

NATURAL RESOURCES CONSERVATION SERVICE
SOUTH CAROLINA
OPERATION AND MAINTENANCE REQUIREMENTS
WASTE STORAGE FACILITY

CODE 313

Land Owner/Operator _____

County _____ SWCD _____ Farm/Tract No. _____

Prepared By _____ Date _____

OPERATION AND MAINTENANCE ITEMS

A properly operated and maintained waste storage structure is an asset to your farm. The waste storage structure was designed and installed to be used for the temporary storage of animal wastes. Estimated life span of this installation is at least 10 years. The life of this installation can be assured and usually increased by developing and carrying out a systematic operation and maintenance program.

This practice will require periodic maintenance and may also require operational items to maintain satisfactory performance. Your operation and maintenance program includes:

- Waste shall be removed from storage and utilized at locations, times, rates, and volumes in accordance with South Carolina Conservation Practice Standards *Nutrient Management (Code 590)* or *Waste Utilization (Code 633)*. South Carolina R. 61-43, *Standards for Permitting of Animal Agricultural Facilities* must be followed when emptying and applying animal wastes. Waste storage ponds are to be routinely agitated and pumped to prevent the accumulation of excessive solids.
- Maintain all pumps, agitators, piping, valves and all other electrical and mechanical equipment in good operating condition by following the manufacturer's recommendations. Maintain grounding rods and wiring for all electrical equipment in good condition.
- Do not allow the operation of any equipment that exceeds the design limit on or within ten feet of the structure.
- All fences, railings, and/or warning signs shall be maintained to provide warning and/or prevent unauthorized human or livestock entry. Maintain all lids, grates, and shields on openings to underground structures.
- Maintain positive drainage away from the facility.
- Immediately empty storage facilities if the structure has been damaged and there is danger of imminent failure. Immediately seek a qualified engineer to assess the situation. Follow the Emergency Action Plan in case of an overflow, breach, leakage, fire, need for emergency land application, etc.

- Eradicate or otherwise remove all rodents or burrowing animals and repair any damage caused by their activity. Maintain screens and/or rodent guards.
- Immediately repair any vandalism, vehicular or livestock damage to the structure, earthen areas surrounding the structure, or any appurtenances.
- Operate the facility in a manner that minimizes odors and air drift.
- **Do not allow human entry into any enclosed structure without safety equipment that includes ladders and breathing apparatus.**

Additionally, for an earthen pond-type animal waste storage facility:

- Unroofed waste storage facilities shall be operated so as to maintain the storage capacity for the 25-year, 24-hour storm and storm runoff.
- Immediately remove all foreign debris within the structure that may cause damage to pumps, agitators, compacted clay liners, or earthfill.
- Periodically inspect spillways and control gates for their ability to maintain the water level to design elevations. Immediately remove any blockage or obstructions in spillways and maintain a minimum of _____ feet of freeboard from the top of the structure to the maximum water surface for earthen storage structures.
- Periodically inspect earthen embankments for longitudinal cracks or unusual settlement. Make sure all structure drains are functional and soil is not being transported through the drainage system.
- Maintain vigorous growth of vegetative coverings on earthen structures. This includes reseeding, fertilization, and application of herbicides when necessary. Fertilize the established stand as needed to maintain a uniform vigorous stand. The embankment and other vegetated areas shall be mowed to maintain a protective vegetative cover. Vegetation shall be clipped a minimum two times each year on the pond embankments. Trees shall not be allowed to grow on the embankments.
- **The soil liner must be protected against damage from agitators or other equipment activities that could reduce the soil liner's effectiveness. The soil liner must also be protected from the erosive forces of filling operations as well.**
- **Prevent animals from entering the waste holding pond and woody vegetation from becoming established to protect the soil liner from damage.**
- **Protect the soil liner from desiccation by maintaining a layer of manure over the liner or adding water.**

Additionally, for a concrete pit-type animal waste storage facility:

- Check backfill areas around structures often for excessive settlement. Determine if settlement is caused by backfill consolidation, erosion, or failure of the structure. Necessary repairs must be made.
- Check walls and floor often- minimum of 2 times per year when the facility is empty- for cracks and/or separation of concrete, and make needed repairs.
- Outlets of foundation drains should be checked frequently and be kept open. The outflow from these drains should be checked when the storage facility is being used to determine if there is

