

CLEANmp
Nutrient Management Plan Data Collection Worksheet

BACKGROUND AND SITE INFORMATION

Land Owner or Producer: _____ Date: _____

Farm Name: _____ Service Provider: _____

Township: _____ State and County: _____

Location: _____ ¼ of _____ ¼ Section _____ T _____ N _____ R E

1. List any state or federal permits or certifications held at or by the facility.

2. Where are mortalities stored prior to final disposal?

3. How long are mortalities stored on-site prior to final disposal?

4. Describe the final method of mortality disposal. Will this differ in a catastrophic mortality event? If yes, how?

5. How are manure storages and animal production areas isolated from precipitation and overland flow from rain events?

6. Identify sensitive areas (i.e., surface water, residences, groundwater wells, sinkholes, karst topography, etc.) around the production areas and fields; also indicate on aerial photos. These areas should be marked on aerial photographs.



7. How are sensitive areas protected from run-off from production areas, manure storages or land application fields?

8. Identify areas where livestock has uncontrolled access to surface water. If these areas are flowing waters, how are the banks protected from erosion?

9. Identify odor receptors within .5 miles of the facility.

10. On the table below, identify any concerns related to dust, gas or odor emissions from the facility in general or from specific areas; note the frequency of incidents, and describe any practices used to minimize the impact of the incidents on neighbors (within .5 miles of the operation).

Areas of Concern	Frequency	Practices to Minimize Impact
Gas or odor from the production site		
Odor from land application fields		
Dust		
Noise		
Aesthetics		
Other		
Other		



11. How are veterinary medical wastes, including sharps, collected, stored and disposed of?

PRODUCTION INFORMATION
Manure and Wastewater Handling and Storage

1. Describe the manure handling system.
2. Describe manure storages at the farm. Identify the storage type, total capacity, days of design storage capacity, typical number of days between manure removal and any anticipated changes in storage capacity needs. Use Table 2 to record this information.
3. How much manure, litter or wastewater is generated annually (gallons or tons)? Fill out Tables 1 and 2.
4. How much wastewater is generated (gallons), where is it stored, how is it used/disposed and what is its nutrient content (N, P and K)?
5. Describe current manure application rates, method, and timing. Use Table 4 if necessary.



6. Obtain size/dimensions of manure application equipment (for manure application spreadsheet).

EMERGENCY ACTION PLAN

1. Does the facility have a written emergency action plan and is it representative of current operations and personnel? If yes, how often are contact numbers verified?
2. Describe emergency procedures for injury, catastrophic mortality and uncontrolled manure releases, including contact information for key personnel.

LAND APPLICATION SITE INFORMATION **Land Treatment**

1. Identify which fields/acres have manure spread on them (indicate on map). Use Table 4 if necessary.
2. How many years have the fields received manure (for residual organic nitrogen mineralization calculation)? Use Table 4 if necessary.
3. How are the fields used where manure or other fertilizer is applied? Use Table 5 if necessary.



4. Average field slope length (ft) (for RUSLE2). Use Table 5 if necessary.

5. Average field slope (%) (for RUSLE2). Use Table 5 if necessary.

6. Describe conservation practices such as terraces, diversions, contour buffer strips, contour filter strips, strip crop rotations, cover crops, no-till, or other (for RUSLE2). Use Table 5 if necessary.

NUTRIENT MANAGEMENT

1. Are soil sample results available? If not, explain. If so, record the most recent data on Table 6 or collect copies of analyses reports.

2. Are manure analyses available? If not, explain. If so, record the most recent data on Table 3 or collect copies of analyses reports.

3. Describe current commercial fertilizer application rates, method, and timing. Use Table 7 if necessary.



4. Within crop rotation, obtain typical planting dates, harvest dates, and tillage dates (for RUSLE2). Use Table 5 if necessary.
5. Describe Typical Tillage Practices (for RUSLE2). Use Table 5 if necessary.

FEED MANAGEMENT

1. Describe feed management practices that could impact nutrient application to fields (i.e., rotational grazing, feed supplements, etc.).

OTHER UTILIZATION OPTIONS

1. What are the facility operator's interest in or need for alternative manure collection, transfer, storage or utilization systems or plans?
2. What limitations exist for future expansion of facility operations?
3. Identify any other resource concerns.



CHEMICAL AND PETROLEUM USE AND STORAGE

1. Identify any hazardous chemicals (i.e., pesticides, herbicides, fungicides, milking parlor chemicals, solvents, fertilizer, liquid feed, etc.) and the methods of storage and location of these materials at the facility. Use Table 8 if necessary.
2. How are unused or waste hazardous chemicals disposed of?
3. Identify the mechanisms to prevent an uncontrolled release for all hazardous chemicals at the facility. Use Table 8 if necessary.
4. How are leftover pesticide, herbicide and fungicide tank rinseate and empty containers disposed of?
5. What types and quantities of petroleum products are stored on site, and where are the storages located? Use Table 9 if necessary.
6. Are there any unused buried petroleum storage tanks at the facility?
7. Are pesticides, herbicides or fungicides mixed and loaded at the farm? If yes, review and locate the mixing and loading site(s) and describe the potential for runoff and the practicality of cleaning up spills.



OPERATION, MAINTENANCE AND RECORDKEEPING
Recordkeeping

1. Does the facility have a written operations and maintenance plan? If yes, is it available and does it reflect the current operation?

Type of Record	YES	NO
Analysis of manure, litter and wastewater to determine N and P content.		
Analysis of soil in all fields where land application activities are conducted to determine nutrient content.		
Visual inspection of all water lines.		
Documentation of the amount of manure stored and remaining storage capacity.		
Documentation of all corrective actions.		
Documentation of all mortality handling.		
Documentation of design storage capacities for all manure, litter and wastewater storages.		
Documentation of all uncontrolled releases of manure, litter and wastewater.		
Documentation of manure, litter and wastewater transfer equipment inspections.		
Documentation of manure, litter and wastewater application equipment inspections.		
Documentation of all manure, litter and wastewater application events (i.e., date of application, method, weather at time and 24 hours previous, and total amount of N, P and material applied).		
Documentation of the expected crop yield from each field.		
Documentation of the sampling procedures for manure, litter and wastewater.		
Documentation of the total amount of N and P applied to each field from all sources.		
For all manure transfers (off-site), documentation of transfer date, name and address of recipient and amount of material transferred.		
A copy of the current NMP or CNMP.		

2. Identify the types of records maintained by the producer.



TABLE 1: Manure Production Information

Animal Type	Average Weight (lbs)	Head Numbers	Occupation Time (Days)	Solid or Liquid Manure	Bedding Type	Bedding Volume	Storage No. and Method



TABLE 2: Manure and Wastewater Storage Information

Storage (ID and Type)	Total Capacity (gal. or tons)	Number of Days of Design Storage Capacity	Typical Number of Days Between Removal From Storage	Projected Storage Changes (increase or decrease in capacity needs)	Method of Manure Transfer to Storage

Example storage types: Anaerobic Lagoon, Aerobic Lagoon, Storage Pond, Evaporation Pond, Aboveground Storage Tank, Belowground Storage Tank, Roofed Storage Shed, Concrete Pad, Impervious Soil Pad, Other (specify).



TABLE 3: Manure, Litter and Wastewater Sample Data

Manure, Litter or Wastewater Source	Date of Analysis	Dry Matter (%)	Total N	NH₄-N	Total P₂O₅	Total K₂O	Max. Avail. N	Avail. P₂O₅	Avail. K₂O	Units



TABLE 4: Manure Application Data

Tract or Field	Application Timing	Manure Type	Manure Source	Application Method	Rate (gal./acre or tons/acre)	No. Years Receiving Manure



TABLE 5: Field Use Data

Tract or Field	FSA Field #	Acres	Crop Rotation	Typical Dates			Yield History/Realistic Yield	Conservation Practices	RUSLE2	
				Planting	Harvest	Tillage			Ave. Field Slope Length (ft)	Ave. Field Slope (%)

Example conservation practices: Buffers, Setbacks, Conservation Tillage, Constructed Wetlands, Infiltration Field, Vegetative Filter, Terrace, Other (specify).



TABLE 6: Soil Sample Data

Tract or Field	Date of Analysis	OM (%)	P Test Used	P (ppm)	K (ppm)	Mg (ppm)	Ca (ppm)	Soil pH	Buffer pH	CEC (meq/100g)



TABLE 7: Commercial Fertilizer Application Data

Tract or Field	Application Timing	Fertilizer Name/Type	Incorporated (Yes/No)	Application Rate	Starter Fertilizer Name/Type	Application Rate



