# R309-305. Certification Rules for Backflow Technicians.

**Table of Contents**

[R309-305-1. Purpose. 3](#_Toc372125274)

[R309-305-2. Authority. 3](#_Toc372125275)

[R309-305-3. Extent of Coverage. 3](#_Toc372125276)

[R309-305-4. Definitions. 3](#_Toc372125277)

[R309-305-5. General. 4](#_Toc372125278)

[R309-305-6. Technician Responsibilities. 5](#_Toc372125279)

[R309-305-7. Examinations. 5](#_Toc372125280)

[R309-305-8. Certificates. 6](#_Toc372125281)

[R309-305-9. Certification Revocation. 7](#_Toc372125282)

[R309-305-10. Fees. 8](#_Toc372125283)

[R309-305-11. Training. 8](#_Toc372125284)

[R309-305-12. Cross Connection Control Commission. 8](#_Toc372125285)

[R309-305-13. Secretary of the Commission. 9](#_Toc372125286)

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**R309-305. Certification Rules for Backflow Technicians.**

## R309-305-1. Purpose.

These rules are established:

(1) In order to promote the use of trained, experienced professional personnel in protecting the public's health;

(2) To establish standards for training, examination, and certification of those personnel:

(a) involved with cross connection control program administration

(b) testing, maintaining and repairing backflow prevention assemblies; and

(3) To establish standards for the instruction of Backflow Technicians.

## R309-305-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(4)(a) of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

## R309-305-3. Extent of Coverage.

These rules shall apply to all personnel who will be:

(1) involved with the administration or enforcement of any cross connection control program being administered by a drinking water system; or

(2) testing, maintaining and/or repairing any backflow prevention assembly; or

(3) instructors within the certification program, regardless of institution or program.

## R309-305-4. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

(1) Backflow Technician - An individual who has met the requirements and successfully completed the course of instruction and certification requirements for Class I, II or III backflow technician certification as outlined herein.

(a) Class I Backflow Technician is a Cross Connection Control Program Administrator.

(b) Class II Backflow Technician is a Backflow Assembly Tester.

(c) Class III Backflow Technician is a Backflow Instructor Trainer.

(2) Class - means the level of certification for a Backflow Technician.

(3) Director - means the Director of the Division of Drinking Water.

(4) Performance Examination - means a closed book, hands on demonstration of an individual applicant's ability to conduct an accurate field test on backflow prevention assemblies.

(5) Proctor - means a Class III Backflow Technician authorized to administer the written or the performance examination.

(6) Renewal Course - means a course of instruction, approved by the Commission, which is a prerequisite to the renewal of a Backflow Technician's Certificate.

(7) Secretary to the Commission - means that individual appointed by the Director to conduct the business of the Commission and to make recommendations to the Director regarding the backflow technician certification program.

(8) Written Examination - means a closed book examination for record used to determine the competency and ability of an individual applicant's understanding of the required course of instruction.

## R309-305-5. General.

(1) Certification Application: Any individual may apply for certification.

(2) Certification Classes: The classes of certificates shall be: Class I, Class II, and Class III.

(a) Class I Backflow Technician - Cross Connection Control Program Administrator: This certificate shall be issued to those individuals who are involved in administering a cross connection control program, who have demonstrated their knowledge and ability by successfully completing the approved certification examination.

(i) These individuals may NOT test, maintain or repair any backflow prevention assembly for purposes of submitting legal documentation of the operational status of a backflow prevention assembly, including performance of any record test demonstrating backflow prevention assembly compliance with required standards. These individuals may test to insure proper testing techniques are being utilized within their jurisdiction.

(ii) These individuals may conduct plan/design reviews, hazard assessment investigations, compliance inspections, and enforce local laws, codes, rules and regulations and policies within their jurisdictions, and offer technical assistance as needed.

(b) Class II Backflow Technician - Backflow Assembly Tester: This certificate shall be issued to those individuals who have demonstrated their knowledge and ability by successfully completing the approved written and performance certification examinations.

(c) Class III Backflow Technician - Backflow Instructor Trainer:

(i) This certificate shall be issued to those individuals who have successfully completed a 3 year renewal cycle as a Class II Technician and in addition have proven qualified and competent to instruct approved Backflow Technician Certification classes by participating in and successfully completing an approved Class III certification course.

(ii) In order to successfully complete a Class III certification course, the applicant shall be required to make a presentation about one or more randomly picked topics in backflow prevention, successfully demonstrating the applicant's knowledge of the subject. The applicant shall also successfully complete a performance examination in a manner that demonstrates knowledge and skill with randomly selected available testing equipment; the applicant shall identify, diagnose and document malfunctions of the backflow assembly and verify the design operating criteria are achieved.

(iii) Class III Backflow Technicians will also be required to attend additional training provided periodically by the Division to ensure knowledge of any regulatory changes and to ensure consistency in the evaluation of applicants.

(3) Certification Requirements: Those individuals seeking certification as a Backflow Technician must participate in an approved Technician's course of instruction and successfully complete the examination required per class of certification.

(4) Backflow Technician Course Instructers: All individuals who instruct Backflow Technician training courses must hold a current Class III - Backflow Technician certificate.[

(5) (a) No person shall install, replace or repair a backflow prevention assembly unless that person holds a Class II or Class III Certification.

(b) This requirement shall not apply when the Backflow Technician is the assembly owner or an employee of the assembly owner.

(c) No person shall install, replace or repair a backflow prevention assembly that has not been certified as provided in R309-105-12(4).

## R309-305-6. Technician Responsibilities.

(1) All technicians shall notify the Division of Drinking Water, local health department and the appropriate public water system of any backflow incident as soon as possible, but within eight hours. The Division can be reached during business hours at 801-536-4200 or after hours at 801-536-4123;

(2) All technicians shall notify the appropriate public water system of a failing backflow prevention assembly within five days;

(3) All technicians shall ensure that acceptable and approved procedures are used for testing, repairing and maintaining any backflow prevention assembly;

(4) All technicians shall report the backflow prevention assembly test results to the appropriate public water system within 30 days;

(5) All technicians shall include, on the test report form, any materials or replacement parts used to repair or to perform maintenance on a backflow prevention assembly;

(6) All technicians shall ensure that any replacement part is equal to or greater than the quality of parts originally supplied within the backflow prevention assembly and are supplied only by the assembly manufacturer or their agent;

(7) All technicians shall not change the design, material, or operational characteristics of the assembly during any repair or maintenance;

(8) All technicians shall perform each test and shall be responsible for the competency and accuracy of all testing and reports thereof;

(9) All technicians shall ensure the status of their technician certification is current; and

(10) All technicians shall be equipped with and competent in the use of all tools, gauges, and equipment necessary to properly test, repair and maintain a backflow prevention assembly.

(11) All technicians shall be responsible for any additional licensure.

## R309-305-7. Examinations.

(1) Examination Issuance:

(a) The examination recognized by the Commission for certification shall be issued through the Division of Drinking Water for both initial certification and renewal of certification.

(b) If an individual fails an examination, the individual may submit an application for reexamination on the next available scheduled test date.

(c) Examinations (both written and performance) that are used to determine competency and ability shall be approved by the Cross Connection Control Commission prior to being issued.[

(2) Exam Scoring: Class I, Class II and Class III Technician's must successfully complete a written exam with a score of 70% or higher. Class II Technician's must also successfully demonstrate competence and ability in the performance examination, for the testing of a Pressure Vacuum Breaker Assembly, a Spill-Resistant Pressure Vacuum Breaker Assembly, a Double Check Valve Assembly, and a Reduced Pressure Principal Backflow Prevention Assembly.

(a) The performance examination shall be conducted by a minimum of two Class III Technicians.

(b) Each candidate must demonstrate competence. Competence shall be evaluated by a proctor and determined with a pass or fail grade in each of the following areas:

(i) Properly identify backflow assembly;

(ii) Properly identify test equipment needed;

(iii) Properly connect test equipment;

(iv) Properly test assembly;

(v) Properly identify assembly malfunctions;

(vi) Properly diagnose assembly malfunctions; and

(vii) Properly record test results.

The candidate must receive a pass grade from the proctor in all areas listed above for each assembly tested in order to successfully complete the performance examination.

(c) An individual may apply for reexamination of either portion of the examination a maximum of two times. After a third failing grade, the individual must register for and complete another technician's training course prior to any further reexamination.

(3) Class III Technicians: Class III Technicians shall participate in and successfully complete a Class III Certification course, approved by the Cross Connection Control Commission Class III Technicians shall maintain their Class II Technician certification.

## R309-305-8. Certificates.

(1) Certificate Issuance: For a certificate to be issued, the individual must complete a Technician's training course and pass with a minimum score of 70% the written examination. For Class II and III certificates, successful completion of the performance examination shall also be required.

(2) Certificate Renewal: The Backflow Technician's certificate is issued by the Director and shall expire December 31, three years from the year of issuance.

(a) Backflow Technician certificates shall be issued by the Director after considering the recommendation of the Commission Secretary.

(b) The Backflow Technician's certificate may be renewed up to six months in advance of the expiration date.

(c) A Backflow Technician may retain the Technician's certification number when the Technician renews certification within twelve months after the certification's expiration date. The technician shall not test, maintain or repair any backflow prevention assembly for purposes of submitting legal documentation of the operational status of a backflow prevention assembly as described in R305-5(2)(a)(i).

(d) To renew a Class I or II Technician certificate, the Technician must register for and participate in an approved

backflow prevention renewal course, and successfully complete the renewal examination (minimum score of 70%) which shall include a performance portion for Class II Certification.

(e) To renew a Class III Technician certificate, the following criteria shall be met:

(i) In the 3 year certification period a total of three events from the following list shall be obtained in any combination:

(A) Instruction at a Commission approved backflow technician certification or renewal course.

(B) Serve as a proctor for the performance examination at a Commission approved backflow technician certification or renewal course.

(ii) Attendance at a minimum of two of the annual Class III coordination meetings or receive a meeting update from the Commission Secretary.

(iii) Attendance and successful review at a Class III renewal course, as approved by the Cross Connection Control Commission.

(f) Should the applicant fail the renewal written examination (minimum score of 70%), renewal of that existing license shall not be allowed until a passing score is obtained. If the applicant fails to successfully complete the test after three attempts, the applicant shall be required to participate in an approved Backflow Technician's course before retaking the written and performance examinations. Class I Technicians only need to successfully complete the written examination.

## R309-305-9. Certification Revocation.

(1) The Director may suspend or revoke a Backflow Technician's certification, for good cause, including any of the following:

(a) The certified person has acted in disregard for public health or safety;

(b) The certified person has engaged in activities beyond the scope of their certification;

(c) The certified person has misrepresented or falsified figures or reports concerning backflow prevention assembly or test results;

(d) The certified person has failed to notify proper authorities of a failing backflow prevention assembly within five days, as required by R309-305-6(2);

(e) The certified person has failed to notify proper authorities of a backflow incident for which the technician had personal knowledge, as required by R309-305-6(1);

(f) The certified person has installed or repaired a backflow prevention assembly that is not certified or has implemented a change in the design, material or operational characteristics of a certified backflow prevention assembly thereby invalidating the backflow assembly certification.

(2) Disasters or "Acts of God", which could not be reasonably anticipated or prevented, shall not be grounds for suspension or revocation actions.

(3) The Commission Secretary shall inform the technician, in writing, if the certification is being considered for suspension or revocation. The communication shall state the reasons for considering suspension or revocation, and the technician shall be given an opportunity for a hearing.

## R309-305-10. Fees.

(1) Fees: The fees for certification shall be submitted in accordance with Section 63-38-3.2.

(2) All fees shall be deposited in a special account to defray the costs of administering the Cross Connection Control and Certification programs.

(3) Renewal Fees: The renewal fee for all classes of Technicians shall be in accordance with Section 63-38-3.2.

(4) All fees shall be deposited in a special account to defray the cost of the program.

(5) All fees are non-refundable.

## R309-305-11. Training.

(1) Training: Minimum training course curriculum, written tests and performance tests shall be established by the Commission and implemented by the Secretary of the Commission for both the Technician Class I and Class II courses and the renewal courses.

(a) The length of the initial certification course for a Class I cross connection control program administrator shall be a minimum of 32 hours, including examination time.

(b) The length of the initial certification course for a Class II backflow assembly tester shall be a minimum of 32 hours, excluding examination time.

(c) The length of each renewal course shall be a minimum of 16 hours including the renewal examination times, for both written and performance.

## R309-305-12. Cross Connection Control Commission.

(1) Appointment of Members: A Cross Connection Control Commission shall be appointed by the Director from nominations made by cooperating agencies.

(2) Responsibility: The Commission is charged with the responsibility of conducting all work necessary to promote the cross connection program as well as recommending qualified individuals for certification, and overseeing the maintenance of necessary records.

(3) Representative Agencies: The Commission shall consist of seven members:

(a) One member (nominated by the League of Cities and Towns) shall represent a community drinking water supply.

(b) One member (nominated by the Utah Pipes Trades Education Program) shall represent the plumbing trade and must be a licensed Journeyman Plumber.

(c) One member (nominated by the Utah Mechanical Contractors Association) shall represent the mechanical trade contractors.

(d) One member (nominated by the Utah Plumbing and Heating Contractors Association) shall represent the non-union plumbing and mechanical contractors and plumbers.

(e) One member (nominated by the Rural Water Association of Utah) shall represent small water systems.

(f) One member (nominated by the Utah Chapter American Backflow Prevention Association) shall represent Class II Backflow Technicians and shall be a Backflow Technician.

(g) One member (nominated by the Utah Association of Plumbing and Mechanical Officials) shall represent plumbing inspection officials and shall be a licensed plumbing inspector.

(4) Term: Each member shall serve a two year term.

(5) Nominations of Members: All nominations of Commission members shall be presented to the Director, who may refuse any nomination.

(6) Unexpired Term: An appointment to succeed a Commission member who is unable to complete his full term shall be for the unexpired term only, and shall be nominated to, and appointed by, the Director in accordance with R309-305-11(1).

(7) Quorum: At least four Commission members shall be required to constitute a quorum to conduct the Commission's business.

(8) Officers: Each year the Commission shall elect officers as needed to conduct its business.

(a) The Commission shall meet at least once a year.

(b) All actions taken by the Commission shall require a minimum of four affirmative votes.

## R309-305-13. Secretary of the Commission.

(1) Appointment: The Director shall appoint, with the consent of the Commission, a staff member to function as the Secretary to the Commission. This Secretary shall serve to coordinate the business of the Commission and to bring issues before the Commission.

(2) Duties: The Secretary's duties shall be to:

(a) act as a liaison between the Commission, certified Technicians, public water suppliers, and the public at large;

(b) maintain records necessary to implement and enforce these rules;

(c) notify sponsor agencies of Commission nominations as needed;

(d) coordinate and review all cross connection control programs, certification training and the certification of Backflow Technicians;

(e) serve as a source of public information for Certified Technicians, water purveyors, and the public at large;

(f) receive and process applications for certification;

(g) investigate and verify all complaints against or concerning certified Backflow Prevention Technicians, and advise the Director regarding any enforcement actions that are being recommended by the Commission;

(h) develop and administer examinations;

(i) review and correct examinations.

(3) The Secretary to the Commission is also responsible for making recommendations to the Director regarding backflow technician certification as provided in these rules.

**KEY: drinking water, cross connection control, backflow assembly tester**

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