

# Manure Sampling Instructions

*Soil Science Department, UW-Madison*

## ***Solid manure – Dairy, Beef, Swine***

Sampling directly from a stack or bedded pack – Take samples from several locations throughout the pile or pack area using a fork, shovel or spade. Thoroughly mix the composite sample and subsample using a one-gallon plastic bag. *Sampling directly from a stack or bedded pack is not the preferred option.*

While loading – *Recommended method for sampling from a stack or bedded pack.* Take samples while loading several spreader loads and combine to form one composite sample. Thoroughly mix the composite sample and subsample using a one-gallon plastic bag.

During spreading – Spread tarp in field and catch the manure from one pass. Sample from several locations and create a composite sample. Thoroughly mix composite sample together and subsample using a one-gallon plastic bag.

Daily haul – Place a five-gallon pail under the barn cleaner 4-5 times while loading a spreader. Thoroughly mix the composite sample together and subsample using a one-gallon plastic bag. Repeat sampling 2-3 times over a period of time and test separately to determine variability.

## ***Liquid Manure - Dairy, Beef, Swine***

From storage – Agitate storage facility thoroughly before sampling. Collect several samples from storage facility or during loading using a five-gallon pail. Place subsample of the composite sample in a one-quart plastic container. *Sampling a liquid manure storage facility without proper agitation (2-4 hours, minimum) is not recommended.*

During application – Place buckets around field to catch manure from spreader or irrigation equipment. Combine and mix samples into one composite subsample in a one-quart plastic container.

## ***Poultry***

Collect approximately 10 samples from throughout the house in a ratio proportional to the overall volume of manure they represent.

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## **Sample Storage/Handling**

Solid/Semi-solid samples – Thoroughly mix composite sample and fill one-gallon plastic heavy-duty ziplock bag approximately one-half full. Squeeze out excess air, close and seal. Store sample in freezer if not delivered to the lab immediately.

Liquid samples – Thoroughly mix composite sample and fill a one-quart plastic bottle not more than three-quarters full. Remember, to always use screw-top plastic containers for safety. Free plastic sample bottles are available from the UW Soil and Forage Laboratory at Marshfield. *Glass containers are not acceptable.* Store sample in freezer if not hand delivered to the lab immediately.

Keep all manure samples frozen until shipped or delivered to a laboratory. Ship early in the week (Mon.-Wed.) and avoid holidays and weekends. Avoid mailing over holidays or weekends.