<table>
<thead>
<tr>
<th>Source Category:</th>
<th>Animal Husbandry - Hogs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCC Code:</td>
<td>2805025000</td>
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<tr>
<td>Pollutants of Concern:</td>
<td>NH₃</td>
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How is the NH₃ National Emission Inventory developed for this category?

**Current Methodology:**

- The total number of hogs and swine in production is estimated from data available through the Census of Agriculture.
- Emission factors based on European studies are applied.
- A composite emission factor is developed to represent the national mix of animal type, size, and production conditions.
- Total emissions for each state are calculated from state-level animal count information.
- Emissions are allocated to the county-level based on the agricultural land surrogate.

**Uncertainties / Shortcomings of Current Methods:**

- The animal counts reported to Census of Agriculture may undercount nonproduction animals.
- The emission factors represent European operations and European weight classifications which can differ markedly from U.S. conditions.
- Emissions can vary significantly particularly based on the waste management approaches.

**How can State, Local, and Tribal agencies improve upon this methodology?**

- Obtain local data on the total number of animals including breeding, and replacement stock.
- Estimate the typical distribution of waste treatment, and waste disposal practices in the area. Aggregate emission factors may be adjusted to account for the revised local conditions.
Activity Variables Used to Calculate Emissions from Hog Production

Current Variables/Assumptions Used:

- Total number of swine by State. [*Census of Agriculture*]
- Aggregate emission factor [*based on European studies*]

Suggestions for Improved Variables:

- Local estimate of number of swine including nonproduction animals. [*State Department of Agriculture, Agriculture Extension Service, State Water Quality Office*]

Where can I find Additional Information and Guidance?

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Telephone:  919 541-5371

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<tr>
<td><strong>MARAMA CMU NH₃ Emissions Inventory</strong></td>
<td>check MARAMA website <a href="http://www.marama.org/">www.marama.org/</a></td>
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<tr>
<td><strong>NEI Methodology Description</strong></td>
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<td><strong>1997 Census of Agriculture</strong></td>
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