**Manure Management Plan Nutrient Balance Worksheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Crop Group** | **Yield** | **CMU/Field Identification** (Each field must be clearly identified on a map) | **Acres** |
|  |  |  |  |
| **Manure Plan Basis**(check planning option) | **OPTION 1: P Removal** |  | **OPTION 2: N Requirement** |  |
| • Soil test not required.• Complete N and P2O5 columns; K2O column is optional.• Use the P2O5 column to determine application rate (Row K phosphorus column). | • MUST have Soil test < 200 ppm Mehlich 3 P. List soil test values below.• Complete N column; P2O5 and K2O columns are optional.• Use the N column to determine application rate (Row K nitrogen column). |
| **Soil Test P (ppm)****(**Mehlich 3) |  |
| **Manure Group** | **Manure Type****(Poultry, Swine, Other, Compost)** | **Application Season** | **Application Management** |
|  |  |  |  |
| **Manure Analysis****Units** (Circle)  **NH4-N Organic N P2O5**  **K2O** . | **Manure % Solids** |
| **lb/ton or lb/1000 gal** |  |  |  |  |  |
| **Notes** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **N** | **P2O5** | **K2O** | **Recommendation Basis** |
| **A) Recommendation or Removal** (lb/A)N – Soil Test or Tables 1 & 2 (AG Table 1.2-3;1.2-5)P2O5 & K2O – Soil Test or Table 3 (AG Table 1.2-6) |  |  |  |  | Soil Tests |
|  | Crop Removal |
| **B) Fertilizer Applied** (lb/A) (Regardless of Manure e.g. Starter) |  |  |  | **Application Record & Notes**Record when the planned manure and fertilizer rates were applied or note changes. |
| **C) Other Organic Sources Applied** (lb/A) (e.g. Biosolids, Other Manure) |  |  |  |
| **D) Residual Manure N** (lb/A) Table 4 (AG Table 1.2-11) |  |  |  |  |
| **E) Previous Legume N** (lb/A) Table 5 (AG Table 1.2-4) or Soil Test Report |  |  |  |
| **F) Net Nutrient Requirement** (lb/A) (A – B – C – D – E) |  |  |  |
| **G) Manure Analysis** (lb/ton or lb/1000gal) | NH4-N | Org N |  |  |
| H) Nitrogen Availability Factors Table 6 (AG Table 1.2-12) | NH4-N | Org N |  |  |
| I) Available Nitrogen Fractions (lb/ton or lb/1000gal) (G x H) | NH4-N | Org N |  |  |
| **J) Total Available Nitrogen** (sum of Available N Fractions from row I) | NH4-N + Org N |  |  |
| **K) Balanced Manure Rate-** (tons/A or gallons/A)Solid manure- For N: (F ÷ J); For P: (F ÷ G)Liquid manure- For N: (F ÷ J) x 1000; For P: (F ÷ G) x 1000  |  |  |  |
| **L) Planned Manure Rate** (tons/A or gallons/A)Must be less than or equal to Row K Balanced Rate and based on the plan basis being used |  |
| **M) Nutrients Applied at Planned Rate** (lb/A)Solid manure- For N: (L x J); For P & K: (L x G)Liquid manure- For N: (L x J) ÷ 1000; For P: (L x G) ÷ 1000 |  |  |  | **Note:** Nutrient balances for P2O5 and K2O based on crop removal (Row A) should not be used to determine additional fertilizer needs. Only recommendations based on soil tests should be used for this purpose. |
| **N) Nutrient Balance at Planned Rate** (lb/A) (F - M) (Indicate short or excess)  |  |  |  |