**Section 811.314 Final Cover System**

a) The unit must be covered by a final cover consisting of a low permeability layer overlain by a final protective layer constructed in accordance with the requirements of this Section, unless the Agency has issued an RD&D permit that allows the use of an innovative final cover technology pursuant to an adjusted standard issued under 35 Ill. Adm. Code 813.112(b), and that permit is in effect.

b) Standards for the Low Permeability Layer

1) Not later than 60 days after placement of the final lift of solid waste, a low permeability layer must be constructed.

2) The low permeability layer must cover the entire unit and connect with the liner system.

3) The low permeability layer must consist of any one of the following:

A) A compacted earth layer constructed in accordance with the following standards:

i) The minimum allowable thickness must be 0.91 meter (3 feet); and

ii) The layer must be compacted to achieve a permeability of 1 x 10-7 centimeters per second and minimize void spaces.

iii) Alternative specifications may be utilized provided that the performance of the low permeability layer is equal to or superior to the performance of a layer meeting the requirements of subsections (b)(3)(A)(i) and (b)(3)(A)(ii).

B) A geomembrane constructed in accordance with the following standards:

i) The geomembrane must provide performance equal or superior to the compacted earth layer described in subsection (b)(3)(A).

ii) The geomembrane must have strength to withstand the normal stresses imposed by the waste stabilization process.

iii) The geomembrane must be placed over a prepared base free from sharp objects and other materials that may cause damage.

C) Any other low permeability layer construction techniques or materials, provided that they provide equivalent or superior performance to the requirements of this subsection (b).

4) For an MSWLF unit, subsection (b)(3) notwithstanding, if the bottom liner system permeability is lower than 1 x 10-7 cm/sec, the permeability of the low permeability layer of the final cover system must be less than or equal to the permeability of the bottom liner system.

c) Standards for the Final Protective Layer

1) The final protective layer must cover the entire low permeability layer.

2) The thickness of the final protective layer must be sufficient to protect the low permeability layer from freezing and minimize root penetration of the low permeability layer, but must not be less than 0.91 meter (3 feet).

3) The final protective layer must consist of soil material capable of supporting vegetation.

4) The final protective layer must be placed as soon as possible after placement of the low permeability layer to prevent desiccation, cracking, freezing, or other damage to the low permeability layer.

d) Any alternative requirements for the infiltration barrier in subsection (b) for any owner or operator of an MSWLF that disposes of 20 tons (18 megagrams) of municipal solid waste per day or less, based on an annual average, must be established by an adjusted standard pursuant to Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 104. Any alternative requirements established under this subsection must fulfill the following requirements:

1) They must consider the unique characteristics of small communities;

2) They must take into account climatic and hydrogeologic conditions; and

3) They must be protective of human health and the environment.

BOARD NOTE: Subsection (b)(4) is derived from 40 CFR 258.60(a) (2017). Subsection (d) is derived from 40 CFR 258.60(b)(3) (2017). Those segments of subsection (a) that relate to RD&D permits are derived from 40 CFR 258.4(b) (2017).

(Source: Amended at 42 Ill. Reg. 21330, effective November 19, 2018)