United States Department of Agriculture

Subject: Evaluation of Advanced Composting Technology (ACT) Enhanced Forced Aeration Composting System with Grinder/Mixer System

Date: June 19, 2019

To: Mr. Keith Warren, President, Advanced Composting Technologies, Candler, NC

I have completed the review of the material prepared for the Advanced Composting Technology's Enhanced Forced Aeration Composting System with a Grinder/Mixer system. Based on the information provided on this technology, in my opinion, this system meets or exceeds the criteria outlined in both the National NRCS and North Carolina Conservation Practice Standards 316, Animal Mortality Facility.

North Carolina State University conducted a study of the performance of the Advanced Composting Technologies mortality composting facility to determine if the enhanced forced aeration composting system met the criteria outlined in the current National and North Carolina Animal Mortality Facility (316) practice standards. This modified technology included the use of a grinder/mixer system which decreased the mortality particle size and improved the contact time with the bulking and composting material. The work focused on the compost temperature and time maintained above the 130 degrees threshold. Both primary and secondary composting areas were evaluated in this study for swine and poultry. A summary of the results from this study is as follows:

1. Time and temperature requirements were met or exceeded for the animal types evaluated in both the primary and secondary compost areas.
2. No visible soft tissue was evident following the composting process.
3. The Most Probable Number (MPN) per gram of compost for fecal coliform was less than 2 for the finished product of both animal types evaluated. (This is the lowest detection level for this analysis method. This meets the Class A compost/bio-solids requirement of <1,000 MPN/gram.)

If you have any questions or need additional information, please don't hesitate to contact me at 336-370-3342 or jeffrey.porter@usda.gov.

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AMNMT Leader

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