

Foundation for Cross-Connection Control and Hydraulic  
Research  
University of Southern California  
*Manual of Cross-Connection Control*  
10<sup>th</sup> Edition

**Manual Review Committee**

23 September 1997

Friendship Auditorium  
3201 Riverside Drive  
LA, CA 90027

*Meeting Synopsis*

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

Minutes of 29 July 1997 meeting distributed for review.

This open meeting had been scheduled as an opportunity for all interested parties to participate with the review of the items previously submitted to the MRC regarding Section 10 of the Manual.

Discussion took place starting with Backflow Prevention Manufacturer's Association (BPMA) Item #13 - *BPMA letter to MRC dated 16 May 97*:

Item #13 - Bronze Material

Considerable discussion regarding the materials used in devices and components used in water distribution systems. The Safe Drinking Water Act (SDWA) recognizes the consensus standard in this area, NSF 61 *Drinking Water System Components - Health Effects*. BPMA representative Brad Noll and Rand Ackroyd updated the MRC regarding the requirements of NSF 61 and State of California Proposition 65.

**Action Item:** It was requested that the BPMA supply some of the existing performance standards for materials used in potable water applications. In addition, a revised proposal was requested to identify other constituents (i.e., zinc) in the bronze alloys.

Item #15 - Orientations

Staff is gathering data to compare cycle testing and field evaluation results. Report at future meeting.

Item #16 - Opening and Closing Points

At the 29 July 1997 MRC meeting, members of the MRC were asked to submit field test data. In an effort to determine how much the field test values change from year to year, especially when a failing value is observed, field test data must be collected. Sam Johnson submitted City of Riverside data dating from 1991 to the present. The City of Riverside data was broken down by manufacturer, as well as overall averages. In regards to relief valve failure readings for RP's, the accumulated data *averaged* out as follows:

RV failing value	One year prior	Two years prior
0.96 psid	2.4 psid	2.5 psid

Adequate check valve data for the double check valve assemblies was not available since the City of Riverside did not record numerical values until fairly recently.

**Action Item:** Other members of the MRC which have not submitted their data yet were requested to do so. An article in the Foundation's CrossTalk (*summer 1997 edition*) newsletter requests this data too. Additional action will take place once adequate data has been gathered.

Item #17 - Differential Pressure Relief Valve Port

Staff reported that relief valve discharge rates were being investigated in the lab. Data acquisition is not complete.

Item #19 - Backsiphonage Test

At the 29 July 1997 MRC meeting, the BPMA was requested to provide proposed wording for an alternate backsiphonage test. No submittal from the BPMA had been received, however, individual submittals were received from Wilkins (dated 9/17/97) and Watts (dated 9/16/97). Brad Noll, representing Wilkins, presented a submittal of the backsiphonage test utilizing fouling wires bent to the configuration of the check valve seat. Rand Ackroyd, representing Watts, presented a submittal of the backsiphonage testing where the water level in the zone after the relief valve has drained will prevent backsiphonage with a fouled first check valve.

**Action Item:** Recommendation that this lab test is reviewed by the MRC in the Foundation's laboratory, utilizing the different fouling techniques (i.e., straight wire, formed wire, etc.) In addition, the MRC will wait to review any submittals from the BPMA.

Items #20 & #21 - DC & RP Cycle Test

Staff is still compiling data in the laboratory. Cycle tests are being conducted on various DC and RP assemblies to determine if the current test needs to be rewritten. Staff to provide recommendation to the MRC once research has been completed in the laboratory.

#### Item #22 - Modification to DCDA Standard

At the 29 July 1997 MRC meeting, the MRC accepted in concept the BPMA's proposal for a DCDA with a single check valve in the bypass. The BPMA was to supply proposed modifications for the standard for MRC review, however, no proposal has been received to date. Rand Ackroyd, representing Watts, presented a submittal (dated 9/16/97) to modify the DCDA and RPDA standards such that a *bypass check valve* would be contained in the bypass rather than a double check valve assembly. The MRC discussed the issue of identification (*How would the field personnel know if the assembly should contain a single check or DC in the bypass?*) should there be two separate standards.

**Action Item:** Motion to create two new standards; DCDA-II and RPDA-II. These would be new standards, and would not replace the existing DCDA and RPDA standards. The BPMA will proceed to supply modified wording for the subject standards.

#### Items #23 and #24 - Check valve loading

Await field test data associated with Item #16 above.

### Old Business

#### BPMA Item #6 - Accessibility

Rand Ackroyd, representing Watts, submitted a proposal (dated 9/16/97) to modify Section 10.1.2.3.

Action Item: Motion to accept proposal. Section 10.1.2.3 to read: "A backflow prevention assembly shall be provided with one or more openings through which the internal parts may be removed, repaired, or inspected without having to remove the body of the assembly from the line. The body of the backflow preventer is that portion of the valve that rigidly connects #1 and #2 shutoff valves. This portion of the backflow assembly is not necessarily a pressure containing component."

### New Business

Rand Ackroyd inquired about the previous proposal from Watts (dated 15 May 1997) for a new standard, Special Application Backflow Preventers for Fire Protection Systems.

**Action Item:** This item will be placed on the agenda for a MRC open meeting.

Bob Purzycki requested that the MRC attempt to coordinate the development of the proposed field test gage standard with proposed ASSE Standard #1064.

**Action Item:** Rand Ackroyd is the ASSE backflow standard coordinator, and he will request a draft copy of the ASSE document for MRC review.

## **Minutes**

Minutes of the 29 July 1997 meeting having been fully reviewed at today's meeting, a motion to approve the amended minutes passed unanimously.

*Amendments:* Page 2, Item #15 - correct wording "... in all orientations, but ~~lab~~ field tested ..."

Item #20 - remove the words "or rewrite the test with the testcock #3 open."

## **Meeting Schedule:**

11 November 1997 - MRC general meeting

*New meeting date scheduled*

13 January 1997 - MRC Open Meeting

Adjourned 2:28 pm