## **Backflow Prevention Reference Manual** *(Fourth Edition)*

The Fourth edition of this full color illustrated reference manual is designed to teach every aspect of backflow prevention and cross-connection control, from identifying and testing the wide variety of backflow prevention assemblies to proper selection and installation of both testable assemblies and non-testable backflow prevention devices and methods. This manual provides the user with information needed to understand what the degree of hazard or potential risks exist to potable water systems, and whether the proper backflow prevention method, device or assembly has been selected and correctly installed. The manual is the perfect resource for the novice or the expert in the cross-connection control industry. As a textbook for use in backflow certification classes or a reference manual used to allow waste and water utility personnel a better understanding of how and why backflow events occur this publication is the best reference available.

The 480 page manual covers the history of backflow prevention; definitions and devices; backflow prevention hydraulics; testing methods with full, detailed illustrations; an overview of gauges and test kits; trouble shooting and repair information; cross-connection control surveys; program development; code requirements and installation standards. The manual also contains sample test questions to help prepare an individual to become a certified backflow prevention tester, surveyor, or repairer. The fourth edition has been updated to the latest editions of the plumbing, mechanical and fire protection codes and standards. It also features expanded chapters about non-testable devices and methods, and improved, updated, and expanded testing/repair/troubleshooting information reflecting the latest products and filed-testing procedures.

IAPMO Online Store: www.iapmostore.org or Toll-Free: 1-800-85-IAPMO

Member: \$116.80 Non-Member: \$146.00

#### HAVE A GROUP THAT NEEDS CERTIFICATION OR RE-CERTIFICATION?

Contact the IAPMO Backflow Prevention Institute to teach for you. Private classes available to fit your schedule.

TOLL FREE: 1-855-536-2800 • Fax: 909.354.3647 • E-mail: kim.curtis@iapmo.org

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#### **COURSE OUTLINES**

IAPMO Backflow Prevention Institute® (BPI) provides education and training services to increase both private and professional awareness of potential hazards to the public drinking supply relating to backflow and cross connections. Backflow prevention programs are in place to protect the public health from intentional and unintentional contamination of the public's potable water supply.

The IAPMO Backflow Prevention Institute training is designed to provide the student with the knowledge to successfully pass any examination required by the State or local Authority Having Jurisdiction. BPI has designed this comprehensive training to provide the necessary skills to confidentially take the exam of AWWA, ABPA, ABC, ASSE and many others.

#### **Cross-Connection Control Surveys**

The Backflow Prevention Institute offers cross-connection control surveying services to commercial, industrial, and municipal clients. Many jurisdictions are now requiring water users and property owners to have cross connection surveys performed on a five year cycle. IAPMO BPI surveys target both isolation and containment protection needs and requirements at existing facilities, to identifying potential and actual cross-connection issues. Our surveys look at existing backflow prevention protection present at the site, testing and maintenance of this protection and recommendations for additional backflow prevention devices or assemblies that may be needed to protect the potable water supply. The Backflow Prevention Institute can also provide certification training to your on-site personnel to allow you to conduct future surveys and inspection and testing in house.

# American Society of Sanitary Engineering (ASSE) and International Association of Plumbing and Mechanical Officials (IAPMO)

IAPMO BPI is an ASSE accredited school; our training classes are designed in accodance with the requirements of the ANSI Accredited ASSE Series 5000 Cross-Connection Control Professional Qualification Standard. The Series 5000 gives the minimum performance requirements for Backflow Prevention Assembly Testers, Cross-Connection Control Surveyors, Backflow Prevention Assembly Repairers, Fire-Sprinkler System Cross-Connection Control Testers, and Backflow Prevention Program Administrators. More and more cities, states and local jurisdictions are recognizing the need to have regulations concerning the installation and testing of backflow devices. They also recognize the need to regulate the qualifications of the individuals testing and repairing these devices. As a national certifying agent, ASSE meets the need of these jurisdictions. As an ASSE approved school the IAPMO Backflow Prevention Institute training is designed to provide the student with the knowledge to successfully pass any examination required by the State or local Authority Having Jurisdiction. BPI has designed this comprehensive training to provide the necessary skills to confidentially take the exam of AWWA, ABPA, ABC, ASSE and many others.

## **Backflow Prevention Assembly Tester Training and Certification Examination (ASSE 5110)**

Length: 40 hours

**CEU:** 4.0

At this forty (40) hour training class, participants will be presented with the guidelines used for acceptable practices of testing backflow prevention assemblies. The participants will also learn the principles of cross-connection control and the methods devices, and assemblies used to protect the potable water system. The training and knowledge provided will prepare the student for the jurisdiction's recognized examination. BPI has designed this comprehensive training to provide the necessary skills to confidentially take the exam of AWWA, ABPA, ABC, ASSE and many others. On the final day of the training, the ASSE 5110 tester certification examination will be administered. The written exam for an initial tester certification consists of 100 questions. Presently, the initial certification candidate must demonstrate the field test procedure for a reduced pressure principle assembly, double check valve assembly, pressure vacuum breaker assembly, and spillresistant vacuum breaker assembly.

#### Backflow Prevention Assembly Tester Recertification Training and Examination (ASSE 5110)

Length: 12 hours CEU:

During this 12 hour training, participants will review the guidelines used for acceptable practices of testing backflow prevention assemblies. The participants will receive the information and skills to help them pass the American Society of Sanitary Engineering (ASSE) Recertification Examination. At the end of the course the recertification examination will be administered. This consists of a written and a hands-on examination. This training is mandatory in order for the tester to re-certify under ASSE program guidelines. The written exam for the tester recertification consists of 25 questions. In the practical examination the candidate must demonstrate the proper field test procedure for a reduced pressure principle assembly, double check valve assembly, pressure vacuum breaker assembly without notes or assistance.

## **Cross-Connection Control Surveyor** (ASSE 5120)

**Length:** 20 hours **CEU:** 2.0

This course provides the necessary training and examination for individuals seeking certification as a Cross-Connection Control Surveyor. The course consists of twenty (20) hours of training culminating in a fifty (50) question examination. During the training portion of the course, participants can expect to discuss the basics of cross-connection control surveying, as well as safety, cross-connection control, product performance, conducting a survey, and proper terminology. Federal, state, and local regulations and codes related to cross-connection control and backflow prevention will be presented.

# **Repairer Training and Certification Examination (ASSE 5130)**

Length: 20 hours CEU: 2.0

This course provides the necessary training and testing for individuals seeking certification as a Backflow Prevention Assembly Repairer. The course provides twenty (20) hours of both classroom and hands on training culminating in a fifty (50) question written examination and a practical examination, which includes the servicing, rebuilding, and retesting of various types and sizes of backflow prevention assemblies. During the training portion of the course, participants can expect to discuss the basics of backflow prevention assembly repair and trouble-shooting, as well as safety, reporting, product performance, product test equipment, and proper terminology.

### TO SEE ALL AVAILABLE COURSES, VISIT OUR WEBSITE:

http://www.iapmobpi.org email us at kim.curtis@iapmo.org

## TO REGISTER FOR A BPI COURSE CONTACT:

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