CSP Job Sheet E-5.1

ENERGY MANAGEMENT ENHANCEMENT **July 2005**

LOWER BIG BLUE AND LOWER LITTLE BLUE WATERSHEDS IN NEBRASKA

Name: _____

For 2005, the Conservation Security Program (CSP) offers a limited number of enhancement payments as incentives to reward or encourage on-farm energy conservation and management. These enhancements are available once the applicant qualifies for CSP by meeting the program's entry requirements for soil and water quality.

This information will help landowners and managers determine if they are eligible for the offered payment(s) for energy enhancement activities.

Ninety Percent (90%) Use of Manure to Supply Crop Nutrient Needs

Payment = $1.10 / Acre / Year to apply manure that supplies 90 percent of crop nutrient needs (no more than 10 percent of nutrient needs can come from commercial fertilizer).The payment applies only to those acres receiving manure.

Livestock manure is an excellent fertilizer for the soil, providing such nutrients as nitrogen, phosphorus, calcium, magnesium, micronutrients, potassium, and organic matter. Using alternative fertilizers to inorganic compounds will benefit the soil's water holding capacity and tilth. Additionally, this approach can reduce the consumption of fossil fuels and minerals used in the production of inorganic fertilizer, conserving energy in the process. However, when using these alternative sources, it is still essential to follow good management practices in order to avoid damage hazards to the crop and hazards to the environment.

Manure - Animal waste is an excellent source for nutrients; however, manure nutrient content varies among operations and over time. Manure applications should be based strictly on the nutrient requirement of the crop to avoid over-application and reduce the potential of nitrate-nitrogen leaching into groundwater and phosphorus being transported into streams. The following steps will assure the correct amount (agronomic rate) of manure is applied and will provide the necessary documentation for payment:

1. Refer to NE-CPA-38 "Annual Nutrient Budget Job Sheet" and Neb-Guide G97-1335A "Determining Crop Available Nutrients from Manure";
2. Determine crop nutrient requirements based on a realistic yield goal and current soil test;
3. Determine the nutrient content of the manure;
4. Determine the fraction of manure nutrients available to the crop in the first year of application;
5. Determine the fraction of manure nutrients available to the crop one, two and three years ago;
6. Calculate the application rate to supply crop nutrient needs, based on University of Nebraska recommendations;
7. Deduct Nitrogen supplied from legumes and irrigation water;
8. Determine supplemental nutrients needed for optimum crop growth.

Documentation Required: Farmer or crop consultant certification of appropriate manure application. Provide a written narrative that addresses the 8 previously listed steps and complete the following Table.

Tract & Field #s	Acres	Crop Grown	Describe how nutrient needs are met
T123 Field 3	80	Winter Wheat	Feedlot manure applied to these acres, no commercial fertilizer applied as described in narrative below.

Tract & Field #s	Acres	Crop Grown	Describe how nutrient needs are met

Narrative Detailing Steps 1-6 as Noted Above:

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Use of Manure to Supply Crop Nutrient Needs Certification

Certification:

I certify that I have used manure according to the requirements listed above to meet 90% or more of the nutrient needs of the crops grown on the field(s) and acres listed in the table.

Name: _____Date:_____