years and you will be required to attend an update seminar before you can recertify.
Riverside County was a two-day affair, in that they held a written test at the County Administration building, then the hands-on was a week later at the water department’s work yard. When you pass the written test, they will give you an appointment to take the hands-on portion of the test. This is nice because you don’t have to wait around for your turn like the other tests. Now, when you do your hands-on test, be prepared to not only test the device, but also to answer questions regarding conditions that may arise while you are testing and how you would proceed with your test as you encounter these situations. Again my advice to you is to know your procedures, especially the troubleshooting. Their certification is valid for 3 years, after which you will be required to recertify after attending an update seminar.

San Bernardino County: They were the last agency I certified through and were very similar to the others. They will also ask questions during your performance exam as to what you would do if different situations would arise during your test. Remember your procedures and know how to proceed if a situation like leaking line valves and backpressure conditions occur. Their hands on test was at the water department’s maintenance yard and you will have to wait your turn with however many testers are getting certified that day. Otherwise it’s a straightforward, exam that asks whether or not you know how to properly test a backflow device. Their certification is also valid for 3 years, after which you will be required to recertify after attending an update seminar.

Personally, I feel all these groups were fair and well informed about the test procedures. I will admit I was a little nervous when I started this quest for certification, but when I got to the last one I was ready for it to all be over with. My advice for those of you wishing to get certified by these different agencies is to – GO FOR IT – but remember to study hard and know the procedures before you get in that hot seat. Also, don’t be afraid to fail a device if it doesn’t meet the minimum requirements of the test procedure. You are not required to get it working properly, but only to correctly record its condition at the time of your test. The device might work perfectly for the tester before you, then go into a failure mode when you try to test it, so don’t sweat it if you fail a device right after someone passed it, or vice versa. Also, if you feel that you’ve made an error in your testing procedure, just back up a step or two and start again. Or if you are more comfortable starting from the beginning, go ahead. There is no penalty for making mistakes as long as you go back and do it over correctly before turning in your test. You will be nervous (I can guarantee it) but you will find the nervousness will go away when you start doing what you know how to do. Good luck and happy testing.

COMING NEXT ISSUE: I’M CERTIFIED, NOW WHAT?
Mechanical Concerns  (cont. from page five)

A backflow preventer may be required to be installed where the environment can affect the backflow preventer. Enclosures may need to be installed around a backflow preventer to assure the backflow preventers temperature parameters are maintained. Enclosures can also be installed for vandal control to restrict who can operate the piping system.

Backflow preventers are installed to protect against an identified hazard, be it high or low. The degree of hazard and the type of backflow (backsiphonage & backpressure) that has been identified will help dictate the proper type of backflow preventer to use. Even if the correct type of backflow preventer is chosen, the installation of the backflow preventer must be followed for it to work effectively. When installing any mechanical backflow preventer (device or assembly) it is important to follow the manufacturer’s restrictions as to its working parameters. It is also important that the backflow preventer is installed only as it is approved by the acceptable approval agency. It is also important to assure the hydraulics of the piping system are not adversely affected by the installation of the backflow preventer and all mechanical considerations are evaluated. Once you have it installed properly, DON’T FORGET TO TEST IT.

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