Alternative Swine Waste Management: Implications for Public Health

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PROBLEM?

" The impact of animal waste on the environment is a growing problem, not only in atoll countries but also in other Pacific Island countries."

- The 14th meeting of the Permanent Heads of Agriculture and Livestock Services In the Pacific (PHALPS) in May 2001

Conventional Sprayout systems require copius amounts of Water and pose a threat to underground and surface water resources

Current Waste Management System in the Pacific

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Directly contaminating the streams (American Samoa)

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Uncontrolled flow of manure around the perimeter of the piggery (Tinian)

Current Waste Management System in the Pacific

Waste effluents directly leading to a cesspool

Animal Waste contaminants

poses public health risk

Cryptosporidium

Leptospirosis

E.coli

asthma

Impact on Public Health

REASONS?

Lack of effective animal waste regulations to follow within the area for small scale operation

Existing waste management system are applicable to commercial operation and not to small-scale subsistence farmers

Lack or limited education on the benefits and effects of manure to the environment, animal and the community

Marianas Dry Litter Waste Management System

BANDIT MODEL 250XP
DANGER!
STOP TO THINK!!!
PUSH TO REVERSE

The Dry Litter system requires no water.
Pigs are comfortable in their bedding

Pigs can’t wait for their chips.
A soft bedding improves the pigs environment which
Helps to keep them happy and healthy

Pig activity turns and aerates the chips promoting the Decomposition of waste materials while greatly reducing odor as well

Key Features of the Marianas Dry Litter System

Roof overhang

Nipple Waterer

Slope Flooring

Rain Catchment

Waste Alley

Hog panels

Chipped organic materials are now readily available
On Saipan at the Transfer Station.

Composted waste materials along with the chipped wood and coconut
Make for a wonderful soil amendment-improving soil quality
And fertility

Less moisture, therefore less odor, less pests (flies) – healthier pigs, better productivity

Benefits to the Community

Reduced agricultural demand for water

Reduced exposure of pathogens from animal manure to ground and surface water resources

Reduced odor, pest and fly problems

Thank You very Much!!!

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