**Section 506.308 Additional Synthetic Material Design and Construction Standards**

a) In addition to the requirements in Section 506.304, the design and construction of synthetic components of livestock waste handling facilities must meet the following requirements:

1) The synthetic material must be supported by a compacted base free from sharp objects;

2) The use of field seams must be minimized. All field seams must be made according to the manufacturer's specifications and oriented in the direction subject to the least amount of stress;

3) The synthetic material must be resistant to or otherwise protected from damage from construction or operation and degradation by ultraviolet light;

4) Synthetic components must be designed for use in livestock waste handling facilities and must be installed according to the manufacturer's specifications and guidelines;

5) The liner must be chemically compatible with the livestock waste being handled and stored and the supporting soil materials; and

6) The liner must have sufficient strength and durability to function at the site under the maximum expected loadings imposed by the waste and equipment and stresses imposed by settlement, temperature, construction, and operation.

b) The owner or operator of the livestock waste handling facility may, upon written request and with written approval from the Department, modify or exceed these standards to meet site specific objectives. The owner or operator must demonstrate that such modification will be at least as protective of the groundwater, the surface water, and the structural integrity of the livestock waste handling facility as the requirements of this Part.

(Source: Amended at 48 Ill. Reg. 3274, effective February 15, 2024)