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## ***Cowley County Wastewater Lagoon General Guidelines***

*For more specific information about wastewater lagoon construction, see the "Cowley County Wastewater Lagoon Installation & Use" document on the Environmental Health webpage.*

### **Site Specifications**

- Cowley County Sanitary Codes require a minimum of 5 acres for a lagoon.
- Separation distances are as follows:
  - 100 feet between the lagoon and property line
  - 100 feet from surface water and private well,
  - 30 feet from a public water line
  - At least 50 feet from the house
  - The bottom of the lagoon should be 4 feet above any restrictive layer (bedrock, ground water, etc.).
- A fence is required. The fence should be 4 feet tall, have a 4-foot-wide swinging gate, and include solid corner posts. Chain link or 2x4 wire panel is desired. See ***Cowley County Wastewater Lagoon Installation & Use*** for more information.
- For sandier soils or a leaky lagoon, bentonite clay can be used as a liner or spread around the water line to seal the lagoon.

### **Drainage & Conveyance**

- Surface drainage should be diverted around lagoon.
- The sewage conveyance pipe should be 4-to-6-inch solid schedule 40 PVC.
- The sewage conveyance pipe should be anchored and 1.5 to 2 feet above concrete splash pad.
- Easily visible and readable depth gauge in 1' (one foot) increments should be installed near center of lagoon
- Cleanout ports should be installed every 100 feet along the conveyance pipe.

### **Berms**

- All berm slopes should be 3 or 3.5 feet horizontal to 1-foot vertical slope.
- Lagoon berm should be seeded with densely growing short-rooted grass. Brome, Bluegrass, fescue, Bermuda, or Buffalo are acceptable. Grass should be kept no taller than 8 inches. Care should be given when mowing so grass clippings do not get into the lagoon. Trees or bushes that sprout should be cut or removed to prevent damage to the berm.
- Berm slopes should have no bare, eroded or damaged spots.

### **Plants & Animals**

- Animals should not be kept inside a lagoon area because of the damage and erosion they can cause to the berm. Erosion can lead to clogging, filling, and overflow of the wastewater.
- No aquatic plants, such as cattails, should be allowed to grow in the lagoon. Herbicides can be used to control aquatic plants.
- Trees or woody plants outside of the lagoon berm should be far enough away so that air flow is not blocked, the lagoon is not in shade, or the roots will not damage the berm.