

## Shallow Pit Effluent Treatment

### Australian Pork Farms Group, Australia

#### Background

Australian Pork Farms Group (APFG) is one of Australia's largest pork industry operators whose shareholders represent many independent swine farmers in South Australia and Victoria. APFG is a major contributor to employment, research and economic growth within the Australian pork industry.

As part of the Group's continued focus on farming and effluent management practices, it recently participated in a trial of BiOWiSH™ to assess its effects on improving environmental issues often associated with swine effluent such as excessive emissions and odor.



#### Site Operations and Trial Focus

The effluent management system at the trial site consisted of a "shallow pit" below floor, collecting animal waste from 10 pens within each shed.

This pit was regularly pumped out 2-3 times per week with effluent transferred to a large evaporative pond separate to the housing sheds.

Specific focus for the trial was to assess the impact of BiOWiSH™ on-site odor and Ammonia, Solids, Nitrogen and Biochemical Oxygen Demand (BOD), all typical measures of the strength of effluent.

#### Manure & Odor Treatment Benefits

- Accelerates the decomposition of organic waste (sludge)
- Reduces the need for pump outs
- Removes rather than masks odors
- Reduces Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) by up to 80%
- Reduces fly numbers by removing organic attractants
- Improves nutrient availability if effluent is used to irrigate pasture
- 100% natural and non-toxic

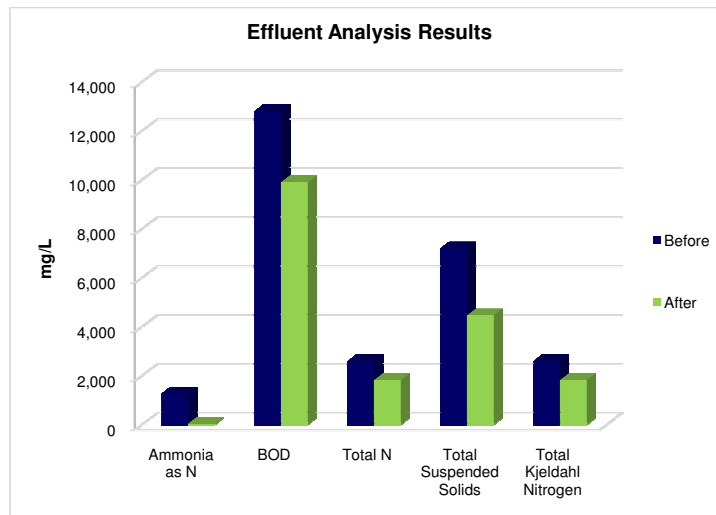
#### Available Sizes

- 1kg/2.2lb
- 5kg/11lb
- 10kg/22lb



## Analysis

Prior to treating with BiOWiSH™, baseline effluent samples were taken and analyzed at the Australian Water Quality Centre (South Australia) against which improvements could be measured. The results after treating with BiOWiSH™ for 4 weeks are shown below.



## Outcomes

Significant reductions were seen across all measured parameters:

- Ammonia reduced by 96%
- Total Kjeldahl Nitrogen reduced by 30%
- Total Suspended Solids reduced by 38%
- Biological Oxygen Demand reduced by 23%

## Testimonial

*“APFG noticed significant changes in the effluent composition and odor generated. Objective measurements of odor were not able to be taken, however there was enough evidence for APFG to continue to assess treatment results and odor incidence at other sites”. Rod Hamann, CEO, Australian Pork Farms Group*

## Contacts

### BiOWiSH Technologies

Tel: +1 312 572 6700

Email: [animalag@biowishtech.com](mailto:animalag@biowishtech.com)

Web: [www.biowishtech.com](http://www.biowishtech.com)

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