A Simplified NMP for Alabama Poultry AFOs

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**Step 1. Estimate Broiler Litter & Compost Produced**

- **4 houses X 26,000 birds x 4 flocks** = 472,000 birds/yr
- **672,000 lbs x 5.5 lb/bird x 6.5 lb/bird** = 1,512,000 lb. Litter = 756 tons

- 48 tons used to produce 1 ton compost for dead birds

668 tons litter produced annually

98 tons compost produced annually (Will store in dry stack – 1/3 or 223 tons)

**Step 2. Determine nutrient value of broiler litter and compost**

- 668 tons litter to spread (47-58-45 per ton)
- 98 tons compost to spread (43-58-45 per ton)

**TOTAL AVAILABLE NUTRIENTS ON FARM =**

- **N = 35,560 lb.**
- **P = 44,900 lb.**
- **K = 34,500 lb.**

**Step 3. Map and calculate land area for spreading, including required buffers**

160-acre Alabama Poultry/Cattle Farm

**Field 4B: Coastal Pasture**

- 13.5 ac. / 12 ac.
- 16 ac. / 14 ac.

- Use commercial N fertilizer on rye in March and on fescue in fall (52-64-50)

**Field 2: Coastal bermudagrass hay - high yield**

- 35 ac. / 30 ac.
- 40 ac. / 35 ac.

- Soil test recommendation

**Field 2 (82 acres):** P=Medium K=Medium

- 1.6 tons litter

**Field 3 (12 acres):**

- 12 tons litter

- Soil test recommendation

**Field 3: Fescue pasture - high management**

- 15 ac. / 14 ac.
- 16 ac. / 12 ac.

- Soil test recommendation

**Field 4A: Field 4A: Field 4A: Field 4A: Field 4A:**

- 1.0 ton litter

- Soil test recommendation

**Field 1B: Field 1B: Field 1B: Field 1B: Field 1B:**

- 2.6 tons litter

**Recommendation**

**P INDEX Rating = “High”**

**Step 4. Determine target crop and nutrient needs and timing for each field.**

**Step 5. Determine uses for excess litter/compost production**

**Summary**

<table>
<thead>
<tr>
<th>Field</th>
<th>Acreage</th>
<th>Litter Use</th>
<th>Compost Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field 2</td>
<td>82 acres</td>
<td>1.6 tons</td>
<td>0 tons</td>
</tr>
<tr>
<td>Field 3</td>
<td>12 acres</td>
<td>12 tons</td>
<td>0 tons</td>
</tr>
<tr>
<td>Field 4A</td>
<td>1.0 ton</td>
<td>0 tons</td>
<td>0 tons</td>
</tr>
<tr>
<td>Field 1B</td>
<td>2.6 tons</td>
<td>0 tons</td>
<td>0 tons</td>
</tr>
</tbody>
</table>

**Note:** Use adjusted lab values once litter is tested.

**Soil test recommendation**

**Field 2:**

<table>
<thead>
<tr>
<th>Soil test</th>
<th>N-P-O</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-4-3</td>
<td>From NRCS-AL Code 590 table for surface applied broiler litter.</td>
</tr>
</tbody>
</table>