**Section 817.309 Facility Location**

a) No part of a unit shall be located within a setback zone established pursuant to Section 14.2 or 14.3 of the Act.

b) No part of a unit shall be located within the recharge zone or within 366 meters (1200 feet), vertically or horizontally, of that portion of a stratigraphic unit containing Class I or Class III groundwater as defined at 35 Ill. Adm. Code 620, unless:

1) There is a stratum between the bottom of the waste disposal unit and the top of the Class I and III groundwater that meets the following minimum requirements:

A) The stratum has a minimum thickness of 15.2 meters (50 feet);

B) The maximum hydraulic conductivity in both the horizontal and vertical directions is no more than 1 x 10-7 centimeters per second, as determined by in situ borehole or equivalent tests;

C) There is no indication of continuous sand or silt seams, faults, fractures or cracks within the stratum that may provide paths for migration; and

D) Age dating of extracted water samples from both the aquifer and the stratum indicates that the time of travel for water percolating downward through the relatively impermeable stratum is no faster than 15.2 meters (50 feet) in 100 years; or

2) The owner or operator of the unit has demonstrated to the Agency, through the use of a site-specific groundwater model, or through other appropriate means, such as historical knowledge of local conditions or regional geological and hydrogeological data, that operation of the unit will not adversely impact any existing Class III groundwater or impact any Class I groundwater such that treatment or further treatment will be required to allow reasonable use of such Class I groundwater for potable water supply purposes.

A) Factors to be considered in evaluating whether a Class I groundwater may be reasonably used for potable supply purposes include, but are not limited to:

i) Physical or technological practicability of development;

ii) Existence of deed restrictions or other legal mechanisms for imposing a restriction on land use; and

iii) The nature of an existing use of the groundwater.

B) In performing groundwater modeling, the owner or operator shall:

i) Estimate the amount of seepage from the unit during operations assuming that the actual design standards for the unit apply;

ii) Determine the concentration of constituents in the leachate from actual leachate samples from the waste or similar waste, or laboratory-derived extracts;

iii) Collect information to develop the site-specific groundwater model (e.g., hydraulic conductivity, gradients, hydrogeology, stratigraphy);

iv) Develop a conceptual groundwater flow model of the site to determine the soil units through which leachate may migrate;

v) If leachate from the unit is expected to contain organic constituents in excess of the MALCs for beneficial usable waste, determine the organic carbon content for soil units through which the leachate constituents may migrate; and

vi) Determine the retardation factor for constituents of interest based on traditional hydrogeological methods.

c) Subsection (b) shall not apply to units that accept only beneficially useable waste.

d) A facility located within 152 meters (500 feet) of the right of way of a township or county road or State or interstate highway shall have its operations screened from view by a barrier of natural objects, fences, barricades or plants no less than 2.44 meters (8 feet) in height.

e) No part of a unit shall be located closer than 152 meters (500 feet) from an occupied dwelling, school or hospital that was occupied on the date when the operator first applied for a permit to develop the unit or the facility containing the unit, unless the owner of such dwelling, school or hospital provides permission to the operator, in writing, for a closer distance.

(Source: Amended at 21 Ill. Reg. 1183, effective January 14, 1997)