



# R&D Snapshot

## Effect of Feed Wastage on Piggery Manure Characteristics and Methane Potential

APL Project 2015/010

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**Purpose:**

- To quantify the effects of different rates of feed wastage on piggery effluent characteristics and potential methane yields.
- To validate the method for estimating piggery feed wastage incorporated in the PigBal 4 model.

**Take home messages:**

- A 5% change in feed wastage equates to 82,000t feed/yr or 1 teaspoon feed/pig/hr on a national scale.
- Increased feed wastage resulted in incremental increases in concentrations of total solids, volatile solids, chemical oxygen demand, most nutrients, volatile fatty acids and methane.
- Increased biogas energy savings from higher levels of feed wastage is insufficient to compensate for increased feed costs.
- Feed wastage in PigBal 4 did not accurately predict feed wastage levels in AUSPIG. Further AUSPIG simulations are needed for incorporation into PigBal 4 along with a revised ingredient database to improve consistency between modelled and measured feed composition.

**Additional information:**

- Contact Janine Price at [janine.price@australianpork.com.au](mailto:janine.price@australianpork.com.au) or 02 6270 8827 for the full report.

