**Section 370.870 Sludge Storage and Disposal**

a) Storage

1) General

Sludge storage facilities shall be provided at all mechanical treatment plants, and may consist of any combination of drying beds, lagoons, separate tanks, additional volume in stabilization units, pad areas or other means to store either liquid or dried sludge. Drainage of supernatant from sludge storage facilities shall be returned to the sewage treatment process at appropriate points and rates. Refer to Section 370.860(b) and (c) for drying bed and lagoon design criteria, respectively.

2) Volume

Rational calculations justifying the number of days of storage based on the total sludge handling and disposal system shall be submitted. Refer to Sections 370.840(g) and 370.860(a) for anaerobicly and aerobicly digested sludge production values; values for other stabilization processes shall be justified on the basis of design. If land application is the only means of sludge disposal used at a treatment plant, a minimum of 150 days storage shall be provided, in order to account for inclement weather and cropping practices.

b) Disposal

1) Landfilling

Sludge and sludge residues may be disposed of in Agency approved municipal solid waste landfill units under the terms and conditions of permits issued by the Agency's Bureau of Land. On-site landfilling shall be conducted in conformance with the design recommendations of the Bureau of Land and must be approved by the Agency's Bureau of Water.

2) Land Application

Specific design criteria for land application of sludge are set out in Design Criteria for Sludge Application on Land, 35 Ill. Adm. Code 391. Additional operating criteria may be obtained from applicable Federal regulations. In order to assure compliance with the facility's effluent standards, alternative sludge disposal options to account for inclement weather and cropping practices are recommended.

3) Sludge Lagoons

The use of lagoons for ultimate disposal of sludge is not recommended because of odor potential, area and volume required and possible long term problems from groundwater contamination. If a lagoon is proposed, a hydrogeologic survey must be performed to demonstrate the appropriateness of a disposal lagoon at the particular site. A groundwater monitoring program must be included in any sludge lagoon design. Refer to Section 370.860(c) for lagoon design criteria.

4) Other Disposal Methods

A detailed description of the technique and design data shall accompany the plans of any proposal to dispose of sludge by methods other than those specified in this Section. Refer to Section 370.520(b) for any new process determinations.

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