

Lagoons are generally larger than waste storage ponds.

Facility capacity, at a minimum, must include storage for 120 days of operation plus feedlot runoff from the 25-year, 24-hour storm, plus solids' accumulation.

Waste storage facilities should not be located closer than 100 feet from property lines, wells, or reservoirs, and 50 feet from rural water lines. Contact the KDHE for minimum separation distances from adjacent residences.

A windbreak can enhance landscape appearance by screening the waste system from view and providing protection and shelter for livestock.

Disposal

Livestock waste is applied to cropland and pasture land in accordance with agronomic rates and should be applied in accordance to a Comprehensive Nutrient Management Plan (CNMP).

Solids are scraped from livestock pens once or twice a year.

Liquids or slurry can be applied with a sprinkler irrigation system or a tank wagon. An irrigation system is usually a more economical disposal method than a tank wagon.

A "big gun" sprinkler will apply the wastes evenly and still handle small solids without clogging.

The best method to minimize odor and water pollution is to inject the waste directly into the soil.



Planning Assistance

The Natural Resources Conservation Service (NRCS) personnel can assist the producer in developing a CNMP. Planning assistance may also be available from private engineering firms or technical service providers (TSPs).

For more information, contact your local NRCS or county conservation district office.

Technical assistance is available from the NRCS at your local USDA Service Center (listed in the telephone book under United States Government). More information is also available on the Kansas Web site at www.ks.nrcs.usda.gov.

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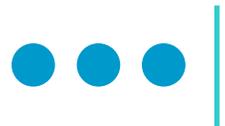
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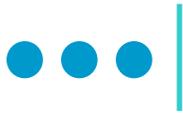
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Livestock Waste Management Systems



Helping People Help the Land





What You Need to Know

In decades past...the management of livestock waste was not considered to be much of a problem. However, as meat production needs increased, herd size and waste production also increased. This has heightened the awareness for waste management.



State law requires livestock operations confining more than 300 animal units (as defined by state statutes) to register with the Kansas Department of Health and Environment (KDHE). Any livestock operation, regardless of size, that is causing a pollution problem must follow the KDHE regulations. KDHE inspects operations, approves plans, and issues permits.

Types of Livestock Waste Management Systems - *used in containing and/or treating livestock wastes*

Discharging Systems

These systems collect lot runoff using a diversion and/or settling basin, and slowly releases the runoff into the grass treatment area or wetlands through an underground pipe. These systems will help reduce pollutants, but may not totally eliminate the pollution problem. They are generally used only on operations confining less than 500 animal units.

Containment Systems

These systems collect and store waste and runoff. Wastes are used on adjacent fields where possible. The following criteria will help in the planning process.

Collection

Lot runoff is usually collected by diversions or settling basins with underground pipe outlets to the storage facility.



The settling basin (solid/liquid waste separation facility) temporarily stores the water causing the solids to settle out. This drastically reduces the need to clean solids out of the storage pond.

If possible, all uncontaminated water from the confinement area should be diverted. Less storage volume will be required if all foreign drainage can be diverted from the lots.

Swine confinement systems usually collect waste with a flush system or a pit under the confinement structure.

Storage

Wastes are stored in a waste storage pond, waste storage structure, or waste treatment lagoon.

Waste storage ponds and waste treatment lagoons can be excavated pits or embankment ponds.

Waste storage structures include concrete tanks and commercial steel structures. These are generally more expensive than waste storage ponds, but could be used where shallow soils or a high water table precludes the use of

