

Natural Biotechnology and GGT Waste, affiliates of Green Growth Technology, Inc. have created a Confined Animal Feeding Operations (CAFO) Manure System that essentially turns organic wastes to water. This is one of several fact sheets that explain that system and its benefits to CAFO operators.

The GGT Waste AG Manure Treatment System uses a proprietary mixture of microorganisms called NBT-100 that:

- **Surpasses existing technology in neutralizing harmful environmental effects of animal waste.**
- **Contains a higher concentration of hardy microbes developed specifically for this purpose.**
- **Possesses tolerance to a wider range of pH and temperatures.**
- **Displays an especially effective combination of antibiotic properties and a high rate of growth.**
- **Effectively addresses lagoon pathogen problems.**
- **Reduces and controls nutrient buildup.**
- **Reduces lagoon odors.**
- **Reduces solids accumulation.**

Industry-leading Technology

Microorganisms, often called microbes, exist naturally as bacteria, fungi and viruses. Some are essential to health and others cause disease. They are widely used to produce, preserve and flavor foods and some are already in use in Asia for animal waste management. The technology is in its infancy, but the NBT-100 strain of microbes developed by Natural Biotechnology and GGT Waste is the most effective microbial product available to simultaneously deal with all the issues facing CAFO operations.

Hardy and Hard Working

NBT-100 is a proprietary, unusually hardy strain that has a higher concentration of active microbes per unit volume than other similar products. This means that NBT-100 will produce more benefits over a longer period of time.

High Tolerance to Lagoon Conditions

Two of the most important factors inhibiting the growth and function of animal waste microbes are pH range and low temperatures. NBT-100 works over a wider pH range than other available products and has been demonstrated effective in temperatures below 40 °F. The result is that the NBT-100 technology can be used anywhere, in any lagoon environment.

Highly Effective Antibiotic and Enzyme Actions

NBT-100 produces substances with antibiotic-like properties that reduce harmful pathogens such as E. coli and fecal coliform bacteria by over 95%. Enzymes produced accelerate the process of pathogen reduction. Concerns about lagoon runoff, groundwater contamination and danger to human health are eliminated.

Controls Nutrient Buildup

NBT-100 reduces concentrations of nitrogen up to 95%, phosphorous up to 75% and potassium up to 60%. This eliminates concerns about the effects of lagoon runoff in lakes and streams and allows lagoon water to be directly applied as fertilizer.

Reduces Odors

NBT-100 microbial action quickly breaks down organic matter into odorless gases. This greatly reduces foul odors, one of the biggest objections to CAFO operations.

Reduces Solids

Lagoon crusting and sludge buildup problems are significantly reduced by the application of NBT-100. Lagoon shrinkage will be a thing of the past.

Coupled with simple application techniques developed by Natural Biotechnology and GGT Waste, NBT-100 is an extremely cost-effective method to virtually eliminate CAFO waste and its associated problems of odor, water contamination, nutrient buildup and lagoon shrinkage.