**Section 502.635 Manure and Soil Sampling and Analysis**

a) Soil Phosphorus Sampling. Soil samples must be obtained and analyzed from each field of the land application area where applications are planned. Fields where livestock waste is applied must be sampled twice for each field during the permit's term. Soil testing must be conducted as follows:

1) Soil sampling for phosphorus must follow the sampling protocols in Chapter 8 of the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at 35 Ill. Adm. Code 501.200. Laboratory analysis for soil phosphorus (Bray P1 or Mehlich 3) must be in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference at 35 Ill. Adm. Code 501.200;

2) Soil samples must be at the same time in the cropping cycle and rotation so that results are comparable year to year; and

3) The two required soil samples for each field must be taken at least one year apart.

b) Manure Sampling.

1) The CAFO owner or operator must annually obtain a laboratory analysis of the nutrient content representative of the livestock waste to be land applied as provided within the nutrient management plan. Livestock waste must be sampled during the application process. Multiple subsamples must be obtained and combined into one sample so that a representative sample is obtained for analysis. Results of a sample taken during waste application the previous year can be used for plan preparation unless there has been a change in the waste management practices during the year. The analytical results of livestock waste samples must be used for calculating the application rate the NPDES permit allows.

2) The laboratory analysis of the livestock waste sample must include total Kjeldahl nitrogen, ammonia or ammonium nitrogen, total phosphorus, total potassium, and percent total solids. The nutrient results must be reported on the laboratory analysis sheet on a lb/ton or mg/kg dry weight basis or lb/1000 gal or mg/L wet weight basis. The results of these analyses are to be used in determining application rates for livestock waste.

(Source: Amended at 48 Ill. Reg. 3196, effective February 15, 2024)