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

Manual Review Committee

5 January 1999
USC Campus – DRB 140

Meeting Synopsis

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

Those in attendance:

Mike Ahlee	Bill Gedney	Robert Purzycki
Ken Anderson	Ernest Havlina	Paul Schwartz
Richard Bird	Sam Johnson	Patrick Sylvester
Dick Carlson	J.J. Lee	
Henry Chang	Brad Noll - BPMA	

- Minutes of 13 January 1998 meeting were reviewed and approved as amended.

- Roster update: Mr. Cor Shaffer does not work for the State of CA DOHS anymore, so a new representative is needed. Bill Gedney offered to contact Mr. Gary Hoffman in Sacramento to inquire about a replacement.

  Action Item: Staff to send letter to Mr. Gary Hoffman requesting new representative on MRC.

- Paul Schwartz updated MRC that a revised AWWA Manual M-14 is under development by an adhoc committee. Initial draft was due to be sent to the AWWA 512 Committee for review in December 98 or January 99.

Old Business

Sections 5 & 7

The reorganizing of these sections is planned to make them more usable to people doing cross-connection control surveys. It was decided to split up facilities in Table 7-1 into general categories (see table below). These initial categories would provide a starting point for adding facilities not currently in Table 7-1. A major concern of the

MRC is that any list that is developed must clearly state that it is not all-inclusive. All facilities that are listed in the new section will be identified as *examples* of this category.

Services	**Manufacturing**	**Food Processing**	**Medical**	**Restricted**	**Others**
(Note: facilities listed below are from table 7-1)					
car wash	aircraft	beverage	hospital	civil works	motion pic
film lab	automotive	brewer		classified	radioactive
laundry	chem plant	cannery			school/coll
	metal	dairy			waterfront
	oil/gas				
	paper				
	plating				
	power				
	rubber				
	sand/gravel				

Then a separate section or subsection will be created which identifies various "systems" (i.e., irrigation, fire, auxiliary, etc.) and "equipment" (i.e., boilers, turbo burners, etc.).

> ***Action Item:*** MRC members to supply to Staff additional facilities for the above categories. In addition, drawings or schematics of equipment found in current Section 5.2 are to be supplied.

Section 9

A number of inquiries and suggestions have been received by the Staff regarding the field test procedures. The following issues were discussed.

RP Field Test Procedure

> 2nd Check direction of flow test (current optional test A.2.2)
> The Foundation's office has received a number of recommendations to include this test as an integral part of the standard field test. Even though there are merits to the idea of recording the direction of flow differential pressure reading of the second check valve, this test requires that the No. 2 shutoff valve holds tight to get an accurate reading. The MRC has supported the position that a slight drip leak in a shutoff valve should not be grounds for failing the assembly. However, if additional field test data were available, this would help with the MRC deliberations.

Action Item: Staff to request field test data from agencies currently performing the 2nd check direction of flow test. Bob Purzycki offered to perform the optional field test during his routine field tests, then report back to the MRC.

Closing No. 2 Shutoff valve

A letter from Les O'Brien at TREEO raised an issue regarding the appropriate time to close the No. 2 shutoff valve during the field test. His recommendation is that bleeding the #4 testcock during the initial steps may not maintain a flowing condition through the first check valve to reduce the possibility of causing the relief valve to discharge. With the No. 2 shutoff valve open, the flow of water from the #4 testcock may actually be from a backpressure condition.

The MRC maintains the position that the gage should be on-line before closing the No. 2 shutoff valve. A discharge from the RV when the No. 2 shutoff valve is closed does not only imply that the first check valve is leaking. It has been demonstrated that the closure of a resilient seated gate valve may create a backpressure condition against the second check valve, and the associated disc compression may cause the relief valve to discharge.

Action Item: Staff to modify the testcock flushing process in Sections 9.2.2. Test No. 1 Step 'a' and 9.3.2 Test No. 1 Stem 'a,' and prepare draft for MRC review. Procedure to be: Open TC#4, #3, #2, #1, then close #1, #2, #3, #4.

Action Item: Staff to modify Section 9.2.2. Test No. 1 Step 'i' to eliminate the possible effects of disc compression when the No. 2 shutoff valve is closed. Proposed procedure: *After closing #2 shutoff valve, if reading goes down to RV opening point, bleed low side of gage to eliminate the possible disc compression.* Staff to modify Section 9.2.3.6 to address this occurrence.

Action Item: Staff to modify the term "troubleshooting."

Action Item: Sam Johnson to submit draft wording regarding the simultaneous leakage of a first check valve and No. 2 shutoff valve when the bypass hose is utilized.

3 psid Buffer

Test #3 of the 9th Edition RP field test procedure maintains that there "should" be a 3 psid buffer. Discussions at previous MRC meetings have suggested that the permissive language must be eliminated.

Action Item: Motion passed to modify the "Requirement" under Section 9.2.2 Test No. 3 to read:

"The static pressure drop across check valve No. 1 shall ~~should~~ be at least ~~3.0~~ 5.0 psid, and greater than the relief valve opening point (Test No. 1). "

Other field test procedure issues

Action Items: Staff to modify Section 9.2.3.5, first box '❑' . Add "Open No. 2 test cock." after first sentence.

Staff to modify Section 9.3.3 Steps T1 and T5. Add "Verify that shutoff valves are closed." at the beginning of each of these steps.

PVB: Add diagnostic steps for leaking No. 2 shutoff valve.
Clarify gage level in both tests, and when it is critical.
Add detailing for verification of air inlet full opening.

Meeting Schedule:

The following meeting dates have been scheduled:

23 February 1999 – General meeting at Foundation Laboratory
6 April 1999 – General meeting
18 May 1999 – Open meeting
29 June 1999 – General meeting

Adjourned 2:55 pm