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Developing a Poultry Manure Composting System for San Diego County

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Abstract Text:

Egg production is a major agricultural industry in San Diego County. For many years, the issue of poultry manure management has plagued the producers and the surrounding communities. As the communities have grown and infringed on the agricultural areas, the problems have become extreme, and have included water quality issues, particularly in the rainy seasons, and fly, odor and particulate issues. The County of San Diego has specific requirements of poultry producers with regard to manure management, and most are related to the control of fly breeding. However, producers have been precluded from utilizing composting, a common practice for manure management worldwide, because of a restriction in the local zoning requirements that does not allow producers to bring in a carbon source to mix with the manure to facilitate composting. At our urging, the county provided us the opportunity and the funding to conduct a large-scale research trial and demonstration on different methods of manure management, including composting. This project was conducted at a producer-cooperator's poultry farm. We followed with a demonstration day and because of the favorable results, have now convinced the County of San Diego to alter the zoning requirements to make it possible for the poultry producers to use composting as a manure management method. Work is currently underway to provide the necessary environmental information to make the zoning change.

Impact Statement:

Composting poultry manure provides the producers with a method of handling manure that is much less likely to cause runoff issues. Composting manure, mixed with a carbon source, is a very absorptive material in comparison to the manure that is stacked, or manure that is on a drying pad. During the rainy season, the problems with water quality near the manure management areas were great, as water washed over the area and into the nearby waterways. In addition to improvements in water quality, odor, fly and other associated issues are greatly improved with composting.