

ARCTECH, Inc. is a diversified company that provides technologies, services and products to meet growing needs of clean energy and for preserving the environment. Formed as a spin-off company from the Environmental Science and Technology division of the Atlantic Research Corporation, the ARCTECH group through 25 years of experience in energy, energetics, environment and agriculture, has created holistic solutions in these interrelated market sectors. The entrepreneurial scientists and engineers at ARCTECH have pioneered the use of vast resources of coal and coal-derived humic acid products such as actosol® fertilizer, HUMASORB®, a multipurpose contaminant adsorber, Actodemil®, for cost effective disposal of munition, and an overall encompassing MicGAS™ technology for production of clean energy while reducing the build up of greenhouse CO<sub>2</sub> emissions. For additional information about our outside the box solutions, please visit our Web Site: [www.arctech.com](http://www.arctech.com).

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# 3PM™ PROCESS

*Pollution Prevention and Profit from  
Manure Process*

*Produces humic rich liquid fertilizer*

*Eliminates odor, pathogens and  
viruses from manures;*

*Modular design, applicable for small to  
large scale operations*

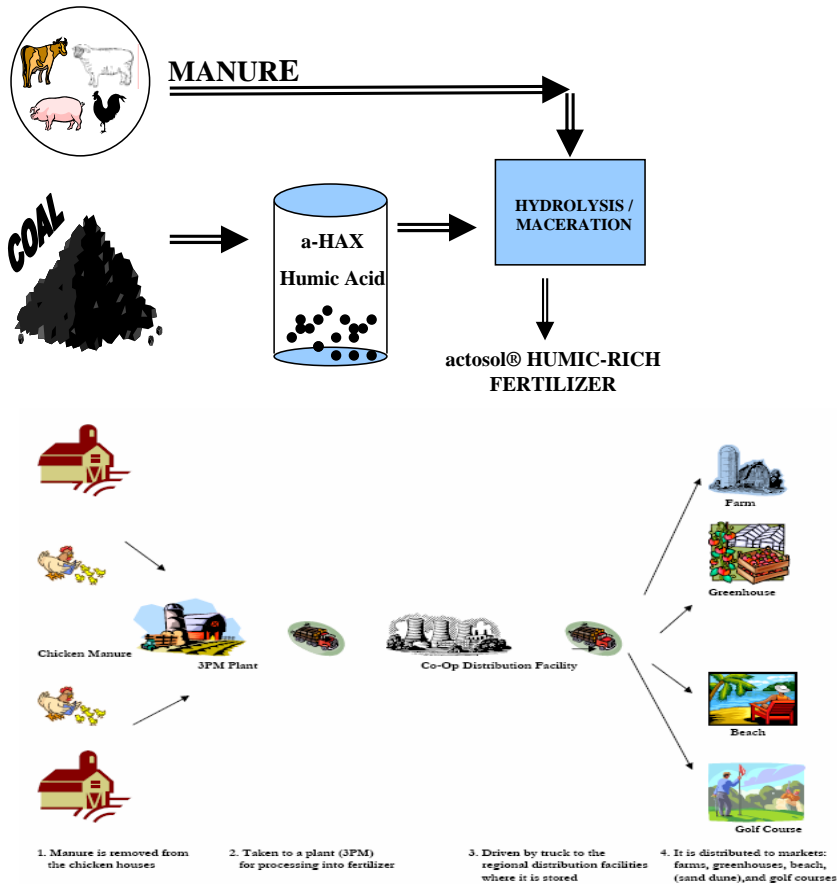
*Converts Problem into economic opportunity*



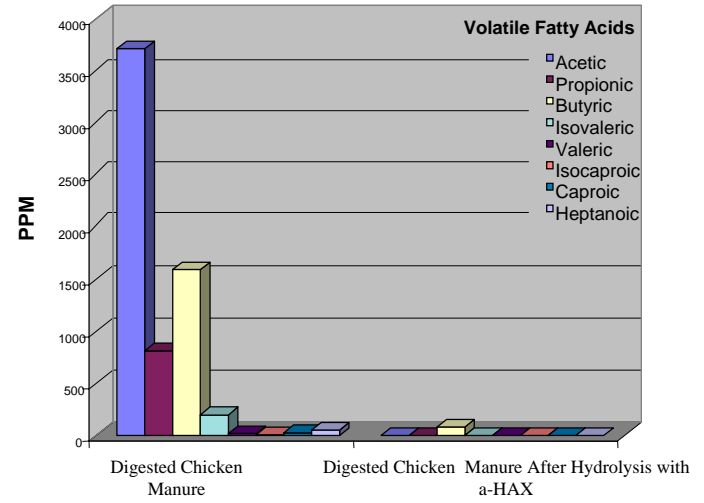
**ARCTECH**

*Preserving tomorrow's world... today*

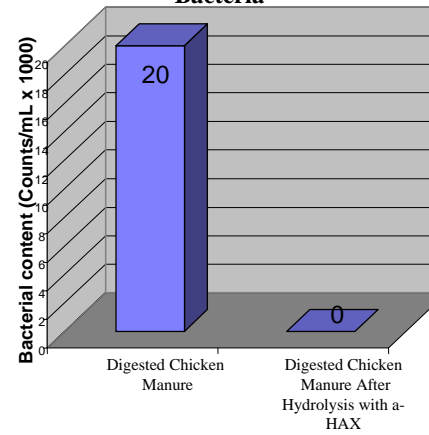
**3PM™** is an “outside the box”, innovative process that simultaneously de-odorizes, and macerates particulates, and completely converts animal wastes (e.g., chicken manure) into humic rich fertilizer. **The use of coal derived a-HAX humic acid in this Process is the unique innovation that sets 3PM™ apart from any other process that also uses anaerobic digestion to produce a fertilizer from animal wastes.** Preliminary economic analysis even for a small 2 ton per day processing plant, shows the process to be economical due to effective, high value humic acid fertilizer. A generalized flow scheme of the 3PM™ process is as follows:



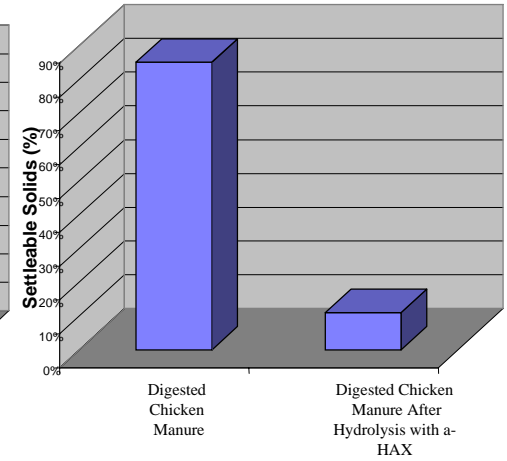
**a-HAX Treatment Reduces Volatile Fatty Acids**



**a-HAX Treatment Destroys Bacteria**



**a-HAX Treatment Reduces Settable Solids**



**actosol® creates vegetation in sand dunes**



**hydroseed mix plus actosol®**

