

Illinois Cross-Connection Control Program

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Illinois has a long history in cross-connection control. Illinois officials and consumers have taken measures to keep drinking water safe, from the first Plumbing Code published in the 1800's, to the ongoing vigilance of public water supply officials in maintaining an active cross-connection control program. The purpose of the early plumbing code regulations was focused primarily upon keeping drinking water away from sewage. As technology, convenience and industry progressed, the complexity of the plumbing code grew considerably. Eventually, both the plumbing code and drinking water programs became the responsibility of the Illinois Board of Health. The drinking water program was split into two agencies in 1970 when the Illinois Environmental Protection Act was passed, with the plumbing program, private water and sewage programs being placed under the jurisdiction of the Illinois Department of Public Health (IDPH), and the community public water supply program placed with the Illinois Environmental Protection Agency (IEPA). Both agencies continued to be concerned with the safety of drinking water, but in 1985, the agencies began to work closely together to ensure that the cross-connection program became a basic element in all water supply operations.

The cross-connection control program for the IEPA was moved from the Permits Section into the Field Operations Section in the fall of 1984. Initially, the cross-connection program was a voluntary effort, wherein public water supplies, (particularly large supplies), were encouraged by Permits Section engineers to implement cross-connection ordinances and programs, using a Technical Letter publication prepared by the Permits Section. In 1985, cross-connection control regulations were adopted by the Agency in the Illinois Administrative Code. These regulations required all community public water supplies to adopt an active program to control cross-connections. An "active program" means that an ordinance, tariff or condition of water service must be adopted by each community public water supply. After adoption, the water supply must enforce the program, maintain records to document ongoing enforcement, and are encouraged to provide education to consumers at least once each year regarding cross-connections. Regional office engineers evaluate the operations of each public water supply approximately every three years. As a part of that evaluation, cross-connection program records are reviewed to ensure that the program is actively enforced. If a water supply has not adopted an enforceable requirement to prohibit unprotected cross-connections, or if required records are not being maintained to document that an active program is in place, the deficiency is cited in the engineering evaluation that is sent to the

water supply officials, and must be read into the official record of the council or board meeting. The water supply must respond within 45 days to tell the Agency what steps will be taken to bring the program into compliance.

In 1984 and 1985, the IEPA recognized that the cross-connection control program would run more smoothly if both "ends" of the water supply pipe participated in the education and compliance process. Both water supply distribution protection and protection within building plumbing systems must be addressed to make the cross-connection program a complete success. Education was recognized as a cornerstone in the building of the cross-connection control program. Efforts were made by IEPA to work more closely with the IDPH in both the non-community water supply program and the Plumbing Program. To accomplish this goal, the IEPA Field Operations Section and IDPH plumbing program gave many joint educational programs. Both offices participated as instructors in the four day cross-connection control device inspector approval course coordinated by the Environmentally Resources Training Center, Southern Illinois University-Edwardsville, traveled to local council meetings, water board meetings, and industry training sessions to explain and promote the cross-connection control program. Today, over 85% of all community public water supplies are in compliance. An additional 5% are in the process of putting a program in place, or improving an existing program. The remainder of the supplies are being pursued by Field Operations personnel during routine operations. Most of these supplies are very small water supplies, or institutional supplies such as nursing homes, prisons or other health care types of facilities. The programs for these supplies are somewhat different from those for larger water supplies. Institutional programs, for example, target education of staff, and requirements for plumbing compliance by owners and operators of those facilities.

The cross-connection control program is also being addressed as part of the federally imposed Capacity Development Program, under the area of Emergency Management. Water supply officials are being required to bring emergency management plans up to date, and include all types of potential drinking water emergencies in response planning. Field Operations personnel are requiring water supplies to make the plans available for review on-site during engineering evaluation or other visits. This added emphasis is serving to encourage water supplies to review and improve existing programs, as well as to bring the remainder of the non-compliant supplies into compliance. ●