**Section 812.306 Design of the Liner System**

The application shall contain information to show that the design of the liner system meets the minimum requirements of 35 Ill. Adm. Code 811.306, including the following information:

a) For Compacted Clay Liners:

1) Cross sections and plan views of the liner system;

2) Results of any field or laboratory tests demonstrating that the liner material complies with 35 Ill. Adm. Code 811.306(d);

3) A description of the test liner, including:

A) Diagrams and any supporting documentation showing that the test liner will be constructed and evaluated in accordance with 35 Ill. Adm. Code 811.507(a); or

B) A detailed description of the test liner constructed in accordance with 35 Ill. Adm. Code 811.507(a), if constructed prior to permit application;

4) A description of construction methods and equipment to be utilized; and

5) A construction quality assurance plan pursuant to 35 Ill. Adm. Code 811.Subpart E.

b) For geomembranes:

1) A description of the physical properties of the geomembrane;

2) Documentation showing that the design of the geomembrane meets the minimum requirements of 35 Ill. Adm. Code 811.306(e);

3) A description of the methods to seam the geomembrane in the field in compliance with 35 Ill. Adm. Code 811.306(e)(5);

4) A plan showing the proposed layout of the individual panels and the locations of all openings through the geomembrane;

5) A cross section and description of how openings in the membrane will be constructed to minimize leaks; and

6) A construction quality assurance program pursuant to 35 Ill. Adm. Code 811.Subpart E for proper construction, seaming and inspection of the geomembrane.

c) For Slurry Trenches and Cutoff Walls:

1) A description of the slurry trench or cutoff wall, including documentation of cross sections, material specifications and methods of construction to demonstrate compliance with 35 Ill. Adm. Code 811.306(f);

2) Location and descriptions of the boreholes, including the results of any testing; and

3) A construction quality assurance plan, pursuant to 35 Ill. Adm. Code 811.Subpart E.

d) For Alternative Liner Technology:

A complete description of the technology, including documentation demonstrating that the technology will perform as required by 35 Ill. Adm. Code 811.306(f).