Greene County Animal Mortality Collection Ramp

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In 1989, North Carolina closed its municipal landfills to organic wastes which would be comingled with other inorganic or solid wastes. This eliminated a disposal option for farm livestock and poultry mortalities. On-farm mortality disposal options consisted of below ground disposal or incineration. Below ground burial or pit disposal of animal and bird mortality may contribute nutrients to groundwater in areas with sandy soils and high water tables similar to the N. C. Coastal Plain. Incineration is energy intensive and costly. With North Carolina ranking in the top seven states in the U.S. in the production of turkeys, hogs, broilers and layers, it has been recently estimated that over 85,000 tons of farm poultry and swine mortality must be disposed of annually. Alternatives to current methods of disposing of animal and bird mortality quickly became a high priority.

Two companies expressed interest in collecting animal and bird carcasses for rendering into by-products usable for animal and pet feeds provided enough mortality could be collected to offset the costs of collection and transport. This alternative would reduce below-ground point-sources of nutrients and produce a marketable end-product that could be transported outside of nutrient-rich areas of the state.

In 1989, the Greene County (N.C.) Livestock Producers Association began using an animal carcass collection site for disposing of animal and bird mortality by transporting to a rendering plant approximately 60 miles away. The site was graded to be well-drained with a hard-packed
gravel road to an elevated ramp adjacent to a concrete retaining wall. Care was taken to grade the site such that wet areas or mudholes in the access road that might harbor disease organisms would be avoided. Livestock producers bring the animal and bird carcasses to the ramp and drop them into a water-tight truck with separate compartments for poultry and other livestock parked behind the retaining wall. The collection truck is parked on a concrete pad under roof to facilitate maintaining sanitary conditions. All farm domestic animal and bird mortalities will be accepted with the exception of sheep and household pets. Site preparation and construction costs, excluding land purchase, for the Greene County site amounted to about $13,000 which came from county funds with the support of the county commissioners.

A local farmer, contracted by the Livestock Association, hauls the animal and bird mortality to the rendering plant each day and maintains the collection site. The rendering plant pays the Livestock Association each week based on the current prices of meat, bone and feather meal, and fat. During the first 16 weeks of operation in 1989, over 1 million pounds or a weekly average of 65,000 pounds of animal and bird mortality were collected and sent to the rendering plant. During the spring of 1991, weekly collections of swine mortality averaged 30,000 to 44,000 pounds worth 2.4 to 2.7 cents per pound at the rendering plant, while poultry mortality (primarily turkeys) averaged 15,000 to 33,000 pounds per week worth 0.2 to 0.4 cent per pound. Total gross returns to the Livestock Association from the rendering plant purchase of the animal and bird carcasses during this period averaged $1,000 per week which after covering all expenses resulted in a profit.

Initial discussions for site planning included a truck wash and disinfect basin for producers leaving the site to prevent disease transfer. Since construction funds were limited, however, this wash pad was not built. After 2.5 years of operation, no disease problems have been reported. Producers who have a major outbreak of disease within their herd or flock are strongly cautioned not to use the collection ramp until they have the disease under control.

The end result of this very successful project is that Greene County livestock and poultry producers have a convenient, safe and economical alternative to dispose of animal and bird mortality while their Livestock Association enjoys a profitable endeavor.

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