

FOUNDATION FOR CROSS-CONNECTION CONTROL RESEARCH

UNIVERSITY OF SOUTHERN CALIFORNIA

University Park, Los Angeles, California 90007

VOLUME 4/NO. SPECIAL/JULY 1970



FOR WHOM THE BELL TOLLS

This issue of Cross Talk is especially prepared for the participants and attendees of the 5th International Water Pollution Research Conference and Exhibition. Never before has the problem of cross-connection control been put so

squarely to the water purveyor as it is today. And, never before has such a time tested and proven means of cross-connection control been available to the water industry as is available thru the Foundation of Cross-Connection Control Research. The sands of the hour-glass are fast running out. Learn about the Foundation, what it has to offer, and why it is so important

for water purveyors as well as local and state health departments to become supporting members of the Foundation. The world has become pollution conscious almost over night. Don't allow your organization to be caught napping - take advantage of two and a half decades of experience on this particular problem. Join the Foundation now.

IT IS STILL WITH US

Records show that polluted or contaminated water have inadvertently gotten into the potable water supply of many cities and towns over the past 50 or more pears. Undoubtedly cross-connections have been permitted as an expidient for years. And, today we find evidence on every hand that new ones are created almost as fast as existing ones are corrected. The newspapers over the past few months have carried a number of stories

giving details of instances where wine, gasoline, chromate sewer gas and fecal matter have been found in drinking water. Too often some of our city fathers are isolated from the facts of such incidents and they fail to realize the seriousness of each case plus the fact that the warning - "it could happen here" is totally overlooked. No water purveyor in this day and age can afford the luxury of being without a viable cross-connection control program. The best way to initiate

and pursue a defensible backflow prevention program is to become a supporting member of the Foundation for Cross-Connection Control Research of the University of Southern California; and, then let the Foundation assist you with specifications for your code and a continuously up-dated List of Approved Devices from which the customer may choose a devise that you know is proven and backed by years of unbiased experience as well as training your chief inspector.

HOW ARE YOU SURE?

Codes and standards, specifications and approved devices are essential for a backflow prevention program. But, still another element is necessary if the program is to be really viable and that is an inspection and record program whereby each backflow prevention device in a system is actually tested periodically and the results of such tests made a part of the records of the water purveyor or cognizant health department.

The testing of backflow devices may be accomplished by either or both of the following. If the purveyor or health department desires to do so it may establish its own crew of certified testers who periodically inspect each and every device within their area; or, the purveyor or health department may require each customer having a backflow device to provide a certificate of inspection on some regular schedule. This certificate is provided by a private entrepreneur who has been certified by either the Foundation or the local health department as being competent to inspect - and if necessary repair - any of the devices on the market. Occasionally a customer having a number of devices within his system could have an employee certified as a limited tester to test and repair only those devices in his system.

As the certificate of inspection of each device is submitted to the purveyor - on what ever schedule is established by the purveyor, i.e. monthly, quarterly, semi-annually or annually - the purveyor logs these data into his master file. Thus, he has a permanent record.

A program for the certification of testers is currently being offered by several school districts in southern California as a part of their adult education program. These classes are on a one-night-per-week schedule for a semester. However, for those purveyors or health departments who have yet to establish an inspection program the Foundation will offer a 5-day short course certification program starting in September 1970, and periodically thereafter. Those interested should address an inquiry to the Director of the Foundation.

A competent inspection team provides the other arm for a strong cross-connection control program that is made possible by the List of Approved Devices of this Foundation. You can be sure.

LOOK AHEAD

A word of caution - in quite a number of instances we have noted that a water purveyor has allowed only a single backflow prevention device to be installed on a sensitive service. Such a service is one where any interruption of the water supply would cause very serious consequences - such

as in a hospital, a steel mill, a film processing laboratory, etc. When a water purveyor is asked to provide water to such an installation thru a single service connection it becomes essential that the customer be required to place two backflow prevention devices in parallel so that it is possible to shut one unit off for the required periodic testing. The size of these

devices, of course, need not be that of the live size; but, may be of an equivalent total flow capacity to that of the service line - unless there is a local condition contraindicated. To allow only a single device in such a service will always cause many headaches. Look ahead to protect your service reputation.

SMALL VS LARGE

When discussing cross-connection control programs we have often heard the excuse "we're too small a system" or "we can't afford an inspection department". It is true that some of the larger water supply systems do have a small cross-connection control department. But, it is not essential that each purveyor have his own inspection personnel. In a few instances

small groups of contigous water purveyors have pooled their efforts by contracting with the local county health department for the services of a competant inspector. Thus, they have gained a defensible program for a relatively small pro-rated annual cost.

Specific cooperation in this area also provides the water purveyor with the back-up strength of the country health officer. In addition to this overt position the county health crossconnection control man can also be the focal point for the training and certification of other cross-connection inspectors and/or commerical testers of backflow prevention devices. Adequate records of the inspection of all devices in the individual system is the only additional data that the purveyor needs to document his responsible protection of his system.

VALUE RECEIVED

To fully appreciate the meaning of "An Approved Device" both the water purveyor and the customer who is required to install a backflow prevention device should have an understanding of the time and effort that has gone into the design, development and evaluation of such a device.

Both the Double-Check Valve Device and the Reduced Pressure Principle device contain check values. But, these check valves are not the ordinary swing check. These are specially designed valves that are internally loaded and constructed so as to meet the exacting specifications of the Foundation. In addition the relief valve that is an integral part of the Reduced Pressure Principle Device is also specially designed and constructed to meet these specifica-

tions. The importance of this statement is that these are not "off the shelf" components that are assembled into a device. In some cases many years of development have gone into the device that is found on the market today.

The design and development of the model of a device is only the beginning. When the manufacturer feels that his device is ready for evaluation he submits it to the Foundation. In the Foundation's Laboratory the model is evaluated against the specifications of the Manual of Cross-Connection Control. If the model successfully passes the laboratory evaluation the Foundation advises the manufacturer to place at least three devices in field sites that are acceptable to the Foundation from the standpoint of type service et. al. Then these field sites are inspected monthly for a

period of twelve months. If all the devices perform to the satisfaction of the Foundation - i.e. trouble-free for the entire twelve mo. period, then a certificate of approval is issued for the specific type and size that is valid for only three years. The certificate must be renewed to remain valid.

It is in this way that both the water purveyor and the customer are provided with full assurance that the "approved device" will perform according to specifications as long as a proper inspection and maintenance schedule is maintained. The Foundation also assists with the training of inspectors as discussed elsewhere in this issue of *Cross Talk*. It is for these reasons that the approval of a device by the Foundation of Cross-Connection Control Research has come to be recognized as a true mark of value.





WELCOME TO BOOTH 324

Let us help you with your Backflow Prevention Problems