**Section 905.90 Waste Stabilization Ponds**

General. Waste stabilization ponds may be used if designed and constructed in accordance with the following criteria and provided that the effluent is discharged in accordance with the requirements of Section 905.110 (see Appendix A, Illustration R as an illustration of these requirements). A septic tank sized according to Appendix A, Illustration F or an aerobic treatment plant shall precede a waste stabilization pond.

a) Location: A waste stabilization pond shall be located as distant as practical from residences, but in no case closer than the distances shown in Appendix A, Illustration D, and in an area where trees will not interfere with sunlight on the surface.

b) Dimensions. Ponds shall have a length not exceeding 3 times the width.

c) Capacity. When domestic sewage from a septic tank is to be discharged to the waste stabilization pond, the capacity of the pond shall be equivalent to 60 times the average daily flow. When preceded by a Class II aerobic treatment plant, the capacity of the pond shall be equivalent to 18 times the average daily flow.

d) Depth. The wastewater depth for a waste stabilization pond shall be uniform and 3 feet to 5 feet.

e) Freeboard. A minimum freeboard of 2 feet shall be provided.

f) Embankments. Embankments shall be constructed of impermeable materials and shall be compacted. Embankment slopes shall be in one to 2 (vertical to horizontal) below the water line and one to 3 or flatter above the water line. The top width of the embankment shall be a minimum of 2 feet. Embankments shall be seeded or rip-rapped from the outside toe to the high water line. Perennial, low growing, spreading grasses that withstand erosion and can be kept mowed are most satisfactory for seeding of embankments.

g) Inlet. The inlet line shall be placed 12 to 24 inches above the bottom of the pond at a point opposite the overflow structure and shall be supported at no greater than 10-foot intervals along its length. It shall discharge at least 10 feet from the water's edge. The inlet line shall be sloped in accordance with Section 905.20(g).

h) Outlet. The outlet structure shall be designed to prevent the discharge of floating solids. This shall be accomplished through baffling. The baffle shall consist of a sanitary T or 90° elbow. If the 90° elbow is used, a ¼ inch hole shall be drilled into the top of the elbow to provide an air break. The outlet baffle shall extend 12 inches below the invert of the overflow. The outlet baffle shall be 3 to 5 feet from the embankment.

i) Bottom. The bottom of the waste stabilization pond shall be cleared and leveled to the required elevation and shall be lined with an impermeable natural or man-made material. The pond shall be kept free of vegetation that would grow to or above the water surface.

j) Drainage. All surface water shall be diverted away from the waste stabilization pond.

(Source: Amended at 37 Ill. Reg. 14994, effective August 28, 2013)