

Plan Recommendations for EQIP application & cost-share

Manure & Wastewater Storage & Handling

- Facility provides adequate manure storage and containment. The East Waste Holding Facility allows for some freshwater runoff to enter the waste stream. It is proposed that a diversion be installed to prevent any freshwater from entering the waste storage structure. Producer uses composting for mortality management but current composting facility lacks adequate containment for runoff. A new composting facility is proposed. Calculations for the proposed composting facility are included in section 1 of this CNMP.
Composting Facility – practice code 317 (composting facility for mortality management 241lbs average daily mortality)

Diversion – Practice Code 362 (freshwater diversion <500 ft.)

Land Treatment Practices

- Fields meet t under current management and rotations. No new land treatment is planned.

Nutrient Management

- Producer may apply for the waste utilization incentive. Producer would need to implement two of the practices outlined on the following page titled Guidance for Implementation of Waste Utilization Plans. Acreages eligible for waste utilization incentive dollars are estimated on the following pages. Maps for all fields show setbacks from surface waters.

Waste Utilization – Practice Code 633

Producer Signature

I certify that all information contained within this plan is truthful and accurate to the best of my knowledge.

LOGEMAN BROTHERS

Signature: *RL*

Date: Feb 19 10

Logeman Brothers Farm

					Annual # of Carcass					
Type of Animal	#	Weight	Turns/Yr	% Mort	Carcass					
Nursery Pigs	2100	35	6.5	0.035	16721.25					
Finisher Pigs	5300	160	2.8	0.03	71232					
		Times Factor of 20	Height	ft2 needed	Width Options	Length if 1 bin	Length if 2 bins	Length if 3 bins	Length if 4 bins	Length if 5 bins
Total Annual # of Carcass	Daily # of Carcass	4819.36	6	803	10	80	40	27	20	16

Chosen width & depth = 10' x 20'

Primary Bins needed = 4

Secondary Bins needed = 4

Total # of 10' x 20' bins = 8

Waste Utilization Incentive Acreage
Logeman Brothers Farm

Farm#	Tract #	Field #	Common Name	Acres	2011	2012	2013	2014	Average
1988	6185	1	North End 3 Acres	3	3	3	3	3	
119	1547	2,3,7,10, 6,5,9	Around Buildings	49	35	37	38	37	
2510	463	1-6, 8-9, 15,19	Pug Farm	81	81		81		
2510	6017	1 & 2	Karen/Korte Farm	173		117		7	
1899	448	1-10	Quint Farm	139		8		135	
	458	1-4, 11							
2510	233	1-4	Darrell Home Farm	97					
	234	1-4							
Total					119	166	122	183	147

Attachment 3

Guidance for Implementation of Waste Utilization Plans

To qualify for receiving the Waste Utilization incentive payment, the applicant must have an NRCS approved CNMP that includes the benchmark use of current Waste Utilization practice. Also, the CNMP must outline implementation of the Waste Utilization practices showing **two or more** of the following management **changes**. (circle all that apply):

1. Fields where manure is or will be applied will have new soil tests if existing soil tests are older than four years. Manure from each storage facility will be tested as close to the planned application dates as possible. Manure application rates will be based on recent soil and manure tests. *(If part, but not all, of this item is currently in place and the applicant will implement the entire item using EQIP dollars, the applicant may get credit for this item as one of the two management changes to qualify for the Waste Utilization incentive payment.)*
2. If waste is currently being applied closer than ¼ mile from a water body, increase the distance between manure application and water bodies by at least 200 feet.
3. Discontinue applying waste within 200 feet of wells, sinkholes, or surface waters.
4. Discontinue applying waste to cropland with slopes greater than 15%.
5. Discontinue spreading waste on frozen or snow-covered soil over 5 percent slope.
6. Install provisions such as contour buffer strips, stripcropping, grass or grass-legume cover or heavy residue cover on lands over 5 percent slope that are receiving manure, to control runoff and pollution so that manure may be spread on frozen or snow-covered soil.
7. Discontinue applying liquid manures to soils with less than 10 inches of at least moderately permeable soil over fractured bedrock, sand, or gravel.
8. Discontinue application of waste on organic soils with a seasonal water table within 1 foot of the surface.
9. Discontinue application of waste on flood plains where flooding occurs more frequently than once in 10 years.
10. Change application method from surface application or immediate incorporation to injection.
11. Discontinue application of waste in areas of concentrated water flow.
12. Change manure management to result in the total nutrient content of the manure being applied to the land to be at least 10% less than the CNMP would allow.

Examples:

- a. Spread manure on 10% more acres than the minimum allowed in the CNMP. *(Note, the EQIP incentive will apply to the number of acres on which manure is to be spread, not to exceed 10% more than the minimum number of acres required by the CNMP.)*
- b. Adopt an alternative use for the manure (other utilization activities such as composting, etc)
- c. Change nutrient content of the manure to reduce Phosphorus content by at least 10% (ie. Feed management).

NOTE: Qualifying acres for the Waste Utilization incentive payment include all land where manure is to be applied (owned or controlled by the applicant, or on which the applicant has a contract to apply manure). The Waste Utilization incentive payment cannot be paid on land where “Other Utilization” options are used. “Other Utilization” includes options such as manure being hauled away and land applied by a third party (not the EQIP applicant).

IL 600.5 – EXHIBIT IL 1 CNMP Documentation Index

(See CNMP Statement of Work for specific information)

1. Manure and Wastewater Handling and Storage

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Narrative (brief description) of operation, existing & proposed	X	X	Section 5
	Types of animals and phases of production that exist/will exist at the facility.	X	X	Section 5 & 6
	Numbers of each animal type, average weight, and period of confinement for each phase of production.	X	X	Section 6
	Total estimated manure, bedding and wastewater volumes produced at facility.	X	X	Section 6
	Existing/planned manure storage type, volume, and length of storage. (Include appropriate geologic investigation reports for planned storage or transfer facilities. Include inspection reports and photographic evidence of physical state of existing facilities.)	X	X	Section 5 & 6
	Existing/planned collection and transfer equipment, system, and procedures.	X	X	Section 2 & 5
	Existing/planned mortality management	X	X	Section 5 & 11
	Contour map of site showing sources and directions of clean water flow and polluted runoff through and around facilities	X	X	Section 4 & 5
	Map showing location of 100 year floodplain, if known	X	X	Section 4
	Animal waste system plan maps and sketches – existing and planned	X	X	Section 5
	Animal waste system preliminary design information (include estimated quantities for proposed practices using NRCS payment scenarios and planned schedule of application.)	X		Section 1 & 5
	Animal waste system practice designs		X	Section 5
	Operation and maintenance requirements	X	X	Section 9
	Emergency action plan to address spills and catastrophic events.	X	X	Section 7
	Air quality and pathogen considerations			Section 9 & 11

2. Land Treatment Practices

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Planned Conservation System (Meets Quality Criteria for Soil Loss and Water Quality) including:			
	Individual field maps for all fields the operator owns/controls and where manure application is planned / applied, showing ephemeral and gully erosion concerns, buffers, waterways, and locations of other existing/planned conservation practices.	X	X	Individual Field Sections
	Soil maps and information such as features, limitations, soil loss calculations and capability for each field the operator owns/controls and where manure application is planned / applied.	X	X	Section 14

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Nitrogen and phosphorus risk assessments for each field the operator owns/controls and where manure application is planned /applied.	X	X	Section 15
	Conservation practices needed to solve identified resource problems including: rotation, tillage, farming direction and soil erosion and water runoff control practices on all fields where manure application is planned (include estimated quantities for proposed practices using NRCS payment scenarios and planned schedule of application by field.)	X		Section 14
	Conservation practice design and implementation information for all fields where manure is applied.		X	Individual Field Sections
	Identification of sensitive areas such as sinkholes, streams, springs, lakes, ponds, wells, gullies, and drinking water sources.	X	X	Individual Field Sections
	Other site features of significance, such as property boundaries, residences and populated areas.	X	X	Individual Field Sections
	Operation and Maintenance (O&M) Plans for practices and/or activities.	X	X	Section 9

3. Nutrient Management

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Individual field maps for all fields the operator owns/controls and where manure application is planned / applied, showing setbacks from wells, sinkholes, and open water areas, along with areas where application restrictions exist.	X	X	Individual Field Sections
	Table or list of total field acres and acres for manure application, for all fields the operator owns/controls and where manure application is planned / applied.	X	X	Section 21
	Current soil test results for pH, phosphorus, and potassium for all fields the operator owns/controls and where manure application is planned / applied.	X	X	Section 21 & 23
	Manure and organic by-product source nutrient “book value” or test results (Planned). Manure and organic by-product source testing results (Applied). Indicate source of values used.	X	X	Section 18 & 23
	A general nutrient budget that identifies number of acres needed for waste utilization. The budget should contain a separate calculation for nutrient uptake for each combination of crop rotation and yield the operator proposes.	X	X	Section 8
	Nutrient budget for nitrogen, phosphorus, and potassium that includes all potential sources of nutrients for all fields the operator owns/controls and where manure application is planned / applied.	X	X	Section 8
	Supplemental nutrient needs when manure does not meet nutrient needs, for setbacks, and years when manure not applied.	X		Section 17 & 19

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Form, source, amount, timing, and method of application of nutrients, by field.	X	X	Section 18 & 25-30
	P buildup potential where nutrient applications are in excess of P use.	X		Section 19
	Manure transfers planned / applied	X	X	Section 18
	Operation & maintenance activities (soil & manure tests, equipment calibration, etc.)	X	X	Section 9
	Air quality, Pathogen, and Salt / heavy metal buildup considerations	X	X	Section 11

4. Recordkeeping

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Current soil test results, in accordance with Nutrient Management (Code 590) and Waste Utilization (Code 633).	X	X	Section 23
	Mortality disposal records.		X	Section 31
	Records of storage containment structures operation and maintenance, including: Dates of emptying, levels before and after emptying, and discharge or overflow events, including level before and after event.		X	Section 31
For Each Application Event, Records of:				
	Field(s) where manure or organic by-products are applied or will be applied.	X	X	Section 30
	Amount applied per acre, source, and application method/equipment used.		X	Section 31
	Time and date of application.		X	Section 31
	Weather and general soil moisture conditions during nutrient application.		X	Section 31
For manure transferred off-site or to third parties:				
	Source and nutrient content		X	Section 31
	Amount and date of manure transferred.		X	Section 31
	Recipient of manure.		X	Section 31
	Copies of all reporting of waste releases filed with Illinois EPA		X	
	Forms for documenting inspections and maintenance	X		Section 31
	Records of maintenance performed associated with operation and maintenance plans.		X	Section 31
	Records of nutrient application equipment calibration.		X	Section 31
	Changes made in CNMP.		X	

5. Feed Management

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Feed management plan.			

6. Other Utilization Activities

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	More efficient and cost-effective methods (such as the following):			
	Improved systems for solids removal from liquid manure.			
	Improved manure handling, storage, and treatment methods to reduce ammonia volatilization.			
	Treatment systems that transform and/or capture nutrients, trace elements, and pharmaceutically active compounds from manure.			
	Improved composting and other manure stabilization techniques.			
	Treatment systems to remediate or replace anaerobic lagoons.			

7. Certification

	Documentation	Required for CNMP Planned	Required for CNMP Applied	Location in CNMP Document
	Producer's selection of alternatives (include written concurrence from producer on all planned practices)	X	X	
	Signature(s) of CNMP developer(s)	X	X	

NOTES:

CNMP Planned: The Comprehensive Nutrient Management Plan - a documented record of producer's decisions for manure and waste water handling and storage, land treatment and nutrient management.

CNMP Applied: After the planned measures in the CNMP have been implemented - the documentation for CNMP Applied includes the CNMP + field specific nutrient management and land treatment designs; any applicable designs for facilities for manure and waste water handling and storage; necessary records; feed management plans and documentation of other utilization options.