**Section 370.820 Sludge Thickening**

a) Sludge thickeners to reduce the volume of sludge should be considered. The design of thickeners (gravity tank, gravity belt, dissolved-air flotation, centrifuge, and others) should take into account the type and concentration of sludge, the sludge stabilization processes, storage requirements, the method of ultimate sludge disposal, chemical needs, and the cost of operation. The use of gravity thickening tanks for unstabilized sludges is not recommended because of problems due to septicity unless provisions are made for adequate control of process operational problems as well as problems of odors at the gravity thickener and any following unit processes. Particular attention should be given to the pumping and piping of the concentrated sludge and possible onset of anaerobic conditions.

b) Process selection and unit process design parameters should be based on prototype studies. The Agency will require such studies where the sizing of other plant units is dependent on performance of the thickeners. Refer to Section 370.520(b) for any new process determination.

(Source: Amended at 21 Ill. Reg. 12444, effective August 28, 1997)