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Through the USDA/NRCS Environmental Quality Incentives Program (EQIP), landowners across the state of Mississippi may benefit from “incentive payments” which encourage poultry litter to be “transferred” to other watersheds in the state. Successful implementation of initiatives of this nature helps to reduce the maximum daily loads entering into those watersheds. The economics of litter transfer is based on the need for the major essential nutrients: nitrogen (N), phosphorus (P), and potassium (K), although many additional nutrients are contained in the poultry litter. Successful implementation of this project also has the potential to reduce poultry litter application in areas where it has traditionally been applied in the past and should result in better distribution of these nutrients statewide.

EQIP can help reduce the cost of poultry litter transfer by providing assistance with the cost of transporting the litter. EQIP will pay according to the distance poultry litter is transported. The EQIP incentive payment based on mileage will be as follows:

- **26 to 50 miles ----- \$6.00/ton**
- **51 to 75 miles ----- \$9.00/ton**
- **76 to 100 miles -----\$12.00/ton**
- **101 to 125 miles -- \$15.00/ton**
- **126 to 150 miles -- \$18.00/ton**

Potential environmental concerns relative to the management of poultry litter in the “MS Poultry Belt” are becoming a high priority for the State Technical Committee. As a result, a new statewide initiative poultry litter transfer resource concern has been developed in EQIP for implementation in FY 2007. This initiative has two primary objectives:

1. Create an incentive to distribute poultry litter to areas of the state that have historically not used poultry litter as a fertilizer.
2. Promotion of a long-term market for animal manure as a fertilizer around the state.

This initiative is intended to fund incentive payments for the hauling of poultry litter from areas in the state of high concentrations of poultry production to areas of the state with no poultry production. The intent is to encourage a market for poultry litter to be used as a source of fertilizer and organic matter on cropland and pastureland. It should be emphasized to applicants that this project is to cover the costs of hauling the poultry litter only, not the cost of purchasing or loading the poultry litter. Payments are based on the tons of poultry litter hauled and the mileage between the poultry litter source and the receiving farm. Payment will be made only for hauling litter for the purpose of land application at agronomic rates. Land application according to a phosphorus index and a nutrient budget is considered an agronomic rate for the purpose of this initiative. EQIP requires the participant to enter into a 3-year contract for the manure transfer incentives. The participant provides **soil tests for all fields** where the poultry litter will be applied. NRCS staff will

assist with the development of a “nutrient management plan” for the fields involved. The person providing the poultry litter will be expected to provide an analysis of the poultry litter.

Many poultry operations are concentrated in south central Mississippi (MS Poultry Belt) which produces a significant amount of poultry litter each year. This poultry litter is normally applied on local farms in the area. This concentrates the nutrients in the area where they are primarily land applied to pasture and hayland. In areas where there is not enough available land to properly land apply the nutrients, water quality issues can become a concern. These watersheds can become “nutrient limited” (sensitive to excessive nutrient inputs), and nutrient limited watersheds can develop water quality concerns. These watersheds can have a build-up of excess nutrients, especially P and K, beyond the normal plant requirements for most crops or forages. These excess nutrients can leave the fields and enter streams, lakes, and other water bodies where they can degrade water resources.

Poultry litter is a valuable resource that can provide significant amounts of slow release fertilizer which include N, P, and K. The **Mississippi State University Extension Research Report Vol. 23 No. 5 “Mississippi Broiler Litter: Fertilizer Value and Quantity Produced”** states that an average sample of broiler litter in Mississippi has a nutrient value of **57 lbs. /ton of N, 29 lbs. /ton of P, and 59 lbs. /ton of K on an “as is basis” with 19 percent moisture.** Nutrient value will vary depending on the types of birds, the age of the litter and its moisture content. The addition of poultry litter as a soil amendment helps to maintain and sometimes improve the soil’s quality by improving soil structure, improving soil water holding capacity, and improving soil nutrient holding capacity. It also improves the soil’s ability to supply nutrients for plant uptake with the addition of organic matter and additional plant required nutrients.

The value of poultry litter should be based on a cost comparison with commercial fertilizer. Based on data from the National Agricultural Statistics Service the southeastern US average prices for fertilizers were: **N \$0.36/lb.; P \$0.32/lb.; and K \$0.21/lb** (<http://www.nass.usda.gov/index.asp>). Approximately **40 percent** of the N is lost during the clean-out of litter from the poultry barns, and hauling and spreading the litter to the fields. With this in mind, all N based agronomic uses for poultry litter should be calculated using roughly 60 percent of the total N concentration per given weight of material. With respect to P and K approximately 80 percent of the total P and 85 percent of the total K concentrations per given weight of material is available for plant uptake within the first growing season. Using these factors and the average broiler litter analysis mentioned above, the nutrient content at the time of land application would be approximately **34 lbs. N/ton; 23 lbs. P/ton; and 50 lbs. K/ton.**

Interested persons who would like to participate in the EQIP “Manure Transfer Initiative” can visit their local USDA/NRCS field office to sign up to have poultry litter transferred to their farm. Poultry farmers can contact Mr. Brook Stewart **(601) 977-4243** with Mississippi Farm Bureau to register their farm on the poultry clearing houses litter website as a source of poultry litter or visit <http://poultry.msfb.org/poultry/>

**Disclaimer: Please note that costs associated with the EQIP “Manure Transfer Initiative” will vary across the State of Mississippi. Local factors and prices should be used when determining actual comparisons between the use of poultry litter and commercial fertilizers for crop and forage production.**

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