

Hospital Water Supply Requirements

APPLICATIONS

Scenario #1- A Looped Municipal System (Typical/Preferred).

Municipal water main systems are typically designed to minimize “dead ends” to promote reliability of service and reduce head loss (a looped system). Valves are typically installed at intervals not to exceed 500 feet to allow isolation of water main breaks and allow continuation of water supply. Two water service lines are provided into the hospital from the water main (Plumbing Code 609.2). The water service lines are separated by at least 10 feet horizontally to allow individual repair of each water service line.

Scenario #2- A Dead End Water Main and Well (Rare).*

The municipal water main system terminates in a dead end (as may occur in remote areas). The hospital has two water service lines into the building (as required by 609.2). The hospital has installed a water well to meet the reliability requirements of the rule. Water wells serving a hospital are classified as “nontransient noncommunity” water supplies and are regulated by Michigan Department of Environmental Quality. Well permits, construction standards and monitoring requirements for the well are under the control of MDEQ.

Scenario #3-A Dead End Water Main and Storage Tank (Extremely rare).*

The municipal water main system terminates in a dead end (as may occur in remote areas). The hospital has two water service lines into the building (as required by 609.2). The hospital has installed a water storage tank to meet the reliability requirements of the rule. The water storage tank is to meet Part 7 of the Recommended Standards for Water Works.

Scenario #4-Only On-Site Water Availability (Existing System Only).*

A new hospital will not be approved where only on-site water is available.

*Note: Municipally owned and operated water systems are governed by stricter regulations and are considered more reliable than a privately owned well.

REFERENCES

Michigan Plumbing Code 2006-Section 609.2 Water Service: All hospitals shall have two water service pipes installed in such a manner so as to minimize the potential for an interruption of the supply of water in the event of a water main or water service pipe failure.

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Michigan Department of Environmental Quality- Safe Drinking Water Act; Act 399, P.A. 1976, as amended; for construction and testing of wells:

Michigan Cross Connection Manual- Section 14.4.2: ...because of the hazardous types of cross connections which are involved in hospitals, it is required that the service line from the public distribution system be protected at the point where it enters the hospital building(s) by either an approved air gap or a reduced pressure principle backflow preventer...

Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers, Recommended Standards for Water Works: Part 8 Distribution Systems.