

# A NEW APPROACH TO THE TREATMENT OF LIQUID MANURE

## Treating liquid manure using penergetic g

After mixing the indicated quantity in water (at a rate of 1.0 kg per 100m<sup>3</sup> of manure to be treated) the mixture can be sprinkled using a watering can into the effluent channels or through the slats of the split-bottom floor of the livestock barn. The first thing that will become evident is that the noxious gases will disappear. Experience has shown that this is most change is evident quickest in the case of hog farming operations. For example, whereas prior to treatment levels of ammonia may have been 17 ppm, three days after applying penergetic g readings of 4 ppm will be more common.

A second effect: The manure becomes more fluid in the effluent channels and there are no longer blockages in the corners and at the effluent outlet to the storage pit. Also, after a few weeks, any crust that existed on the concrete walls in the livestock area becomes completely dissolved, meaning that the fluidity is decisively reduced by these deposits and subsequently the walls can be rinse simply with water and in the future crusty manure deposits will no longer occur at the walls.

Now let us follow the flow of the manure into the storage tank. Typically, most liquid manure storage tanks are characterized by a thick floating layer on the surface. Although it will take some time (sometimes several months), treatment with penergetic g will eventually result in this layer becoming totally dissolved. In most cases, this layer is reduced remarkably after four weeks. However, in the case of storage tanks located outside, as a result of the oxidation caused by the air a thin layer of 2-5 cm may always remain. Yet, experience has shown this to not have any negative consequences for the breakdown and eventual distribution of the slurry.

It has also been report that on some farms the crust layer was up to 1.0 metre thick. Nonetheless, after six months it was total dissolved and no residue layer remained. The process inside the storage tank is interesting and worth commenting on. The uppermost layer is normally thick and dry. In some cases these buoyant layers are thick enough to support a person stand on top of it. After applying penergetic g cracks and veins begin to appear and become filled with liquid. Next, the manure becomes more active as it begins to generate more or more bubbles and especially at the shell a scum forms. A definite reduction of the foul smell can also be observed.

## Treatment in the storage area

Manure pits and containers have to be treated in the following way: the quantity of penergetic g needed is put into a barrel, and afterwards the barrel is filled with liquid manure, the preparation is then stirred / mixed and then distributing into the liquid manure (with a bucket, watering can or other means). For those who have a stirring device in their slurry tank or lagoon, it is advantageous to stir the liquid occasionally during this process. Normally, one can observe a significantly increased generation of bubbles on the surface.

## Penergetic g benefits from contact with water

It seems to be of crucial importance that penergetic g is applied with plenty of water. If one takes a watering can the slat flooring in a livestock barns (such as the rearing stalls for pigs) should be watered carefully so that the microscopically small powder transfers its information quickly to a big quantity of water which then can get into much better contact with the microorganisms in the manure.

## The treatment of solid manure

With solid manure the procedure is similar, yet for maximum results a product with slightly different information (penergetic k) is used. The required quantity can be applied directly in the livestock barn – either onto the bedding or onto the flooring directly. The result is a faster decomposition process and a reduction in noxious gases in the barn. On the whole, these Penergetic products have a maximum effect without requiring a big effort.

## Creating a healthy circulation

The Penergetic approach encourages the recirculation of nutrients. Firstly, by reducing the harmful effects of animal effluents (and odours) right in the livestock barn and the slurry storage tank; and secondly because the penergetic powder dissolved in the manure, is transported to the fields where it can continue with its effect. A healthy circulation starts.

Penergetic users who have observed this circulation for the second or third year report that not only do the animals enjoy the green forage (or silage) that has been cut from fields treated with penergetic-manure, but also they experience increased milk production and their animals are in a better state of health. A further side benefit is that some farmers indicate that there are customers who can distinguish the aromatic milk of "penergetic-cows" from other milk - and request it.