

November 15, 2011



TO: Group A Public Water Systems
FROM: Terri Notestine, Cross-Connection Control Program Manager
SUBJECT: **Field Implementation of USC *Tenth Edition* Backflow Assembly Test Procedures**

State drinking water rules require backflow prevention assemblies that protect public water systems to be tested by Department of Health (DOH)-certified backflow assembly testers (BATs) using field test procedures acceptable to the department (WAC 246-290-490). This memo:

- Provides details on our transition plan and schedule for *field implementation* of the revised assembly test procedures in the *Tenth Edition Manual of Cross-Connection Control* published by the University of Southern California (USC).
- Clarifies requirements for purveyors and DOH-certified backflow assembly testers (BATs) as we transition from the USC *Ninth Edition* test procedures to the *Tenth Edition* procedures in the field.
- Provides key messages you can share with customers affected by the transition.

We implemented the USC *Tenth Edition* test procedures on the BAT practical exams January 1, 2011.

Transition Plan Requirements for Purveyors (See page 3 for a Transition Plan Summary)

1. Now through December 31, 2012:

- a. Both *Ninth Edition* and *Tenth Edition* procedures will be in use by DOH-certified BATs.
- b. Purveyors must accept assembly tests conducted by DOH-certified BATs using either *Ninth* or *Tenth* Edition procedures, as long as the BATs:
 - i. Use the same edition test procedures in the field as used on their *most recently passed* BAT hands-on exam.
 - ii. Start using the *Tenth Edition* field test procedures as soon as they pass their BAT hands-on exam based on the *Tenth Edition* procedures.

2. From January 1, 2012, through December 31, 2012:

- a. Purveyors must apply the *Tenth Edition* pass/fail criteria to **all** reduced pressure principle assembly (RPBA) field tests conducted during this time.
- b. Under the *Tenth Edition* RPBA criteria, Test No. 3 Step a, the first check valve reading must be:
 - i. Greater than or equal to (\geq) 5.0 psid; *and*
 - ii. Above the relief valve opening point (Test No. 1).

3. Effective January 1, 2013:

Purveyors must **only** accept backflow assembly tests conducted by DOH-certified BATs:

- That have passed the hands-on exam based on the USC *Tenth Edition* procedures.
- Using the *Tenth Edition* test procedures in the field.

USC Field Test Procedures - *Ninth Edition* vs. *Tenth Edition*

The USC *Ninth Edition* and *Tenth Edition* field test procedures will both be in use in Washington State through December 31, 2012. Both sets of test procedures equally protect public health and enable BATs to determine an assembly's ability to prevent backflow. However, there are some important differences between the test procedures as shown in the table at <http://www.usc.edu/dept/fccchr/FinalForms/9thvs10th.pdf>

In the *Tenth Edition* RPBA procedures, USC eliminated the recommended 3.0 psid buffer between the first check reading and the relief valve opening point. The 3.0 psid buffer doesn't affect the assembly's ability to prevent backflow. Instead, the *Tenth Edition* RPBA procedures require the first check to hold a minimum value of at least 5.0 psid and more than the relief valve opening point; and the relief valve must initially open at 2.0 psid or greater. The *Tenth Edition* pass/fail criteria should be less confusing for users to interpret (some purveyors interpreted the 3.0 psid buffer recommendation as a requirement).

Due to these differences, an RPBA may pass the *Ninth Edition* but fail the *Tenth Edition* procedures with the same field test results. To address this issue, from January 1, 2012, through December 31, 2012, **purveyors and BATs must apply the *Tenth Edition* pass/fail criteria to all RPBA field tests.** This will ensure statewide consistency in the pass/fail criteria and equitability to water system customers that own RPBAs.

During the transition, some RPBAs may fail their annual field tests. If you get calls from owners of these RPBAs, here are some key messages to keep in mind:

- Washington is transitioning to *revised* backflow assembly test procedures (USC *Tenth Edition*).
- The *Tenth Edition* procedures include different RPBA pass/fail criteria than the *Ninth Edition*.
- RPBAs on the current DOH-Approved Assemblies List should be able to meet the revised *Tenth Edition* criteria. USC's Backflow Prevention Assembly Approval Program has required the 5.0 psid first check valve reading for RPBAs since 1974.
- RPBAs that fail the *Tenth Edition* criteria don't automatically require replacement. First check valve readings of less than 5.0 psid may only indicate that the valve needs maintenance.

Getting a Copy of the USC *Tenth Edition* Field Test Procedures

We no longer print or distribute the *non-illustrated* field test procedures booklets. Individuals applying for a BAT hands-on exam may request one free copy of the *non-illustrated* USC *Tenth Edition* test procedures from our contractor, Washington Certification Services, at <http://www.wacertservices.org>

To get the *illustrated* field test procedures, buy a *Tenth Edition Manual of Cross-Connection Control* from:

- USC at <http://www.usc.edu/dept/fccchr/>
- Washington Environmental Training Center (WETRC) at <http://www.wetrc.org/>

E-mail questions to CCCProgram@doh.wa.gov

cc: DOH-certified Cross-Connection Control Specialists

DOH Field Test Procedures Transition Plan Summary

Timeframe	Applies to	Status	Field Test Procedures	DOH-Certified Backflow Assembly Tester (BAT) and Purveyor Requirements
Effective January 1, 2011	BAT hands-on exams	<i>Transition complete</i>	USC <i>Tenth Edition</i> procedures only .	All individuals taking initial BAT certification or professional growth exams will be tested under the USC <i>Tenth Edition</i> procedures.
Now through December 31, 2012	Field implementation of USC test procedures	<i>In transition</i>	DOH will accept USC <i>Ninth</i> and <i>Tenth Edition</i> procedures in the field, <i>as long as BATs meet the conditions specified in this memo.</i>	When providing testing services, BATs must use the: <ul style="list-style-type: none"> • Same USC edition test procedures in the field as used on their <i>most recently passed</i> hands-on exam.* • USC <i>Tenth Edition</i> procedures as soon as they pass the hands-on exam based on the <i>Tenth Edition</i>.
January 1, 2012, through December 31, 2012	Field implementation of USC test procedures	<i>In transition</i>	DOH will accept USC <i>Ninth</i> and <i>Tenth Edition</i> procedures in the field, <i>as long as BATs meet the conditions in this memo.</i>	During this period, BATs and purveyors must apply the USC <i>Tenth Edition</i> pass/fail criteria to all RPBA field tests.
Effective January 1, 2013	Field implementation of USC test procedures	<i>Transition complete</i>	DOH will only accept USC <i>Tenth Edition</i> procedures.	To test assemblies, all DOH-certified BATs must: <ul style="list-style-type: none"> • Have passed the hands-on exam based on the USC <i>Tenth Edition</i> procedures. • Use only the <i>Tenth Edition</i> procedures in the field. All purveyors must only accept assembly tests conducted by DOH-certified BATs: <ul style="list-style-type: none"> • That have passed the hands-on exam based on USC <i>Tenth Edition</i> field test procedures. • Using the <i>Tenth Edition</i> procedures in the field.

*Available on-line in the BAT Certification Status Report at: www.wacertservices.org