Poultry Litter Agronomic Application Rate Calculation Work Sheet

		Example:			Your numbers:	
1a	**Nutrient needs of crop (lbs/acre)** Recommendations based on soil test results and a realistic yield goal.	N P_2O_5 K_2O	= = =	200 80 40	N P_2O_5 K_2O	= = =
1b	**Nutrients carried over in last 2 years' applications (lbs/acre)** See Table 2.	N P_2O_5 K_2O	= = =	25 0 0	N P_2O_5 K_2O	= = =
1c	**Nutrient needs to meet with litter** Subtract line 1b from line 1a.	N P_2O_5 K_2O	= = =	175 80 40	N P_2O_5 K_2O	= = =
2	**Total nutrients available in litter (lb/ton)** Based on litter analysis of representative sample collected close to time of application.	N P_2O_5 K_2O	= = =	64 55 43	N P_2O_5 K_2O	= = =
3	**Determine available nutrients (lb/ton)** Multiply the value in step 2a by availability, 50% for N and 90% for P and K.	N P_2O_5 K_2O	= = =	32 50 39	N P_2O_5 K_2O	= = =
4a	**Calculate application rates to supply N, and P_2O_5 needs (tons/acre)** Divide values from Step 1c by values from Step 3.	N P_2O_5	= =	5.5 1.6	N P_2O_5	= =
4b	**Choose between N or P_2O_5 application rate (tons/acre)** Select highest rate in Step 4a to use litter as complete fertilizer. Select lowest rate to maximize nutrient use.	Rate (based on P)	=	1.6	Rate	=
5a	**Determine amount nutrients applied at chosen rate (lbs/acre)** Multiply the rate chosen in step 4b by available nutrients in step 3.	N P_2O_5 K_2O	= = =	51 80 62	N P_2O_5 K_2O	= = =
5b	**Determine supplemental nutrients (lbs/acre)** Subtract the nutrients applied, step 5a from nutrients needed, step 1c. If the difference is negative, enter 0.	N P_2O_5 K_2O	= = =	124 0 0	N P_2O_5 K_2O	= = =

This worksheet calculates the rate of application based on crop nutrient needs, either on N or P requirement. However, NRCS Code 590 Guideline dictates how much can be applied, depending on soil test P and locations.