

UNIVERSITY OF KENTUCKY

College of Agriculture Cooperative Extension Service

AGRICULTURE ANIMAL WASTE SAMPLE INFORMATION SHEET

Department of Agronomy

Division of Regulatory Services

Section I.

DATE SAMPLED: \_\_\_ / \_\_\_ / \_\_\_

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE: \_\_\_\_\_

Owner's Sample ID

--	--	--	--

Section II.

Test to be made.

Routine (Total N,  
P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, and  
moisture for solids.)

Section VI. (Lab Use)

Section VII. (County)

--	--	--

County Code

--	--	--	--

County Sample No.

Section III. TYPE OF ANIMAL WASTE

\_\_\_ Poultry

\_\_\_ Solid

\_\_\_ Dairy

\_\_\_ Liquid

\_\_\_ Swine

\_\_\_ Beef

Section VIII.  
(Lab Use Only)

Billing Code: \_\_\_

Section IV. Animal Waste Application History

Section V. Other Information.

Paid \_\_\_\_\_

\_\_\_\_\_  
Signature of Extension Agent

NOTE: See back for sampling information.

## How to Sample

A good sample is one that represents the particular batch of animal waste being tested. This may be one poultry house, a stack of solid manure, a storage tank, or a lagoon. Effective sampling methods will be different for each one.

### Solid Wastes:

**Poultry (floor grown)** — Take 10 to 12 subsamples of about one pint each from different areas of the house to the full depth of accumulation. Take samples under waterers and feeders in proportion to the area they occupy.

**Poultry (caged layers)** — Take 10 to 12 subsamples of about one pint each from random areas under the cages to the full depth of accumulation.

**Stacked manures** — Take 10 to 12 subsamples of about one pint each from random areas over the entire stack. Sampling should extend as deep as possible into the stack. Do not limit your testing just to samples from the surface.

**Livestock feeding areas (covered or uncovered)** — Take 10 to 12 subsamples of about one pint each from random locations over the whole area. Sampling should extend to the full depth of manure accumulation.

### Liquid Wastes:

**Holding tanks** — These need to be agitated, or stirred, to thoroughly mix the solids with the liquid to get a good sample. The sample can be taken by dipping from the tank or collecting wastes as they are pumped out. Be careful to avoid exposure to toxic gases while sampling holding tanks. Take special precautions with covered tanks or areas where ventilation is limited.

**Holding ponds or lagoons** — It is difficult to take representative samples from ponds or lagoons until they have been agitated and thoroughly mixed. Good samples can be taken if special sampling devices are available. These allow subsamples to be taken from different depths and various locations to collect a sample that is representative of the whole pond.

## Handling Samples

### Solids:

Place subsamples in a clean plastic bucket and mix thoroughly. Take a one-pint sample and put it in a clean, one-quart, self-sealing plastic bag. Do not fill the bag. Compress the air from the bag, seal it, and tape over the seal. Using a permanent ink marker,

label the outside of the bag with the owner's name, sample identification number, type of manure, and county.

### Liquids:

Place subsamples in a clean plastic bucket and mix thoroughly. Fill a clean, wide-mouth plastic bottle one-half full of the mixture. Tighten the lid and check to see that it does not leak. Using a permanent ink marker, label the bottle with the owner's name, sample identification number, type of waste, and county. Plastic bottles can be obtained from the laboratory in Regulatory Services for shipping test samples to the University of Kentucky. Do not use glass containers for any livestock waste samples.

## Where to Send Samples and Cost of Analyses

Manure samples for analysis can be sent to commercial laboratories or to 103 Regulatory Services Building, Alumni and Shawneetown Roads, University of Kentucky, Lexington, Kentucky 40546-0275, (Attention: Soil Lab). Send samples by UPS or hand carry or mail them early in the week (Monday through Wednesday) to avoid weekends. Also, avoid holidays, which could delay delivery. The accuracy of the test depends on taking a good sample and getting it to the laboratory quickly. Include an information sheet that lists the sample identification number shown on the sample bag or bottle and the owner's address and phone number.

A test for moisture, nitrogen (N), phosphorus (P), and potassium (K) will cost \$25 per sample at UK Regulatory Services. Reports are sent electronically to the County Extension Office from which the manure sample is received. The P and K will be reported as P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O, which is the common terminology for fertilizer materials. Extension agriculture agents can advise farmers on taking samples and interpreting results.

## Related Publications

- AGR-146 Using Poultry Litter on Agricultural Land
- AGR-146A Calculating Rates of Poultry Litter for Crop Production
- ASC-80 Fertilizer Value of Swine Manure
- ID-19 Farm Manure: Production-Value-Use
- AGR-165 The Agronomics of Manure Use for Crop Production

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, C. Oran Little, Director of Cooperative Extension Service, University of Kentucky College of Agriculture, Lexington, and Kentucky State University, Frankfort.  
Issued: 1-97, 3000 copies.