

Section N: Record Keeping and Land
Application Log Forms

SECTION N. LAND APPLICATION LOG FORMS

The following log forms are enclosed:

1. Manure Source Details
2. Annual Report Form For Permitted Confined Animal Facilities
3. Previous Manure Applications and Nitrogen Credits
4. Calculating Residual/Supplemental Nitrogen Amounts
5. Fertilizer Recommendations and Crop Requirements
6. Determining the Manure Application Rate
7. Animal Waste Land Application Record For Permitted Confined Animal Facilities

Record keeping plays a critical role in a manure management system. Records are essential to calculate appropriate rates of manure to apply to the land while protecting surface and groundwater resources. It enables operators to make good annual and long-term decisions concerning efficient use of manure. Additionally, records serve to document compliance with regulations or voluntary adoption of best management practices.

Records should be maintained for five years or as otherwise instructed by specific federal and state laws, local county ordinances and/or program requirements.

As a minimum, track manure application by collecting and keeping records of the following information:

- Soil test results and recommendations for all fields receiving manure (collected and tested prior to handling manure).
- Manure test results.
- Identity of the fields farmed including acres spread on and off site (if applicable).
- Calculated "planned" manure application rate per field.
- Calculated "actual" manure application rate per field.
- Method of manure application.
- Date(s) and date(s) of manure application.

The following additional records are recommended if the goal is to implement a whole farm nutrient budget program:

- Soil test results and recommendations for the remaining fields receiving manure from other sources (i.e. commercial fertilizer).

Manure source details

Storage identification _____

Manure form (solid/liquid) _____

Year	Total N	Manure Analysis				Sample ID/Date	Estimated Volume to be Spread ton or gal	Actual Volume Spread ton or gal
		Organic N	Ammonium N lb/ton, or lb/1000 gal	P2O5 K2O	% Moisture Content			
CALCULATION/ REFERENCE: COLUMN:	(1)	(1)-(3) (2)	(1)-(2) (3)	(4)	(5)	(6)	(7)	(8) AE-1188 (9)

Arkansas Department of Environmental Quality
Permits Branch, Water Division
5301 Northshore Drive
North Little Rock, AR 72118

ANNUAL ANIMAL WASTE LAND APPLICATION REPORT

PERMITTEE NAME: _____ PERMIT NUMBER: _____

Field Name or/ and Number	Crop Type	Total* Area Applied (acres)	Total** Volume Applied (gallons)	Total*** Nitrogen (lbs/1000 gal.)	Calculated Nitrogen Applied (lbs/ac)
(1)	(2)	(3)	(4)	(5)	(6)

* Total available area is the area where manure was applied during the reporting period (this data can be obtained from the management plan).
 ** Total volume applied is the total volume applied to the field during the whole reporting period (this data can be obtained from record sheet).
 *** Total Nitrogen concentration (lbs/1000 gallons) can be obtained from the wastewater analysis sheet.

Column (6) = Nitrogen Applied (lbs/ac) = Column(4) X Column(5) ÷ Column (3) ÷ 1,334

NOTE: You may make additional copies of this table as needed.

Mail complete annual report form and annual application report to:
 Arkansas Department of Environmental Quality
 Permits Branch, Water Division
 5301 Northshore Drive
 North Little Rock, AR 72118

Previous manure applications and nitrogen credits.

Date / /

Field	Nitrogen credit from application before last season's crop			Nitrogen credit from application before crop 2 seasons ago				Previous Manure Credit (PMC) lb/a	
	Manure N Analysis lb/1000 gal	Application Rate ton/a or 1000 gal/a	% Available (Year 2)	N Credit lb/a	Manure N Analysis lb/1000 gal	Application Rate ton/a or 1000 gal/a	% Available (Year 3)		N Credit lb/a
CALCULATION/ REFERENCE: COLUMN:	AE-1189 SHEET 1, COL 1 (1)	AE-1189 SHEET 2, COL 4 (2)	TABLE 2 (3)	(1)X(2)X(3)/100 (4)	AE-1189 SHEET 1, COL 1 (5)	AE-1189 SHEET 2, COL 4 (6)	TABLE 2 (7)	(5)X(6)X(7)/100 (8)	(4)+(8) (9)

Fertilizer recommendations and crop requirements.

Date / /

Field	Crop	Target Yield bu/a, ton/a or lb/a	Nitrogen Requirement lb/a	Soil Test Nitrogen (STN) lb/a	Sampling Date Adjustment (SDA) lb/a	Previous Crop Credits (PCC) lb/a	Previous Manure Credit (PMC) lb/a	Nutrient Requirements			
								Net N	P2O5 lb/a	K2O	
CALCULATION/ REFERENCE:	(1)	(2)	SF 882 (3)	SF 882 (4)	SF 882 (5)	SF 882 (6)	SHEET 1, COL 9 (7)	(3)- [(4)+(5)+(6)+(7)] (8)	SF 882 or TABLE 4 (9)	SF 882 or TABLE 4 (10)	

From: [C. H Hog Farms, Inc.](#)
To: [Bailey, John](#); [Water Permit Application](#); [Yarberry, Katherine](#)
Subject: Fw: NMP Modification Request for C & H Hog Farms - Utilization of Waste Storage Pond 2 - Email #7
Date: Wednesday, March 11, 2015 4:45:06 PM
Attachments: [NMP Section N.zip](#)

Reforwarding Section N of the NMP as per the email inquiry.

----- Forwarded Message -----

From: "C H Hog Farms, Inc." <chhogfarmsinc@yahoo.com>
To: John Bailey <bailey@adeq.state.ar.us>; "water.permit.application@adeq.state.ar.us" <water.permit.application@adeq.state.ar.us>; "yarberryk@adeq.state.ar.us" <yarberryk@adeq.state.ar.us>
Cc: Richard Gray <richard_gray@cargill.com>; David Brown (Cargill Pork Production) <david_brown@cargill.com>
Sent: Thursday, February 26, 2015 4:24 PM
Subject: NMP Modification Request for C & H Hog Farms - Utilization of Waste Storage Pond 2 - Email #7

This is the final email pertaining to this particular modification request. Attached is Section N of the NMP.

Regards,
Jason Henson