

Delaware Nutrient Management
Program

DELAWARE CONSERVATION
PRACTICE STANDARD

**NUTRIENT
MANAGEMENT
RECORD KEEPING**

(Reported by each)

DEFINITION

Nutrient Management Record Keeping is the documentation that indicates whether a farmer is following the conditions of the facility's nutrient management plan (NMP) or animal waste management plan (AWMP) and its Concentrated Animal Feeding Operation (CAFO) Permit.

PURPOSE

To minimize agricultural pollution of surface and ground water by ensuring the farmer follows the conditions of the farm's NMP or AWMP and the farm's CAFO Permit conditions.

**CONDITIONS WHERE
PRACTICE APPLIES**

This practice applies to all farms that are nutrient handlers. Nutrient management record keeping is required as one of the nine elements of an NMP or AWMP by the Delaware CAFO Regulations.

CONSIDERATIONS

Farms covered under a CAFO permit must maintain and provide all applicable records

for a period of at least six years. Records must be kept on the farm. They must be available for inspection as requested by the Secretary of Agriculture or his designee.

PLANS & SPECIFICATIONS

Specifications for all nutrient management and animal waste management shall be in keeping with this standard, the Delaware Nutrient Management Law and the Delaware CAFO Regulations. They shall describe the requirements for applying the practice to achieve its intended purpose, and to prevent water quality impairment.

**OPERATION AND
MAINTENANCE**

Record Keeping

The following records must be maintained for a farm covered by a CAFO Permit

The following records must be kept to document implementation of the plan requirements and permit conditions in the part of the farm where livestock are raised:

1. Records indicating mortality management to include number disposed and method of disposal.
2. Records of manure storage activities, length of storage, amount stored, and maintenance of manure storage facilities.
3. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage containment structure.

In addition records indicating the following routine visual inspections of the CAFO production area were conducted. At a minimum the following must be visually inspected:

1. Daily inspection of water lines, including drinking water or cooling water lines. The farmer should use their integrator's record keeping forms to keep track of this.
 2. Weekly inspections of the depth of manure, litter, and process wastewater storage; the inspection shall note the level in liquid impoundments as indicated by a depth marker.
 3. All open surface liquid impoundments shall have a permanent depth marker or recorder installed at the maximum operating level to indicate when drawdown should begin and that provides for the required volume less the volume contribution of precipitation and runoff from the 25-year, 24-hour storm event plus the volume allowance for residual solids after liquids have been removed.
 4. Records of the date, time, and estimated volume of any overflow.
 5. Records documenting the design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total volume design, and approximate number of days of storage.
4. Crops planted, yields, and plant matter (grain, silage, etc.) removed from the land.
 5. Records indicating periodic inspections and maintenance of land application equipment for leaks.

If manure, litter or process wastewater is sold or given to other persons for disposal or utilization, the following records shall be maintained at the CAFO generating the manure, litter or process wastewater:

1. The date of manure, litter or process wastewater removal.
2. Name of receiver and contact information.
3. A copy of the most recent manure, litter and process wastewater nutrient analysis shall be given to the receiver on or before the date of transfer.

Nutrient management records shall be maintained for a period of six years and shall kept on the farm.

The Delaware Nutrient Management Program may provide record keeping templates or record books to assist farmers. Templates for record keeping are attached. These are:

1. Manure/Mortality Records
2. Visual Insp. Of Production Area
3. Nutrient Land Application Record

Records of implementation in the Land Application Area shall include:

1. Manure, litter, process wastewater and soil test results, methods for testing and analyzing, and recommended nitrogen and phosphorus application rates with an explanation of the basis for determining manure application rates, as provided in the protocols established in the State Technical Standards, the NMP or AWMP.
2. Quantities, calculations, analyses and sources of all nitrogen and phosphorus applied to fields.
3. Dates, weather conditions at the time of manure, litter or process wastewater land application and 24 hours before and after application, and methods of application(s).

REFERENCES

1. Delaware Department of Agriculture. Title 3 of Delaware Code, Chapter 22 Nutrient Management
2. Delaware Department of Agriculture. Delaware Nutrient Management Notes.