

Foundation for Cross-Connection Control and Hydraulic
Research
University of Southern California
Manual of Cross-Connection Control
10th Edition

Manual Review Committee

25 May 1999

Friendship Auditorium
3201 Riverside Drive
LA, CA 90027

Meeting Synopsis

Dr. JJ Lee, Director, welcomed all members of Manual Review Committee (MRC) and guests. Committee roster distributed, address corrections requested.

Those in attendance:

Mike Ahlee	Eric Foltz	Brad Noll - BPMA
Ken Anderson	Ernest Havlina	Bob Purzycki
Richard Bird	Lloyd Huff	Paul Schwartz
Henry Chang	Sam Johnson	Patrick Sylvester
Kathleen Coates Hedberg	J.J. Lee	
	Chuck Nena	

Guests

Rand Ackroyd	Bill Dunmire	Jim Purzycki
Pat Ahearn	Mike Lueck	

- Dr. Lee thanked members of the MRC for their support with the Foundation's proposal to AWWARF for the project *National Assessment of the Impact of Cross-Connections in North American Water Supplies*.

Paul Schwartz updated MRC with current EPA activity. ABPA has recently sent a questionnaire to water purveyors and state agencies requesting information about their respective programs. EPA has requested all available data regarding backflow incidents, as well as costs of operating cross-connection control programs.

- Roster update: Kathleen Coates Hedberg has agreed to serve on the MRC as the representative from the State of California Health Department, replacing Cor Shaffer.

- Minutes of 23 February 1999 meeting were deferred to the end of today's meeting since a couple of MRC members did not receive the minutes in the mail.

Old Business

New Section Titles

Staff has prepared the draft titles for the Sections of the 10th Edition.

- i. OBJECTIVES
 1. DEFINITIONS
 2. INTRODUCTION/HISTORY
 3. HYDRAULICS
 4. ELEMENTS OF CROSS-CONNECTION CONTROL PROGRAM
 5. CROSS-CONNECTION CONTROL PRACTICE - SURVEYS
 6. FACILITIES
 7. EQUIPMENT
 8. SAMPLE LETTERS, FORMS, INSTALLATION GUIDELINES, MODEL ORDINANCE
 9. FIELD TEST PROCEDURES
 10. SPECIFICATIONS OF BACKFLOW PREVENTION ASSEMBLIES
 11. SUMMARY OF CASE HISTORIES
- APPENDIX

These are the new Section numbers that the MRC will now be referencing as the contents are finalized.

Section 6 – NAICS

At the previous meeting Staff was requested to determine if there was any restriction of use for North American Industry Classification System (NAICS) codes. These codes provide a way to classify individual businesses. There is no restriction of use, and reference to these numbers may be utilized in the new Section 6.

Section 8

Elements of Certification Programs – Subcommittee's had been formed to develop the basic elements of certification programs for Testers, Specialists, and Reclaimed Specialists.

Tester Subcommittee – Mike Ahlee explained the handout material, minimum requirements for Backflow Tester Certification Programs.

Bob Purzycki requested that more information be included regarding instructor requirements.

Tester:	Ahlee*
	Johnson
	Havlina

Specialist Subcommittee – Rick Bird explained the handout material; course objectives and specific body of knowledge. Rick also reviewed the Reclaimed Specialist material that Dick Carlson supplied.

Specialist: Bird*
Carlson
Foltz

Action Items:

- MRC members to send comments on initial draft material to subcommittee chairs. Revised drafts to be sent to Staff so that it may be distributed to MRC before 24 August 99 MRC meeting.
- Bob Purzycki to send draft language to Mike Ahlee regarding instructor qualifications.
- Staff send USC course outlines to subcommittees.

Section 9

RP Field Test Procedure

2nd Check direction of flow test (current optional test A.2.2)

In response to requests to include the optional test as part of the procedure in Section 9, field data had been requested from MRC members.

The following field test results were presented:

	# of assemblies tested	# that passed standard backpressure test, but failed dir of flow test (< 1.0 psi)
Marty Freibert -	72	2 (3%)
Mike Ahlee	84	21 (25%)
Bob Purzycki	45	5 (11%)

Due to a number of variables (i.e., limited number of tests, limited sizes tested, unknown age and usage, etc.) it was felt that this data did not present a clear need for the subject test. In addition, the direction of flow test requires that the No. 2 shutoff valve holds tight to get accurate values. To fail an assembly only for a leak in the shutoff valve was not felt to be acceptable.

Action Item: Motion passed to remove the Optional Test A.2.2 from the Appendix.. (7 yes, 6 no)

Illustrations for Field Test Procedures

Input from Craig Adams, City of Tucson, AZ regarding the illustration of the hand under the relief valve of the RP, and the finger on the air inlet valve of the PVB and the bleeding of the bleed valve arrangement.

Action Item: These issues will be addressed when the draft of the illustrated procedures are prepared.

Section 10

Field Test Gage

Presentation by Mike Lueck, Midwest Instrument, regarding the pressure spike seen by test kits while turning on a testcock from the closed position to the open position as fast as possible. Presentation handout to be forwarded to MRC.

Recommendations/findings included:

- Gages exposed to same pressure spike
- Test more severe when test kit is fully drained
- Recommended test pressure of 65 psi
- Recommended pressure rise rate – 2,500-3,500 psig/sec

Cycle Test

Staff updated MRC regarding the experimentation that has been conducted to add performance tests at the end of the cycle test. It has been suggested that performance tests (direction of flow, 1psi backpressure, 150 psi backpressure, etc.) would provide a more objective pass/fail criteria. It was recommended that all components be under performance test criteria, not just elastomers.

Action Item: Staff to investigate applying performance tests as pass/fail criteria for all components during cycle test.

Febco Proposals

Proposals submitted by Mr. Bill Dunmire, Febco, in letter dated 12 August 1998.

- Remove requirement for #1TC on ½” RP’s
- Allow the design of operating stems in the shutoff valves of ½” and smaller assemblies to be similar to the design used for a testcock.
- Allow inlet and outlet connections to be of standard tube connector threads.

During the follow up discussion, it was recommended that the end connection requirements be expanded to allow for all standard connections.

Action Items:

- Bill Dunmire to supply specific tube thread standard.
- Brad Noll, BPMA, to supply recommended modifications for Section 10.1.1.3 to allow for alternate end connections.
- Staff to review prior discussions of the above items, and send to MRC.

Backsiphonage Test - RP

Rand Ackroyd inquired about the status of the proposed modifications to the backsiphonage test. This test is still being reviewed by Staff.

Minutes of 23 February 1999

Minutes of 23 February 1999 meeting were brought back on the table for approval. New motion to accept the minutes was passed.

New Business

Field Test Procedures

Mike Ahlee questioned the statement made on page 155, step T6; “appropriate repairs must be made.” In this context it seemed to suggest that repairs are always necessary. After discussion it was suggested that the words “*if necessary*” be inserted to clarify the step.

Action Item: Staff to provide this modification in next draft of field test procedures.

Page 300, step e: The attachment of the bypass hose to the gage is not clear. It implies that it is already attached, but there is no specific step to attach it.

Action Item: Staff to insert the following at the beginning of step ‘e’; *Attach bypass hose to low side bleed needle valve.*

DCDA/RPDA

Pat Ahearn questioned the origin of the 3 gpm crossover point for the DCDA’s and RPDA’s. He wanted to know if this might be lowered to 1 gpm.

Action Item: Staff to review justification of the 3 gpm from prior editions of Manual.

Fireline Backflow Preventers

At the 13 January 1998 MRC meeting, it was accepted in principle to include additional laboratory tests to the existing standards for DC, RP, DCDA, and RPDA's.

Action Item: Rand Ackroyd will be forwarding suggested language for these tests.

Meeting Schedule:

The following meeting dates have been scheduled:

- 29 June 1999 – General meeting at USC
- 24 August 1999 – General meeting at USC
- 12 October 1999 – Open meeting -- 9:00am – 3:00pm
Tentatively at Friendship Auditorium
3201 Riverside Drive, LA, CA 90027
(One block west of Foundation laboratory)

Adjourned 2:40 pm