



UNIVERSITY OF  
**Nebraska**  
Lincoln

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EC136

# Nutrient Management Record Keeping Calendar

**January 2014 - January 2015**

# Records for Nebraska Animal Feeding Operations

Operation ID: \_\_\_\_\_

### General Directions

- Record the initials of the person performing the inspection each time (see table below for initial codes). Check marks will not satisfy the recordkeeping requirements.
- Record any maintenance and/or repairs.
- Correct all deficiencies within 30 days.

### Daily Records and Inspections

- Inspect all waterlines (both drinking and cooling) within the drainage area.
- Weather Information - Record any measurable rainfall that occurs at the facility.
- Collect carcasses and properly dispose of them within 36 hours.

### Weekly Records and Inspections

- Record the liquid depth of the manure storage structure as indicated on the depth marker. Be sure that the recommended pumping level is indicated on the marker.
- Before use, inspect any equipment used for land application of manure and/or wastewater.
- Inspect all waste control facilities, including lagoons, holding ponds, concrete tanks, pits, and manure storage structures.
- Inspect all storm water and runoff diversion devices used to channel contaminated storm water to storage structures.

### Monthly Records and Inspections

- Inspect facilities used for disposal of carcasses. Include composting facilities, containers, and recent burial sites in the inspection.
- Do NOT dispose of carcasses in any liquid manure or process wastewater system.

### Yearly Records and Inspections

- Evaluate the depth of the sludge layer of the lagoon or holding pond.
- At least 1 representative from an operation must attend Land Application Training every 5 years.
- The P-Index must be assessed for land application areas every 5 years, prior to land application.

### Yearly Sample Collection and Analysis

- Collect manure and/or wastewater samples at least 1 time per year.
- Analyze manure/wastewater samples for at least total nitrogen, organic nitrogen, and phosphorus.
- Collect soil samples every year on sites used for nitrogen application.
- Analyze soil samples for phosphorus at least once in 5 years.

### Yearly Site Requirements

- Complete and submit an annual report for the previous year to NDEQ by March 1 (NPDES permits only).
- Keep records on site for a minimum of 5 years.

Name	Initials	Name	Initials	Name	Initials	Name	Initials

*Additional information and space for records is provided on the back page.*

### *Disclaimer*

*The information in this calendar should assist producers to meet legal requirements and protect environmentally sensitive areas around their operations. The use of this calendar and accompanying information is intended to serve as a guide and does not guarantee compliance with the NDEQ rules and regulations.*

### Manure / Wastewater Applied:

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

\*Nitrogen availability calculation worksheet can be found at the end of this publication.

## Dung Beetles are Beneficial

Dung beetles are beneficial insects that are often associated with manure. This species pictured below is strongly attracted to cattle manure. They are important insects in manure recycling and fly reduction. Recent work has shown that these beetles can significantly reduce the emission of methane (CH<sub>4</sub>) from manure on rangeland.

### Notes

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*\*Additional information and space for records is provided on the back page.*

### Employee Training

At least 1 representative must complete Land Application Training every 5 years.

Training Type \_\_\_\_\_ Date \_\_\_\_\_

Employees Trained \_\_\_\_\_

Trainer and Location \_\_\_\_\_

Training Type \_\_\_\_\_ Date \_\_\_\_\_

Employees Trained \_\_\_\_\_

Trainer and Location \_\_\_\_\_

Training Type \_\_\_\_\_ Date \_\_\_\_\_

Employees Trained \_\_\_\_\_

Trainer and Location \_\_\_\_\_

Training Type \_\_\_\_\_ Date \_\_\_\_\_

Employees Trained \_\_\_\_\_

Trainer and Location \_\_\_\_\_

### Manure Sold or Given Away

An information sheet containing your operation name and address along with a written statement that manure / wastewater must not enter waters of the state and the nutrient analysis must be provided to the recipient.

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

More manure information at [manure.unl.edu](http://manure.unl.edu) and [extension.org/animal\\_manure\\_management](http://extension.org/animal_manure_management)





# March 2014

**Monthly Inspections**  
 Mortality Management System \_\_\_\_\_ Date \_\_\_\_\_  
 Notes \_\_\_\_\_

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekly Inspections
						1 Rainfall _____ Waterline Inspection _____	<p><b>Note: Annual Permit Fee is due March 1 for large CAFOs, and Annual Reports are due for NPDES permit holders.</b></p>
2 Rainfall _____ Waterline Inspection _____	3 Rainfall _____ Waterline Inspection _____	4 Rainfall _____ Waterline Inspection _____	5 Rainfall _____ Waterline Inspection _____	6 Rainfall _____ Waterline Inspection _____	7 Rainfall _____ Waterline Inspection _____	8 Rainfall _____ Waterline Inspection _____	
9 Rainfall _____ Waterline Inspection _____	10 Rainfall _____ Waterline Inspection _____	11 Rainfall _____ Waterline Inspection _____	12 Rainfall _____ Waterline Inspection _____	13 Rainfall _____ Waterline Inspection _____	14 Rainfall _____ Waterline Inspection _____	15 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
16 Rainfall _____ Waterline Inspection _____	17 Rainfall _____ Waterline Inspection _____	18 Rainfall _____ Waterline Inspection _____	19 Rainfall _____ Waterline Inspection _____	20 Rainfall _____ Waterline Inspection _____	21 Rainfall _____ Waterline Inspection _____	22 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
23 Rainfall _____ Waterline Inspection _____	24 Rainfall _____ Waterline Inspection _____	25 Rainfall _____ Waterline Inspection _____	26 Rainfall _____ Waterline Inspection _____	27 Rainfall _____ Waterline Inspection _____	28 Rainfall _____ Waterline Inspection _____	29 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
30 Rainfall _____ Waterline Inspection _____	31 Rainfall _____ Waterline Inspection _____	In case of a spill or discharge, take immediate measures to contain the spill and contact NDEQ at 1-402-471-4239 within 24 hours. Written reports of a spill must be submitted within 5 days.					Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____

**Annual Report Due** →



### Manure Sold or Given Away

An information sheet containing your operation name and address along with a written statement that manure / wastewater must not enter waters of the state and the nutrient analysis must be provided to the recipient.

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

### Stockpiled Manure

Manure stockpiles must be located and managed to prevent contamination of water. Stockpiles placed in risky areas must be covered, diked, or otherwise managed to prevent runoff of nutrients and organic matter into water until the stockpile material is utilized. Two feet is the recommended minimum height for dikes.

Remember, all discharges MUST be reported.

### Notes

*\*Additional information and space for records is provided on the back page.*

### Manure / Wastewater Applied:

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

Field ID & Location \_\_\_\_\_ Acres Applied \_\_\_\_\_ Date \_\_\_\_\_

Manure Source \_\_\_\_\_ Application Method \_\_\_\_\_

Application Rate \_\_\_\_\_ Available N/acre\* \_\_\_\_\_ Applied P \_\_\_\_\_

\*Nitrogen availability calculation worksheet can be found at the end of this publication.

### Crops Harvested - Nutrients Removed

Date	Field ID and Location	Crop Type	Yield	Acreage	N Removed*	P Removed*

### Crop Nutrient Needs - Estimates for Next Year

Date	Field ID and Location	Crop Type	Yield	Acreage	N Required	P Required

\* Crop removal rates can be found at the back of this publication.

More manure information at [manure.unl.edu](http://manure.unl.edu) and [extension.org/animal\\_manure\\_management](http://extension.org/animal_manure_management)



# August 2014

**Monthly Inspections**  
 Mortality Management System \_\_\_\_\_ Date \_\_\_\_\_  
 Notes \_\_\_\_\_

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekly Inspections
					1 Rainfall _____ Waterline Inspection _____	2 Rainfall _____ Waterline Inspection _____	<p><b>Remember to order your 2015 Nutrient Management Record Keeping Calendar using the coupon here!</b></p>
3 Rainfall _____ Waterline Inspection _____	4 Rainfall _____ Waterline Inspection _____	5 Rainfall _____ Waterline Inspection _____	6 Rainfall _____ Waterline Inspection _____	7 Rainfall _____ Waterline Inspection _____	8 Rainfall _____ Waterline Inspection _____	9 Rainfall _____ Waterline Inspection _____	
10 Rainfall _____ Waterline Inspection _____	11 Rainfall _____ Waterline Inspection _____	12 Rainfall _____ Waterline Inspection _____	13 Rainfall _____ Waterline Inspection _____	14 Rainfall _____ Waterline Inspection _____	15 Rainfall _____ Waterline Inspection _____	16 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
17 Rainfall _____ Waterline Inspection _____	18 Rainfall _____ Waterline Inspection _____	19 Rainfall _____ Waterline Inspection _____	20 Rainfall _____ Waterline Inspection _____	21 Rainfall _____ Waterline Inspection _____	22 Rainfall _____ Waterline Inspection _____	23 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
24 Rainfall _____ Waterline Inspection _____	25 Rainfall _____ Waterline Inspection _____	26 Rainfall _____ Waterline Inspection _____	27 Rainfall _____ Waterline Inspection _____	28 Rainfall _____ Waterline Inspection _____	29 Rainfall _____ Waterline Inspection _____	30 Rainfall _____ Waterline Inspection _____	Lagoon Depth Marker (ft) _____ Date _____ Manure Storage & Equipment Inspection _____ Notes _____ Date _____ Water & Runoff Diversion or Containment Devices _____ Notes _____ Date _____ Maintenance or Repairs _____ Date _____ Notes _____
31 Rainfall _____ Waterline Inspection _____	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; width: fit-content; margin: 0 auto;"> <p>In case of a spill or discharge, take immediate measures to contain the spill and contact NDEQ at 1-402-471-4239 within 24 hours. Written reports of a spill must be submitted within 5 days.</p> </div>						



**General Directions**

- Record the initials of the person performing the inspection each time. Check marks will not satisfy the recordkeeping requirements.
- Record any maintenance and/or repairs.
- Correct all deficiencies within 30 days.
- More detailed instructions can be found on page 3.

**Phosphorus Index**  
Must be completed every 5 years for all manured fields

Date Completed	Field ID and Location	Risk Rating	Management

**Employee Training**  
At least 1 representative must complete Land Application Training every 5 years.

Training Type \_\_\_\_\_ Date \_\_\_\_\_  
 Employees Trained \_\_\_\_\_  
 Trainer and Location \_\_\_\_\_

Training Type \_\_\_\_\_ Date \_\_\_\_\_  
 Employees Trained \_\_\_\_\_  
 Trainer and Location \_\_\_\_\_

Training Type \_\_\_\_\_ Date \_\_\_\_\_  
 Employees Trained \_\_\_\_\_  
 Trainer and Location \_\_\_\_\_

**Soil Sampling**  
For guidelines see go.unl.edu/g1740

Field ID and Location	Sample Depth	Date of Collection

**Manure / Wastewater Sampling**  
(for guidelines see go.unl.edu/g1450)

Sampling Location	Sampling Details	Date of Collection

**Irrigation Water Sampling** (for nitrates)

Sampling Location	Date of Collection	Results (ppm nitrate)

**Annual Sludge Level**  
Depth \_\_\_\_\_ Date \_\_\_\_\_

***Disclaimer***  
 The information in this calendar should assist producers to meet legal requirements and protect environmentally sensitive areas around their operations. The use of this calendar and accompanying information is intended to serve as a guide and does not guarantee compliance with the Nebraska Department of Environmental Quality rules and regulations.

**Accidental Spill or Discharge**

Date and time of spill or discharge \_\_\_\_\_  
 Length of time of spill or discharge \_\_\_\_\_  
 Location and source of spill \_\_\_\_\_

Date and time of oral NDEQ notification (must be within 24 hours) \_\_\_\_\_

**Call NDEQ at 1-402-471-4239.**

Estimated discharge volume \_\_\_\_\_  
 Date of sample collection (must be analyzed by a laboratory) \_\_\_\_\_  
 Description of the cause of the discharge \_\_\_\_\_

Precipitation amount (if cause of the discharge) \_\_\_\_\_ Date \_\_\_\_\_

**Within 5 days, send written spill report to:**  
 Nebraska Dept. of Environmental Quality  
 Attention: Ag Section  
 1200 N Street, Suite 400  
 Lincoln, NE 68508

**Annual Report** (for NPDES permits)

Date report submitted to NDEQ \_\_\_\_\_

**Reports are due March 1 of each year.**

Location of files and records for inspections \_\_\_\_\_

Dates of NDEQ inspections \_\_\_\_\_

### Manure / Wastewater Applied

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Date	Field ID and Location	Acreage Applied	Volume / Weight Applied	Manure Source	Application Method	Available N*	Applied P

\*Nitrogen availability calculations can be found at the end of this publication.

### Manure Sold or Given Away (transferred)

An information sheet containing your operation name and address along with a written statement that manure / wastewater must not enter waters of the state and the nutrient analysis must be provided to the recipient.

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

Manure volume/weight \_\_\_\_\_ Date \_\_\_\_\_

Recipient Name and Address \_\_\_\_\_

Analysis Number: \_\_\_\_\_

### Crops Harvested - Nutrients Removed

Date	Field ID and Location	Crop Type	Yield	Acreage	N Removed	P Removed

### Crop Nutrient Needs - Estimates for Next Year

Date	Field ID and Location	Crop Type	Yield	Acreage	N Required	P Required

### Crop Removal Rates

Other crop information can be found on page 89 of the Manure Application Workbook which can be found at: [http://go.unl.edu/manure\\_workbooks](http://go.unl.edu/manure_workbooks)

Crop	Test Weight	DM, %	N	P <sub>2</sub> O <sub>5</sub>	Units
Corn (grain)	56	84.5	0.70	0.31	lbs./bu.
Corn (stover)		85	17.7	3.5	lbs./ton
Corn (silage)		35	9.0	3.2	lbs./ton
Oats (grain)	32	86	0.60	0.23	lbs./bu.
Oats (straw)		90	12.7	2.5	lbs./ton
Wheat (grain)	60	86.5	1.2	0.50	lbs./bu.
Wheat (straw)		90	10.1	2.1	lbs./ton
Small grain hay		85	34.0	11.7	lbs./ton
Soybeans (grain)	60	87	3.5	0.79	lbs./bu.
Alfalfa (hay)		85	46.2	9.3	lbs./ton
Alfalfa (silage)		40	21.8	4.9	lbs./ton



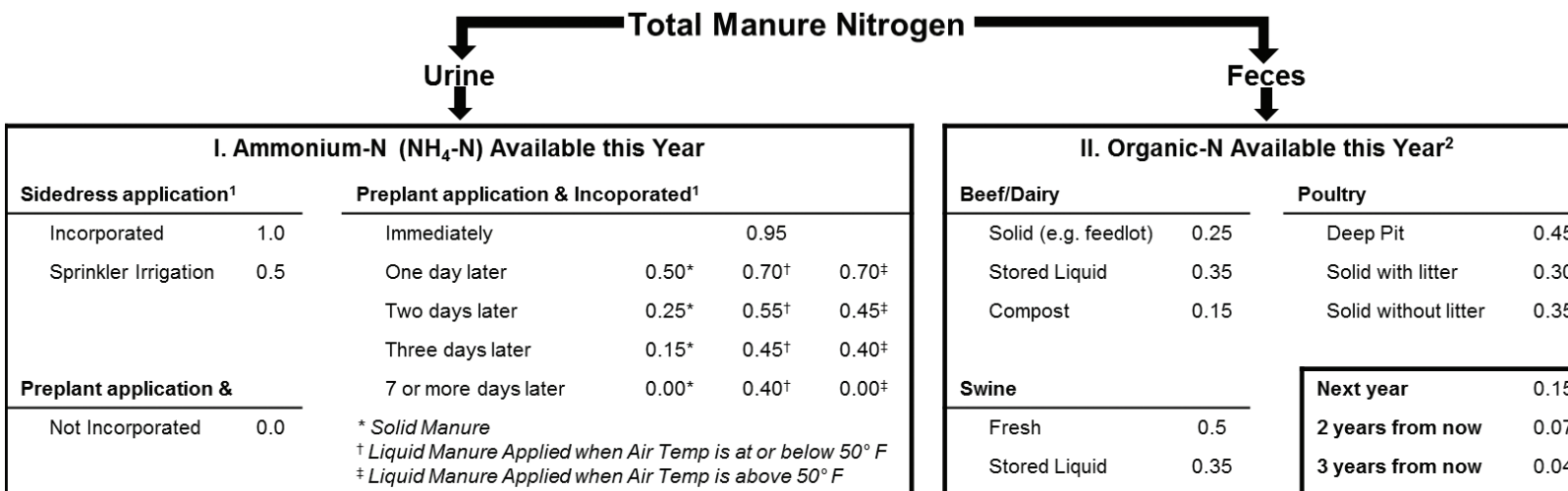
Crop Available Nitrogen Calculations												N Budget Records						
	a. Site, Crop, and Yield Goal	b. Soil Test N, ppm	c. Proposed N-rate*	d. NH <sub>4</sub> -N Content †	e. Availability Factor (see I in figure below)	f. Available NH <sub>4</sub> -N (d X e)	g. Organic-N Content †	h. Availability Factor (see II in figure below)	i. Available Organic-N (g X h)	j. N Available from Manure (f + i)	k. Application rate needed to meet N need (c / j)	l. Actual Application Rate	m. Actual Manure N Applied (l X j)	n. Commercial N applied ‡	o. Irrigation N applied ‡	p. Other N applied ‡	q. Total N applied (m + n + o + p)	r. Actual Yield
Ex.	Home 1/4 Corn, 200 bu	15	100	4.8	0.5	2.4	16.4	0.25	4.1	6.5	15	12	78	0	20	0	98	215
1				lbs/ton lbs/1000 gal lbs/ac-in								ton/ac 1000 gal/ac ac-in/ac						
2				lbs/ton lbs/1000 gal lbs/ac-in								ton/ac 1000 gal/ac ac-in/ac						
3				lbs/ton lbs/1000 gal lbs/ac-in								ton/ac 1000 gal/ac ac-in/ac						
4				lbs/ton lbs/1000 gal lbs/ac-in								ton/ac 1000 gal/ac ac-in/ac						
5				lbs/ton lbs/1000 gal lbs/ac-in								ton/ac 1000 gal/ac ac-in/ac						

\* This number should include all sources of N in lbs/acre. Guidelines for fertilizer rates can be found in UNL Publications listed on the manure resources page at [go.unl.edu/manurepubs](http://go.unl.edu/manurepubs)

† Use "as is" basis from manure analysis. Units should be selected in NH<sub>4</sub>-N column and used throughout the table.

‡ Actual manure application rates should be adjusted for these N applications.

## Availability Factors for Manure Nitrogen



<sup>1</sup> Incorporation can be accomplished by tillage or rainfall of one-half inch or greater.

<sup>2</sup> Organic-N availability assumes spring seeded crops such as corn and soybeans. For fall seeded crops such as wheat, multiply organic-N availability factor by 0.7.

Name of Facility: \_\_\_\_\_ Facility ID Number: \_\_\_\_\_

Address: \_\_\_\_\_ City, State and Zip code: \_\_\_\_\_ Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_

1. **Livestock** - Maximum number of livestock at the CAFO at any one time during the previous calendar year. \_\_\_\_\_ head of \_\_\_\_\_ (species)
2. **Generated Manure** - Total amount of waste generated by the operation during the previous calendar year, including manure, and process wastewater.  
 Manure gallons = \_\_\_\_\_ Liquid gallons = \_\_\_\_\_
3. **Transferred Manure** - The total amount of waste sold or given away by the operation in the previous calendar year, including manure and process wastewater.  
 Manure tons = \_\_\_\_\_ Liquid gallons = \_\_\_\_\_
4. **Land Application Responsibility** -
  - a. Person who has primary responsibility for the land application at the CAFO:  
 Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
 Address: \_\_\_\_\_ City, State and Zip code: \_\_\_\_\_
  - b. Is the person an **authorized** representative, owner, or an employee? Circle one. yes / no
  - c. Most recent date the person completed land application training? \_\_\_\_\_
5. **Land Application Area** -
  - a. Total number of land application acres covered by CAFO's current Nutrient Management Plan. \_\_\_\_\_ acres.
  - b. Total number of acres controlled by the CAFO and used for land application of livestock waste during the previous year - including manure and process wastewater. \_\_\_\_\_ acres.
6. **Discharges** - (*In case of spill or overflow incident; otherwise, not applicable*) Summary of all livestock waste discharges (including manure and process wastewater) from the production areas and the land application areas during the previous year. The summary must include the following information for **each** discharge
  - a. Date discharge began \_\_\_\_\_ and ended \_\_\_\_\_
  - b. Time of day/night discharge occurred \_\_\_\_\_ and the duration of discharge \_\_\_\_\_ hours.
  - c. Approximate volume of waste discharged (provide supporting figures) = \_\_\_\_\_
7. **Nutrient Management Plan Information** - CAFO's current Nutrient Management Plan on file with the Department was developed and approved by a certified nutrient management planner? Circle one. yes / no
8. **Changes to Nutrient Management Plan** - Yes ( ) or No ( ) If the CAFO has made any changes to the nutrient management plan during the previous calendar year, the changes must be reported to the Department. Supporting documents must be included with the information submitted. The information submitted should include changes in:
  - a. Any changes in land application areas: \_\_\_\_\_
  - b. Methods of soil sampling or soil analysis: \_\_\_\_\_
  - c. Means of determining land application rates: \_\_\_\_\_
9. **Individual field records** - For each field crop during the previous 12 months provide:
  - a. Actual crop planted and yield: \_\_\_\_\_
  - b. Actual N and P content of manure, litter, or wastewater applied : \_\_\_\_\_
  - c. Results of calculations made according to NMP: \_\_\_\_\_
  - d. Amount or volume of manure, litter, and wastewater applied to each field during the past 12 months: \_\_\_\_\_
  - e. Results of any soil testing for N and P during the preceding 12 months: \_\_\_\_\_
  - f. Any conversion or availability factors used to determine nutrient availability: \_\_\_\_\_
  - g. Amount of supplemental fertilizer used in previous 12 months: \_\_\_\_\_

**NOTE: Changes in nutrient management plans or other major modifications may require the submission of the 1) application to the Department, 2) the appropriate application fee, and 3) Departmental approval prior to any changes.**