

# Dealing with Odour Complaints

## ***A case study from the APL “Environmental Training Package for Piggery Managers”***

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What would you do if you received a serious odour complaint from a neighbour? Would you ignore it or attempt to solve it? It pays to be armed with information.

This case study is the first of a series modified from the APL “Environmental Training Package for Piggery Managers”. Participants at workshops for the training package work through a series of case studies each highlighting problems and dilemma’s faced by the fictional Farmer MacDonald.

### *Background Information*

Odours from piggeries become an issue when they cause nuisance to neighbours or other receptors. The factors defining odour nuisance are: Frequency, Intensity, Duration and Offensiveness (the so-called “FIDO factors”). If a receptor is frequently exposed to highly offensive, intense odours for lengthy durations, the odour is clearly creating a nuisance. If low level odours are received only occasionally, it is less likely that the odour will be regarded as a nuisance.

Little can be done to change a neighbour’s perception of odours. However, piggery operators have some ability to change odour creation, odour release and odour dispersion to reduce impacts to neighbours. For instance, at a piggery where carcasses are left uncovered in a pit, odour creation could be reduced simply by covering the carcasses with soil. For some practices at a piggery, the timing of odour release can be controlled. For instance, a manager can control the timing of effluent irrigation, pond desludging and spreading of sludge. If odour is dispersed more quickly, the level of odour impact at the neighbour will be lower.

As a general rule, odour disperses best under warm, windy conditions and least under overcast, still conditions. Odour generally does not disperse much early in the morning or early in the evening particularly in cool weather. Odorous air also tends to drain from areas of higher altitude to areas of lower altitude, a phenomenon known as katabatic drift or valley drainage.

### *The Problem*

Farmer MacDonald has received his first ever complaint about odours from two neighbours who live in new homes to the east of his piggery, overlooking Platypus Creek. The neighbours have said that they noticed the odour on the evening of both Tuesday and Wednesday.

### *Assessment*

Farmer MacDonald is very sceptical that the piggery is the source because:

- He has been operating his piggery to his usual high standard and does not think the sheds or effluent ponds are creating more than the usual amount of odour.
- There was very little wind on Tuesday and Wednesday evenings with an occasional gentle breeze to the north-east, not the east (i.e. not towards the houses).
- Although he did irrigate effluent on Tuesday and Wednesday afternoon and Thursday morning, he only irrigated creek flats on the north-western side of his property, well away from the neighbours houses.
- He has occasionally noticed faint odours from a dairy located to the south-west of the houses. The odour occurs when the effluent collected after each milking is irrigated. The wind direction indicates that odour from this source would be carried directly towards the houses.

#### *Identification of the Odour Source*

As Farmer MacDonald points out, the dairy could well be the odour source. The relationship between the locations of the dairy and houses; and the wind direction certainly make it a suspect! So does the timing of the odour, which coincides with the evening irrigation. However, there is also evidence that the piggery may be the cause. Little dispersion of odour would be expected in the evenings, which coincides with Farmer MacDonald's effluent irrigations on the days of the complaints. Although Farmer MacDonald was irrigating land well away from the neighbours, it was located adjacent to Platypus Creek. The wind blowing gently to the north-west would convey a concentrated plume of odour towards Platypus Creek. From there, the odour would drift along the creek, towards the houses. Hence, it appears that either the dairy or Farmer MacDonald's effluent irrigation (or both!) could be the source of the odour.

#### *Solutions*

Farmer MacDonald should talk with the neighbours and point out that he doesn't think that the piggery or the ponds are the source of odour as these are being maintained to their usual standards. While it is OK to say that the dairy could be the source, he should acknowledge that the odour could also have come from the effluent irrigations on land near Platypus Creek. It would be useful to explain why he thinks the effluent irrigations may be the cause (little odour dispersion at that time of day, valley drainage of concentrated odour plume). He should also make a commitment that effluent will not be irrigated after mid-afternoon, or when the wind is blowing directly towards the houses, in future.

COMMUNICATION, COUPLED WITH CORRECTIVE ACTION, IS AN IMPORTANT KEY TO RESOLVING COMMUNITY ISSUES. It would be worthwhile for Farmer MacDonald to follow up the neighbours in a few weeks to verify that the issue has been resolved.

Peter Capp of Spring Ridge recently attended a workshop at Gunnedah. He found that the package was very helpful, particularly to anyone considering an expansion. The content of the package, and those presenting the information, focussed on management issues and easily separated regulatory compulsion from management

good sense. Peter found that the package created a definite link between sound environmental management practices and improved financial performance.

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*The Environmental Training Package for Piggery Managers is now being presented as a series of workshops throughout Australia. Your group may be eligible for APL funding assistance. For more information, please contact the National Co-ordinator, Robyn Tucker, on 03 – 5381 0709 or 0419 – 787 137.*

