

Table 3. Estimated liquid pit manure characteristics.

Livestock stages	Production					Units	Concentration			
	Manure (lb/yr)	Total N (lb/yr)	NH ₃ -N* (lb/yr)	P ₂ O ₅ * (lb/yr)	K ₂ O* (lb/yr)		Total N	NH ₃ -N	P ₂ O ₅	K ₂ O
							lb/1,000 gallons of manure			
Farrowing	11,500	21	11	17	15	per pig space	15	8	12	11
Nursery	1,000	3	2	2	3	per pig space	25	14	19	22
Grow-finish (deep pit)	3,500	21	14	18	13	per pig space	50	33	42	30
Grow-finish (wet/dry feeder)	2,500	22	15	16	12	per pig space	75	50	54	40
Grow-finish (earthen pit)	3,500	13	10	9	8	per pig space	32	24	22	20
Breeding-gestation	7,000	21	10	21	20	per pig space	25	12	25	24
Farrow-finish	37,500	126	72	108	103	per production sow	28	16	24	23
Sow per pig	2,000	7	4	6	6	per pig sold per year	28	16	24	23
Farrow-feeder	10,000	25	13	22	23	per production sow	21	11	18	19
Dairy cow	54,000	200	39	97	123	per mature cow	31	6	15	19
Dairy heifer	25,000	96	18	42	84	per head capacity	32	6	14	28
Dairy calf	6,000	19	4	10	17	per head capacity	27	5	14	24
Veal calf	3,500	11	9	9	17	per head capacity	26	21	22	40
Dairy herd	73,000	271	53	131	193	per mature cow	31	6	15	22
Beef cows	30,000	72	25	58	86	per mature cow	20	7	16	24
Feeder calves	13,000	39	12	26	35	per head capacity	27	8	18	24
Finishing cattle	25,500	89	24	55	79	per head capacity	29	8	18	26
Broilers	83	0.63	0.13	0.4	0.3	per bird space	63	13	40	29
Pullets	49	0.35	0.07	0.21	0.2	per bird space	60	12	35	30
Layers	130	0.89	0.58	0.81	0.5	per bird space	57	37	52	33
Tom turkeys	282	1.79	0.54	1.35	1	per bird space	53	16	40	29
Hen turkeys	232	1.67	0.56	1.06	0.9	per bird space	60	20	38	32
Ducks	249	0.45	0.24	0.36	0.3	per bird space	22	5	15	8

* Phosphate (P₂O₅) = 2.29 x P, Potash (K₂O) = 1.21 x K, NH₃-N (ammonia N) = 1.22 x NH₃

Source: MWPS-18, *Manure Management Systems Series*, Section 1, Manure Characteristics.

Note: Use only for planning purposes. These values should not be used in place of a regular manure analysis.