



Backflow Assembly Tester

Water Works Operator Certification Program Guideline



Washington State Department of
Health

Environmental Health Division
Office of Drinking Water
PO Box 47822
Olympia, WA 98504-7822

Revised: February 2007

Backflow Assembly Tester Certification

The Certification Services division of the Washington Environmental Training Center (WETRC) at Green River Community College (GRCC) in Auburn administers the State of Washington's Backflow Assembly Tester (BAT) certification program and examinations through a contract with Department of Health, Office of Drinking Water. Certification Services follows the regulations, policies, and procedures established by DOH in cooperation with the Water Works Operator Certification Advisory Committee.

DOH is directly responsible for oversight of the BAT certification program and for enforcement activities. (See page 9 Backflow Assembly Tester Revocation and Suspension)

Americans with Disabilities Act

Applicants for examination may request special examination accommodation for a documented disability. Certification Services requires applicants requesting special accommodations to submit the Request for Accommodation forms, which include current documentation of the disability from an individual qualified to assess the disability. The documentation must identify the diagnosis and nature of the disability, the last time the provider saw the applicant, the name of the test used to diagnose the disability, the duration of the condition, and the recommended accommodation. The documentation must be provided by a physician or licensed health care provider appropriate to the disability and submitted on professional letterhead.

If Certification Services allows special examination accommodation, it shall set the time and place it considers appropriate to address the applicants needs.

The completed Request for Accommodation forms must be submitted to Certification Services at least 30 days prior to the examination date.

For information about the BAT certification program and examinations contact:

Certification Services
Washington Environmental Training Center
Green River Community College
12401 SE 320th Street M/S WW
Auburn, WA 98092-3622
(253) 288-3369 or (800) 562-0858 (toll-free in Washington)

Backflow Assembly Tester Certification Examination

Washington State Department of Health (DOH) state regulations (WAC 246-290-490) require anyone who inspects, tests, and/or monitors backflow prevention assemblies to pass the state's Backflow Assembly Tester (BAT) certification examination and hold a valid certificate.

Application and Examination Fees

Anyone who is not already certified as a Backflow Assembly Tester (BAT) in Washington may apply to take a BAT certification examination. There is no education, training or experience required. To apply for a BAT certification examination, contact Certification Services for the current schedule, fees, and procedures.

Reciprocity with Other States

Washington does not have reciprocity with other states' BAT certification programs or examinations.

Certification Examination Criteria

The Washington State Backflow Assembly Tester (BAT) certification examination consists of two types of examinations. You must pass both parts of the examination to become a certified BAT in Washington State. **If you fail either part of the examination, you will be required to reapply, pay all applicable fees, and take both parts of the examination again.**

All exam applicants are required to provide picture identification (driver license, military identification card, or other government issued identification) prior to taking the examination.

- ***Written Examination***

The written examination consists of 100 multiple-choice questions developed by the Association of Boards of Certification (ABC). Three hours are allowed to complete the closed-book examination. Notes, books, or other reference materials are not permitted during the examination. The passing score for the written examination is 70 percent.

- ***Practical (Hands-On) Examination***

- One hour is allowed to demonstrate competency in testing the following four backflow prevention assemblies to standard performance criteria:
 - Pressure Vacuum Breaker Assembly (PVBA)
 - Spill-Resistant Pressure Vacuum Breaker Assembly (SVBA)
 - Double Check Valve Assembly (DCVA)
 - Reduced Pressure Backflow Assembly (RPBA)
- During the 1 hour examination you will be required to identify and diagnose one simulated failure condition for the RPBA, DCVA, and PVBA. There will not be a simulated failure condition for the SVBA.

- You will be required to fill out a test report of all four backflow prevention assemblies. They must be complete, accurate and legible. The test reports may be completed after the 1 hour time limit for the Practical Examination.

Test Procedures

During the Practical Examination, applicants will be examined using only the test procedures approved for use in Washington State as published in the July 1998 edition of *Backflow Prevention Assembly Field Test Procedures in Washington State*. Currently these test procedures are based on the 9th Edition of the *Manual of Cross Connection Control* published by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research.

The *Backflow Prevention Assembly Field Test Procedures in Washington State* manual and an abbreviated version of the test procedures for each of the four backflow prevention assemblies will be available at the examination site.

Test Kits

A five-valve differential pressure test kit will be available for applicant use at the examination site. Applicants may use their own differential pressure test kit if they provide the examination proctor with a current certificate of accuracy or calibration report.

Backflow Assembly Tester Professional Growth Requirement

The Water Works Operator Certification state regulations, [WAC 246-292-090 (4)], requires the holder of a Backflow Assembly Tester (BAT) certification to demonstrate professional growth by passing the Department of Health's (DOH) BAT professional growth examination during each reporting period. WETRC schedules and administers the BAT professional growth examination.

All certified BATs are assigned a professional growth reporting period based on their original certification date. DOH provides each BAT with a minimum of 3 years to meet the professional growth requirement by passing the BAT professional growth examination. The BAT professional growth examination may be taken at any time during the reporting period dates, but must be passed by the reporting period deadline date.

When certified Backflow Assembly Testers must meet their professional growth requirement:

If your original certification date is:	Then you must meet the professional growth requirement between:
Before 1/1/2004	1/1/2007 and 12/31/2009 and in each 3 year reporting period thereafter.
1/1/2004 - 12/31/2006	Your original certification date and 12/31/2009 and in each 3 year reporting period thereafter.
1/1/2007 - 12/31/2009	Your original certification date and 12/31/2012 and in each 3 year reporting period thereafter.

Note: For information on the appeals process, see page 10.

Backflow Assembly Tester Professional Growth Exam

Application and Examination Fees

If you are certified as a Backflow Assembly Tester (BAT) in Washington and have not yet passed the BAT professional growth examination during your reporting period, you are eligible to apply for the professional growth examination. There is no education, training or experience required. To apply for a BAT professional growth examination, contact Certification Services for the current schedule, fees, and procedures.

Reciprocity with Other States

Washington does not have reciprocity with other states' BAT certification programs or examinations.

Professional Growth Examination Criteria

The Washington State Backflow Assembly Tester (BAT) professional growth examination is a practical (hands-on) examination. If you fail the examination you will be required to reapply, pay all applicable fees, and take the examination again.

All exam applicants are required to provide picture identification (driver license, military identification card, or other government issued identification) prior to taking the examination.

- One hour is allowed to demonstrate competency in testing the following four backflow prevention assemblies to standard performance criteria:
 - Pressure Vacuum Breaker Assembly (PVBA)
 - Spill-Resistant Pressure Vacuum Breaker Assembly (SVBA)
 - Double Check Valve Assembly (DCVA)
 - Reduced Pressure Backflow Assembly (RPBA)
- During the 1 hour examination you will be required to identify and diagnose one simulated failure condition for the RPBA, DCVA, and PVBA. There will not be a simulated failure condition for the SVBA.
- You will be required to fill out a test report of all four backflow prevention assemblies. They must be complete, accurate, and legible. The test reports may be completed after the 1 hour time limit for the Practical Examination.

Test Procedures

During the practical examination, applicants will be examined using only the test procedures approved for use in Washington State as published in the July 1998 edition of *Backflow Prevention Assembly Field Test Procedures in Washington State*. Currently these test procedures are based on the 9th Edition of the *Manual of Cross Connection Control* published by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research.

The *Backflow Prevention Assembly Field Test Procedures in Washington State* manual and an abbreviated version of the test procedures for each of the four backflow prevention assemblies will be available at the examination site.

Test Kits

A five-valve differential pressure test kit will be available for applicant use at the examination site. Applicants may use their own differential pressure test kit if they provide the examination proctor with a current certificate of accuracy or calibration report.

Backflow Assembly Tester Certification Renewal

All Backflow Assembly Testers (BAT) who are eligible to renew their certificates will receive a renewal notice from Certification Services at Green River Community College. **During the professional growth reporting period deadline year, a BAT renewal will not be mailed until the professional growth requirement has been met.**

Renewal Notices

Certification Services will mail the first renewal notice to the BAT's home mailing address the second week of November. If payment has not been postmarked by the deadline date listed on the first renewal notice, a second and final notice will be mailed.

A renewal late fee will be assessed to BATs failing to submit the required renewal fee within the time period specified on the first renewal notice.

Any additional fees incurred by Green River Community College (GRCC) for checks returned for non-sufficient funds (NSF) will be charged to the Backflow Assembly Tester(s). All fees must be paid in full by the final renewal deadline date.

Fees

The first renewal notice fee is \$42.00. A \$35.00 late fee is assessed on the final renewal notice for a total final renewal fee of \$77.00. (Note: All fees are subject to change.)

How to Renew

Return the bottom half of the renewal notice to the address on the form with your payment payable to GRCC/BAT. Record the amount enclosed and any address changes on the form. Keep the top half of the renewal notice for your records.

Validation Cards

After your payment is processed you will receive a certification validation card in the mail for the renewal year. Your validation card identifies you as a certified Backflow Assembly Tester. Your validation card also serves as a receipt for your renewal payment and you will not receive a separate receipt.

Address Changes

Notify Certification Services in writing of changes to your home mailing address promptly so that you continue to receive all notifications regarding your certification. It is the BAT's responsibility to keep Certification Services informed of the current home mailing address. **Failure to notify Certification Services of a change of address does not constitute a reasonable excuse for waiver of the late fee assessment, failure to renew a certificate or failure to demonstrate professional growth. The Water Works Operator Certification Program will not consider renewal appeals from Backflow Assembly Testers who fail to report address changes in writing.**

Inactivation for Failure to Pay

If a BAT fails to pay the first renewal notice fee by January 1, the BAT certificate will be temporarily valid for two months. Certificates for all BATs who fail to submit the applicable renewal fee by the final deadline date will be invalid and non-renewable.

BATs failing to renew their certification under the provisions of state regulations (WAC 246-292-090) may reapply for certification and must meet the requirements for a new applicant.

Backflow Assembly Tester Revocation and Suspension

Under state drinking water regulations (WAC 246-292-100), the Department of Health (DOH) may suspend a Backflow Assembly Testers (BAT) certificate for up to 1 year or revoke a BAT's certificate for up to 5 years in any of the following circumstances:

- The BAT obtains a certificate by fraud or deceit.
- The BAT performs an act of gross negligence in the operation of a purification plant or distribution system.
- The BAT intentionally violates the requirements of state drinking water laws, DOH statutes, rules or orders.

Except in a case of fraud, deceit, or gross negligence, DOH may not revoke or suspend a certificate until the Water Works Operator Certification Program notifies the operator in writing of the violation, and provides an opportunity for the operator to correct the violation.

A revocation or suspension action brought under this section shall be conducted in accordance with state drinking water laws and regulations (RCW 43.70.115, RCW 34.05, and WAC 246-10).

A person whose certificate is revoked may not apply for certification until the end of the revocation period.

After the revocation period ends, a person whose certificate was revoked may apply as a new operator in accordance with state drinking water regulations (WAC 246-292-070).

To maintain certification during the suspension period, an operator whose certificate is suspended shall continue to meet all renewal requirements in accordance with state drinking water regulations (WAC 246-292-090).

Backflow Assembly Tester Appeal Procedures

Backflow Assembly Tester Renewal Appeals

A Backflow Assembly Tester (BAT) may appeal a non-renewed certification using the following procedure:

1. The BAT must file the appeal in writing with the Water Works Certification Program Manager within **30 days** of the date on the BAT's inactivation letter.
2. If the appeal is not filed within 30 days, **appeal rights are forfeited.**
3. The written request must include justification for the appeal.
4. The Water Works Certification Advisory Committee (Committee) will review the appeal at its next meeting. The Committee will make its recommendation to the Water Works Certification Program Manager.
5. The Water Works Certification Program Manager will send notice of DOH's decision to the BAT and the BAT Certification Program Manager within 30 days of the Committee's determination.

To mail appeals or for further information contact:

Water Works Operator Certification Program
Department of Health
PO Box 47822
Olympia, WA 98504
(360) 236-3137 or Toll Free (800) 525-2536

Backflow Assembly Tester Certification Written Examination Subject Areas

The written examination consists of 100 multiple-choice questions. Hand-held numeric calculators may be used.

Below is the exam description.

Air Gap
Atmospheric Vacuum Breaker
Backflow Prevention Concepts
Cross Connection Concepts
Double Check Valve Assembly
Field Testing
Public Health
Pressure Vacuum Breaker
Regulations
Reduced Pressure Assembly
Test Equipment

The passing score for this exam is 70 percent.

Backflow Assembly Tester Examination References

<p><i>PNWS-AWWA Cross Connection Control Manual, Sixth Edition</i></p>	<p>Judy Grycko Pacific NW Section of AWWA PO Box 2050 Clackamas, OR 97051-2050 Phone Number: 503-655-4075 Web Page: http://www.pnws-awwa.org</p>
<p><i>Backflow Prevention Assemblies Field Test Procedure Approved for Use in Washington State</i></p>	<p>WETRC 12401 SE 320th Street MS/WW Auburn, WA 98092-3699 Phone Number: 1-800-562-0858 Web Page: http://www.wetrc.org or http://www.wetrc.com</p>
<p><i>Backflow Prevention Assemblies Approved for Installation in Washington State</i></p>	<p>Amy Koch Department of Health, Office of Drinking Water PO Box 47822 Olympia, WA 98504-7822 Phone Number: 360-236-3164 Web Page: http://www.doh.wa.gov/ehp/dw/</p>
<p><i>Manual of Cross Connection Control, 9th Edition</i></p>	<p>Foundation for Cross Connection Control & Hydraulic Research University of Southern California KAP-200 University Park MC-2531 Los Angeles, CA 90089-2531 Phone Number: 213-740-2032 Web Page: http://www.usc.edu/</p>
<p><i>WAC 246-290-490 Cross Connection Control – extracted from WAC 246-290 Group A Drinking Water Regulations</i></p>	<p>Terri Notestine Department of Health, Office of Drinking Water PO Box 47822 Olympia, WA 98504-7822 Phone Number: 360-236-3133 Web Page: http://www.doh.wa.gov/ehp/dw/</p>
<p><i>Journeyman Plumbers Certification Law ... RCW 18.106</i></p>	<p>Department of Labor & Industries, Plumbers Section PO Box 44470 Olympia, WA 98504-4470 Phone Number: 360-902-4670 Alisha Atkinson</p>

Backflow Assembly Tester Professional Growth Examination References

<i>Backflow Prevention Assemblies Approved for Installation in Washington State</i>	Amy Koch Department of Health, Office of Drinking Water PO Box 47822 Olympia, WA 98504-7822 Phone Number: 360-236-3164 Web Page: http://www.doh.wa.gov/ehp/dw/
<i>Backflow Prevention Assemblies Field Test Procedures Approved for Use in Washington State</i>	WETRC 12401 SE 320 th Street MS/WW Auburn, WA 98092-3699 Phone Number: 1-800-562-0858 http://www.wetrc.org or http://www.wetrc.com