**Section 601.200 Disposal Site Suitability Requirements**

The following minimum characteristics shall be used in determining a site acceptable for disposal of low-level radioactive waste:

a) The primary emphasis in disposal site suitability is isolation of waste and disposal site features that ensure that the long-term performance objectives are met.

b) The disposal site shall be capable of being characterized, modeled, analyzed and monitored.

c) Within the region where the facility is to be located, a disposal site shall be selected so that projected population growth and future developments are not likely to affect the ability of the disposal facility to meet the performance objectives of this Part.

d) Areas shall be avoided having known natural resources that, if exploited, would result in failure to meet the performance objectives of this Part.

e) The disposal site shall be generally well drained and free of areas of standing water or flooding or frequent ponding. Waste disposal shall not take place in a regulatory flood plain, as provided in the rules of the Illinois Department of Natural Resources (see 17 Ill. Adm. Code 3706).

f) Upstream drainage areas shall be minimized to decrease the amount of runoff that could erode or inundate waste disposal units.

g) The disposal site shall provide sufficient depth to the water table that groundwater intrusion, perennial or otherwise, into the waste will not occur.

h) Areas shall be avoided where tectonic processes such as faulting, folding, seismic activity or vulcanism occur with such frequency and to such an extent that they would affect the ability of the disposal site to meet the performance objectives of this Part or would preclude defensible modeling and prediction of long-term impacts.

i) Areas shall be avoided where surface geologic processes such as mass wasting, erosion, slumping, landsliding or weathering occur with such frequency and to such an extent that they would affect the ability of the disposal site to meet the performance objectives of this Part, or would preclude defensible modeling and prediction of long-term impacts.

j) The disposal site must not be located where nearby facilities or activities could adversely impact the ability of the site to meet the performance objectives of this Part or significantly mask the environmental monitoring program.