APPENDIX E: TERMS OF THE NUTRIENT MANAGEMENT PLAN INCORPORATED INTO THE PERMIT

I. PERMITTEE

In accordance with Parts III.2.b and f of NPDES Permit No. NMG010000, the following terms of the nutrient management plan (NMP) are hereby incorporated as site specific terms and conditions of the general permit for:

NMG010007
Clayton Cattle Feeders
P.O. Box 220
Clayton, NM 88415

For the purposes of this permit, "NMP" refers to the latest version of the NMP approved by EPA. Any changes to the NMP must be submitted to EPA in accordance with Part III.A.6 of the permit.

II. SITE SPECIFIC PERMIT TERMS

A. Adequate Storage

Table 1

STORAGE STRUCTURE	STORAGE PERIOD (days)	TOTAL CAPACITY (ac-ft)
RCS #1	90	55.25
RCS #2	90	5.12

Manure shall be stored in the drainage area in accordance with the "Potential Pollutant Sources" section of the NMP.

B. Land Application

The permittee has selected the narrative rate approach to address rates of land application. The permittee shall calculate the amounts of manure, litter, and process wastewater to be land applied on land application areas specified below using the methodology

established in the NMP. The addition of any crops not included in Table 2 below must be submitted to EPA in accordance with Part III.A.6 of the permit.

Table 2

Land Application Area	Outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport (*1)	Crop	Annual Yield Goal (tons/ac)	Recommendation (lbs/ac) (*2)		Maximum Amount of Nutrients Derived from all Sources (lbs/ac) (*2)			
				Nitrogen	Phosphorus (as P_2O_5)	Nitrogen	Phosphorus (as P_2O_5)		
							At 1.5 times crop removal (*5)	At crop removal (*6)	No phosphorus application allowed (*7)
LMU 1	N-Based	Wheat Forage	6	240	37	240	56	37	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0
		Small Grain(SG) Silage (*3)	12	160	67	160	101	67	0
		Corn Silage (*3)	25	350	96	350	144	96	0
		Corn Grain (*3)	180 (*4)	210	68	210	102	68	0
		Sorghum Forage/Silage (*3)	20	280	74	280	111	74	0
		Wheat Forage (*3)	6	240	37	240	56	37	0
		Forage – other Small Grains (*3)	6	240	37	240	56	37	0
		Forage – cool season grass blend (*3)	4	240	43	240	65	43	0

		Forage – warm season grass blend (*3)	6	200	35	200	53	35	0
		Small Grain (SG) Silage (*3)	4	55	25	55	38	25	0
		Corn Silage (*3)	8	85	38	85	57	38	0
		Corn Grain (*3)	50 (*4)	70	25	70	38	25	0
		Sorghum Forage/Silage (*3)	8	145	40	145	60	40	0
		Wheat Forage (*3)	3	60	12	60	18	12	0
		Forage – other Small Grain (*3)	3	60	12	60	18	12	0
		Forage – cool season grass blend (*3)	1.5	85	20	85	30	20	0
		Forage – warm season grass blend (*3)	2	120	17	120	26	17	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0
		Wheat Forage/Corn Silage (*3)	6 / 25	590	133	590	200	133	0
		Wheat Forage/Sorgh Silage (*3)	6 / 20	520	111	520	167	111	0
LMU 2	N-Based	Corn Grain	180 (*4)	210	68	210	102	68	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0

		Small Grain(SG) Silage (*3)	12	160	67	160	101	67	0
		Corn Silage (*3)	25	350	96	350	144	96	0
		Corn Grain (*3)	180 (*4)	210	68	210	102	68	0
		Sorghum Forage/Silage (*3)	20	280	74	280	111	74	0
		Wheat Forage (*3)	6	240	37	240	56	37	0
		Forage – other Small Grains (*3)	6	240	37	240	56	37	0
		Forage – cool season grass blend (*3)	4	240	43	240	65	43	0
		Forage – warm season grass blend (*3)	6	200	35	200	53	35	0
		Small Grain (SG) Silage (*3)	4	55	25	55	38	25	0
		Corn Silage (*3)	8	85	38	85	57	38	0
		Corn Grain (*3)	50 (*4)	70	25	70	38	25	0
		Sorghum Forage/Silage (*3)	8	145	40	145	60	40	0
		Wheat Forage (*3)	3	60	12	60	18	12	0
		Forage – other Small Grain (*3)	3	60	12	60	18	12	0
		Forage – cool season grass blend (*3)	1.5	85	20	85	30	20	0

		Forage – warm season grass blend (*3)	2	120	17	120	26	17	0
LMU 3	N-Based	Corn Grain	180 (*4)	210	68	210	102	68	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0
		Small Grain(SG) Silage (*3)	12	160	67	160	101	67	0
		Corn Silage (*3)	25	350	96	350	144	96	0
		Corn Grain (*3)	180 (*4)	210	68	210	102	68	0
		Sorghum Forage/Silage (*3)	20	280	74	280	111	74	0
		Wheat Forage (*3)	6	240	37	240	56	37	0
		Forage – other Small Grains (*3)	6	240	37	240	56	37	0
		Forage – cool season grass blend (*3)	4	240	43	240	65	43	0
		Forage – warm season grass blend (*3)	6	200	35	200	53	35	0
		Small Grain (SG) Silage (*3)	4	55	25	55	38	25	0
		Corn Silage (*3)	8	85	38	85	57	38	0
		Corn Grain (*3)	50 (*4)	70	25	70	38	25	0
		Sorghum Forage/Silage (*3)	8	145	40	145	60	40	0

		Wheat Forage (*3)	3	60	12	60	18	12	0
		Forage – other Small Grain (*3)	3	60	12	60	18	12	0
		Forage – cool season grass blend (*3)	1.5	85	20	85	30	20	0
		Forage – warm season grass blend (*3)	2	120	17	120	26	17	0
LMU 4	N-Based	Corn Grain	180 (*4)	210	68	210	102	68	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0
		Small Grain(SG) Silage (*3)	12	160	67	160	101	67	0
		Corn Silage (*3)	25	350	96	350	144	96	0
		Corn Grain (*3)	180 (*4)	210	68	210	102	68	0
		Sorghum Forage/Silage (*3)	20	280	74	280	111	74	0
		Wheat Forage (*3)	6	240	37	240	56	37	0
		Forage – other Small Grains (*3)	6	240	37	240	56	37	0
		Forage – cool season grass blend (*3)	4	240	43	240	65	43	0
		Forage – warm season grass blend (*3)	6	200	35	200	53	35	0

		Small Grain (SG) Silage (*3)	4	55	25	55	38	25	0
		Corn Silage (*3)	8	85	38	85	57	38	0
		Corn Grain (*3)	50 (*4)	70	25	70	38	25	0
		Sorghum Forage/Silage (*3)	8	145	40	145	60	40	0
		Wheat Forage (*3)	3	60	12	60	18	12	0
		Forage – other Small Grain (*3)	3	60	12	60	18	12	0
		Forage – cool season grass blend (*3)	1.5	85	20	85	30	20	0
		Forage – warm season grass blend (*3)	2	120	17	120	26	17	0
LMU 5	N-Based	Wheat Forage	6	240	37	240	56	37	0
		Wheat Forage/Corn grain (*3)	6 / 180 (*4)	450	105	450	158	105	0
		Small Grain(SG) Silage (*3)	12	160	67	160	101	67	0
		Corn Silage (*3)	25	350	96	350	144	96	0
		Corn Grain (*3)	180 (*4)	210	68	210	102	68	0
		Sorghum Forage/Silage (*3)	20	280	74	280	111	74	0
		Wheat Forage (*3)	6	240	37	240	56	37	0

		Forage – other Small Grains (*3)	6	240	37	240	56	37	0
		Forage – cool season grass blend (*3)	4	240	43	240	65	43	0
		Forage – warm season grass blend (*3)	6	200	35	200	53	35	0
		Small Grain (SG) Silage (*3)	4	55	25	55	38	25	0
		Corn Silage (*3)	8	85	38	85	57	38	0
		Corn Grain (*3)	50 (*4)	70	25	70	38	25	0
		Sorghum Forage/Silage (*3)	8	145	40	145	60	40	0
		Wheat Forage (*3)	3	60	12	60	18	12	0
		Forage – other Small Grain (*3)	3	60	12	60	18	12	0
		Forage – cool season grass blend (*3)	1.5	85	20	85	30	20	0
		Forage – warm season grass blend (*3)	2	120	17	120	26	17	0

Footnotes

*1 Outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport (New Mexico NRCS Agronomy Technical Note 57) must be recalculated at least annually using the most recent soil test results. In accordance with Part III.A.6 of the permit, any change in the outcome of this calculation must be submitted to EPA and may be subject to public comment.

*2 Nutrient recommendations and maximum amount of nutrients derived from all sources have been established for both nitrogen and phosphorus; However, land application of manure and process wastewater shall be based on the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport as identified above.

*3 Alternative crop.

*4 bu/ac

*5 To be used when the phosphorus application classification rating of the New Mexico Phosphorus Index (New Mexico NRCS Agronomy Technical Note 57) is determined to be “Phosphorus Based (1.5 times crop removal).”

*6 To be used when the phosphorus application classification rating of the New Mexico Phosphorus Index (New Mexico NRCS Agronomy Technical Note 57) is determined to be “Phosphorus Based (at crop removal).”

*7 To be used when the phosphorus application classification rating of the New Mexico Phosphorus Index (New Mexico NRCS Agronomy Technical Note 57) is determined to be “No Phosphorus Application Allowed.”

Table 3

Land Application Area	Acres
LMU 1	120
LMU 2	122
LMU 3	110
LMU 4	125
LMU 5	125

C. Site Specific Conservation Practices

Table 4

Agricultural Well Head, Surface Water, or Conduit to Surface Water	Setback Requirement
Agricultural Irrigation Well (Northwest of LMU 2)	35-ft. vegetated buffer
Agricultural Irrigation Well (North of LMU 3)	35-ft. vegetated buffer
Agricultural Irrigation Well (Southwest of LMU 3)	35-ft. vegetated buffer
Agricultural Irrigation Well (Northeast of LMU 5)	35-ft. vegetated buffer
Agricultural Irrigation Well (Southeast of pivot point of LMU 5)	35-ft. vegetated buffer

D. Protocols for appropriate testing of soil, manure, litter, and process wastewater

Manure and process wastewater shall be sampled in accordance with the “Manure Analysis” and “Wastewater Analysis” sections of the NMP. Soil shall be sampled in accordance with the “Soil Analysis” section of the NMP.

E. Mortality Management

All mortalities shall be disposed of in accordance with the “Potential Pollutant Sources” section of the NMP. Composting of mortalities shall be done in accordance with the attached New Mexico State University Cooperative Extension Service Guide D-108 (Whole Animal Composting of Dairy Cattle).

F. Clean Water Diversion

Diversion berms and terraces are utilized to divert clean water run-on from entering waste storage pond drainage areas. See the "Control Facilities and Equipment" section of the NMP. An additional 38 acres are included in the drainage area and are accounted for in the required storage capacity of RCS #1. See the "Feedyard Site Map" in the NMP.