Suggested Outline for Cross-Connection Control

The following is a suggested outline for a cross-connection control program. Using this outline will help local governments create their own city ordinance.

A. **Introduction**. Explanation of the why, how, what, and when.

B. **Local Ordinance**. Legal provisions for establishing and maintaining a cross-connection program should be developed at the local level. A cross-connection ordinance need not be lengthy, but should contain the following points:

1. Objective. A purpose or general statement should address why the ordinance is necessary to protect the water system, to eliminate existing hazards and to prevent future cross-connections.

2. Definitions. This is standard practice for most regulatory documents. The definitions should define such things as a reduced pressure principle device, the credentials of a certified tester and degree of hazard.

3. Requirements. This section should state who is responsible for each part of the water system. For example, the water supplier is responsible for maintenance of the distribution system to the meter outlet. The customer would then be responsible for insuring the integrity of the system within the building. This section should also include a clause that would permit inspections of the plumbing system by the water supplier. The section should also address which types of cross-connection devices are approved and give an inspection schedule for frequency of device testing.

4. Violations and Penalties. This section should address the enforcement procedure for a customer who does not respond to the notices supplied by the water system that a cross-connection exists. This section usually contains provisions for stopping and resuming services.

C. **Prioritize hazards**. The next step in starting a program is to prioritize inspections of those users who pose the greatest threat or potential hazard to the system. For example, a chemical plant may be more of a hazard than a hospital or funeral home, which may be more of a hazard than a packing plant, which may be more of a hazard than a dry cleaner. Those areas in the system with low pressure should be considered as potentially dangerous regardless of the hazard involved.

D. **Field Inspections**. The next step is to conduct actual field inspections. Inspectors should be trained to identify potential cross-connections. It is very important to identify those users who have already installed backflow preventors and also to determine where and what kind of additional devices are needed. An inventory of devices already installed should be made so that the device can be inspected and tested on a regular basis. Records should be kept so repeat problems can be addressed. The customers who are not protected from cross-connections must be informed of the potential hazard and give a schedule to follow for installing proper prevention devices.

E. **Certified Testers**. It is important to test backflow devices after they have been installed and at least annually thereafter. These tests must be conducted and recorded by a certified tester. Responsibility for testing falls on the user.

F. **Accident Procedures**. An important part of a cross-connection program is to establish a procedure to follow in case of an accident. The following are suggested procedures:

1. Have an accurate map of the distribution system showing shut off valves, fire hydrants, industrial users, possible contamination points and other information deemed valuable. A GPA unit would be beneficial to pinpoint the exact location of these points.

2. have access to the services of a qualified laboratory that can help determine possible contaminants. The lab should be able to run analysis on short notice, especially on weekends.

3. Keep a box of proper sample bottles available for quick sampling.

4. If a hazardous material has entered the system, phone numbers of local health agencies, clinics, and doctors should be readily available. Proper news media notification should be made.

G. **Public Relations Program**. Another part of a cross-connection program is effective public relations. Brochures enclosed in the monthly mailing illustrating potential household hazards is one way to notify users about cross-connections. Public awareness can be a big help in reducing hazards.