

diversion of clean water



... prevent clean water from entering the farm and becoming pollution

- control roof water with troughs, eaves, or rain gutters
- divert water away from building foundations



... treat runoff from feedlots and farms

- use vegetative buffers/filters to treat runoff
- use sufficient area of vegetation
 - 50 feet from litter/manure application sites
 - 100 feet from someone else's house

Divert runoff to protect water quality. Prevent runoff and roof water from entering the confinement areas, waste storage structure, or dry stack.

prevention of direct contact



... prevent clean water from entering waste storage lagoon

- use a berm to divert runoff

install stream crossings

- use USDA-NRCS to help design and engineer the structure



In pastures, fence off streams and use planned crossings and alternative water sources. Use buffers to treat and filter runoff.

record keeping



... nutrient management records include:

- maps of the area/fields
- date litter/manure is applied
- crop applied to
- type and amount applied
- analysis of animal waste
- soil analysis at least every 3 years
- details of storage pond/lagoon dewatering
- reports of inspections



emergency plan

- an up-to-date emergency plan discussed with farm employees

Accurate record keeping is critical to the success of animal waste/nutrient management.

chemical storage & handling



proper chemical storage

- containment system constructed of compatible materials to detain any chemicals during an accident
- containment system capable of holding 110 percent of the volume of the largest container



proper chemical handling

- read & follow instructions on label
- use proper safety equipment

Measures must be taken to prevent or control any spills of stored fuels or chemicals that might, if spilled, be reasonably expected to enter surface water or contribute to pollution on the farm.

mortality management

composting mortalities

- NRCS can help with designs for composting structures
- follow guidelines for composting and maintain temperature, rotation, etc.



freezers for mortalities

- freeze carcasses immediately for rendering

consider the following when planning for disposal method ...

- state regulations
- installation costs
- land area
- type of animal
- labor needs
- size of operation
- equipment needs

Proper disposal of dead animals must be carefully planned. It is in the best interest of the operator and

neighboring landowners that the disposal be done timely and in an appropriate manner.

best management practices guide for small animal feeding operations



... improve efficiency & productivity



... protect water resources



... safeguard operations

quick guide to practices and strategies minimizing pollutants



adequate storage



... monitor lagoon level

- inspect weekly
- maintain 12-inch free board margin
- install a permanent measuring device



... maintain structure

- inspect the condition of the liner
- protect against grazing animals
- eliminate invading vegetation
- renovate after 8 to 10 years



... develop schedule and procedures

- plan for 25-year, 24-hour storm event
- maintain 12-inch free board margin
- pump out solids to restore margin



... waste storage

- locate stockpile proper distance from water sources and adjacent properties
- store under roofs or plastic cover
- place on clay or concrete pad

Design your waste holding system to intercept and hold animal waste - this conserves nutrients. Proper construction and maintenance is necessary.

manure & soil testing



... measure available nutrients

- collect manure samples regularly
- analyze manure/litter for nutrient content
- use test results, realistic optimum yield, and additional inputs to determine application rates and timing



... measure residual soil nutrients

- collect soil samples regularly
- analyze soil samples and use UGA Agricultural Services Laboratory to receive recommendations
- use soil test recommendations and a realistic crop goal to determine nutrients needed to satisfy that goal

A good nutrient management program carefully monitors residual soil nutrients, nutrient needs of the crop, available nutrients, and application amounts and timing to protect water quality.

nutrient loss



... establish buffer to prevent nutrient loss

- allow a vegetative buffer to capture any nutrients that may runoff the farm

... maintain setbacks for animal waste facilities

- establish setbacks from animal enclosures
- establish setback for animal waste storage facilities to collect manure for use in land application



... properly land apply litter/manure

- establish and follow a CNMP
- use soil and manure/litter analysis to determine application rates
- time land application during actively growing crops
- do not land apply on saturated soils, during rain, or when the National Weather Service advises "50 percent rain probability"
- do not apply when wind is high or direction is toward neighboring farms

Protect against nutrient losses by establishing buffers and setbacks. Captured nutrients can be used in land application.

When applied to cropland, litter/manure can reduce the need for commercial fertilizers. Use proper land application practices to receive the greatest benefit.