

Waste Application Systems

Definition/Purpose

A **Waste Application System** means an environmentally safe system (such as mobile irrigation equipment, solid set, dry hydrant, etc.) for the conveyance and distribution of animal wastes from waste treatment and storage structures to agricultural fields as part of an irrigation and waste management plan. (DIP)

Mobile Application System means a portable conveyance system for the application of liquid animal waste from a waste storage pond or lagoon or a manure spreader for the application of dry waste or compost.

Solid Set System means an in-ground sprinkler system which allows the conveyance of liquid waste from a waste storage pond or lagoon to allow land application of liquid wastes.

Underground Main and Hydrant System means an in-ground system of pipes ending in hydrants which allows the conveyance of liquid waste from a waste storage pond or lagoon to facilitate the land application of animal wastes.

Policies

1. Items for reimbursement under the maximum are all equipment, materials, construction, installation, vegetation, pumps, etc. from the waste structure to and including the delivery system. **The type of system must be specified in contracts** (i.e. center pivot, traveling gun, solid set, etc.) Reimbursable items must be supported by receipts, including any previous payments to the cooperator for pipe, hydrants or other elements of a waste application system. **Cost share payments for this practice are limited to a \$50,000 lifetime cap per operation.** Cost share will not pay for any motorized vehicles used in transporting/applying waste or for replacing worn out equipment that was previously cost shared on.
2. By signing the Cost Share Agreement (NC-ACSP-2), the cooperator and/or landowner acknowledges and agrees that they are responsible for the maintenance or replacement of all equipment cost shared as a component of waste management measure(s) at their expense and that any cost shared component will not be sold or used as collateral for the life of the practice must be included in the contract.
3. Above-ground mobile irrigation pipe may be used as a component of a waste application system for cost share with the following stipulations:
 - a. All pipe from the lagoon or waste storage pond to the field must be buried according to NRCS standards;
 - b. The waste application system must include a safety valve that will close in case pressure is lost; and
 - c. The use of above ground pipe must be approved by an engineer.

4. The following guidelines apply for poultry litter and manure spreaders:
 - a. Before a cooperator can receive Cost Share assistance for a litter or manure spreader, he/she must have a [method for mortality disposal](#) approved by the State Veterinarian and must have adequate litter storage. For purposes of the cost share program, storing covered or uncovered litter on the ground is not considered acceptable storage, nor is pit disposal acceptable for mortalities.
 - b. For poultry litter, only a commercially sold fan spinner, rotary type spreader with an adjustable door for calibration may be cost shared.
 - c. Cost share will be based on actual cost with receipts required not to exceed the amount on the average cost list for ACSP.
 - d. Non-producers are not eligible for litter or manure spreaders.
 - e. If a producer has a litter spreader, they are **NOT** eligible for cost share assistance irrespective of whether it was cost shared.
5. Fencing was ruled to be a production practice by the ACSP Technical Review Committee and **is not** an acceptable element of this BMP.
6. A Waste Management Plan (WMP) shall address all waste handled on the facility. If changes to the WMP are required due to new equipment, an updated WMP shall be developed according to the most recent NC NRCS Conservation Practice Standard No. 590 "Nutrient Management".
7. This practice shall not be used to apply waste at a rate exceeding the following maximums:
 - a. For sites with a phosphorus loss potential (per PLAT) of low or medium, waste shall be applied in accordance with a nitrogen-based waste application plan.
 - b. For sites with a phosphorus loss potential (per PLAT) of HIGH, waste shall be applied in accordance with the phosphorus removal rate of the receiving crop.
 - c. No application of waste is allowed for sites with a phosphorus loss potential (per PLAT) of VERY HIGH.
 - d. Planning shall project the impact of the waste application to heavy metal critical levels based on soil index. Alternative application sites should be selected if projections indicate that metals may approach excessive levels.
 - e. In addition, the application shall not exceed the rate specified per acre in the plan nor the total nitrogen requirement of the receiving crop specified in the plan. If additional nitrogen is needed, consideration must be given to limit additional phosphorus application.

8. When 15A NCAC 02T .1300 and Cost Share converge:
 - a. When Cost Share is used for a waste application system that meets the 15A NCAC 02T .1300 certification requirements, and a new water quality problem associated with the waste application system is created through the actions of the farmer, Cost Share funds shall not be used to solve the new problem. The Soil and Water Conservation Commission compliance policies shall be followed if the waste application system was shared.
 - b. When a waste management system is certified with equipment that is not cost shared, the farmer will be eligible to upgrade the system with Cost Share assistance if greater water quality benefits can be shown. **All such contracts must be considered by the TRC Subcommittee for Waste Management Measures.**
 - c. Cost Share funds can be used to pay the difference between the current replacement value of a previously Cost Shared waste application system (e.g., a honey wagon) and a new system (e.g., solid set) if the new system is shown to provide greater water quality improvements. **All such contracts must be considered by the TRC Subcommittee for Waste Management Measures.**
 - d. If a third-party applicator arrangement for an animal operation fails, the producer would be eligible for cost share assistance to implement a waste application system.
 - e. Cost Share would be available to extend irrigation pipe when an existing WMP is updated and the operation will need to expand the waste application systems to take phosphorus or other nutrients into consideration or to base the application rates on more current realistic yield estimates. The operation would still be limited to the amount listed on the average cost list.

WASTE APPLICATION SYSTEMS	
Maintenance Period	10 years
BMP Units	EACH
Required Effects	ANIMAL TYPE ANIMAL UNIT ACRES_AFFECTED N and P WASTE MANAGED
JAA	Professional Engineer Or NRCS – ENG – 442 – Irrigation System, Sprinkler NRCS – ENG – 430 – Irrigation Pipeline NRCS – ENG – 449 – Irrigation, Water Management NRCS – ECS – 590 – Nutrient Management NRCS – ENG – 634 – Waste Transfer NRCS – ENG – 533 – Pumping Plant
NRCS Standards	NRCS – CPS – 442 – Irrigation System, Sprinkler NRCS – CPS – 430 – Irrigation Pipeline NRCS – CPS – 449 – Irrigation, Water Management NRCS – CPS – 590 – Nutrient Management NRCS – CPS – 634 – Waste Transfer NRCS – CPS – 533 – Pumping Plant
CS2 Reference Materials	NC-ACSP-11 Signature Page Map with BMP location, fields, and roads Waste Management Plan Upload the design for Solid Set/Underground Main & Hydrant Systems Mobile Application System: upload a picture of the equipment with receipts (for RFP)
Additional Spot-check Requirements	All waste management systems for operations not permitted by the Division of Water Resources must be spot-checked annually for five years following implementation.