**Section 604.1300 General Storage Requirements**

a) Storage facilities must have sufficient capacity to meet domestic demands and, where fire protection is provided, fire flow demands.

b) Excessive storage capacity must be avoided to prevent potential water quality deterioration problems and freezing.

c) The material used in the construction of water storage structures must be approved by the Agency under 35 Ill. Adm. Code 602.105. Porous materials, including wood and concrete block, are not acceptable.

d) Storage Structure Drainage

1) Storage structures must be designed so they can be isolated to prevent loss of pressure in the distribution system when maintenance or cleaning occurs.

2) Each elevated storage tank must have a hydrant or other means to drain for repair, maintenance or cleaning.

3) The storage structure drain must discharge to the ground surface with no direct connection to a sewer or storm drain.

e) The bottom of a water storage structure must be placed above the groundwater table, preferably above grade. At least 50 percent of the water depth must be above grade.

f) Finished water storage must be designed to facilitate turnover of water to avoid stagnation.

g) Freezing

1) Finished water storage structures and their appurtenances, including the riser pipes, overflows, and vents, must be designed to prevent freezing.

2) Equipment used for freeze protection that will come into contact with the potable water must comply with Section 604.105(f).

h) The discharge pipes from water storage structures must be located to prevent the flow of sediment into the distribution system.

i) The area surrounding a ground level structure must be graded to prevent surface water from standing within 50 feet.

j) Minimum distances from sources of contamination for below ground storage reservoirs must be maintained as specified in Section 604.150(a).

k) A smooth-nosed sampling tap must be provided to facilitate collection of water samples for both bacteriological and chemical analyses.