



PIGGERIES

This fact sheet outlines a range of land use planning considerations relevant to the establishment, expansion or modification of piggeries in Western Australia.

This fact sheet has been prepared to assist planners implement <u>State Planning Policy 2.5:</u> <u>Rural Planning.</u>

What is a piggery?

Piggeries are premises (land and/or buildings) used for the breeding or housing of pigs.

Types of piggeries

Piggeries are defined by the type of pig stock they accommodate, their intended purpose (breeding or meat growing for slaughter) and their relationship with the land. They are either housed in indoor sheds and pens or as free range pigs in outside sheds or rotated outdoor pens.

Indoor

Conventional: Pigs are housed in sheds with partly or fully slatted flooring to allow for the collection of waste. Conventional piggeries are suitable for all pig classes as they allow nutrition and husbandry to be tightly controlled. Large amounts of water are required for the cleaning of sheds.

Deep litter: Pigs are housed in enclosed structures with pens bedded with straw.

Outdoor

Rotational: Pigs are kept in small paddocks with huts or other shelters until they are ready for sale or slaughter. Pigs are rotated around paddocks on a sixmonthly rotation. Once rotated out, the paddock will go through a non-pig phase which involves growing and harvesting crops to accelerate nutrient removal.

Feedlot: Pigs are kept in permanent outdoor pens until suitable for sale or slaughter. Feedlots are located within a controlled drainage area so that nutrient rich effluent (generated from rainfall run-off from the pens) is separated from surrounding clean run-off. The base of the pen is sealed to prevent salt and nutrient leaching.

Farm design and operations

A piggery includes:

- infrastructure for housing and feeding pigs;
- transport of pigs to and from the site;
- transport, handling and/or disposal of animal feed, used bedding and/or waste on or off-site; and
- handling and disposal of deceased or 'retired' pigs on or off-site.

It is important for piggeries to satisfy legal, planning and environmental requirements. This will minimise the potential for conflict with neighbours, manage future environmental impacts and ensure long term viability. The design of sheds and associated infrastructure is guided by industry best practice.

Further information regarding farm design can be found in <u>National Environmental Guidelines for Rotational Outdoor Piggeries 2013</u> and <u>National Environmental Guidelines for Piggeries 2010</u> prepared by Australian Pork Limited.

Planning context

Scale of the proposal: The scale of a proposal is a critical factor in considering matters such as:

- the distance necessary to manage impacts on sensitive land uses;
- whether waste management arrangements are suitable;
- potential visual impacts;
- management of odour, dust and noise; and
- the extent of conditions required to manage potential impacts.

To define the capacity of a piggery, pigs are measured in Standard Pig Units (SPU) which are based on the volatile solids (VS) produced. One SPU is the equivalent of an average sized 'grower' pig which produces 90kg of VS per year. The Australian Pork Limited *website* provides Nutrient Balance Calculators for conventional and rotational piggeries. These calculators assist in understanding the quantity of nutrients in VS, so it can be reused appropriately.

Access to water: Water of a suitable quality and quantity is required for domestic use, drinking supplies, shed cooling, shed sanitisation, fire protection, irrigation of landscaping and domestic use.

Flooding: Flat sites may be subject to localised flooding and waterlogging which can cause the spread of nutrients. Piggeries are generally located above the 1 in 100 year flood event.

Vehicle access: Vehicle movements to and from the farm need to be considered, including:

 the location and design of access roads so that vehicle movements (including dispatch and/or deliveries of feed, pigs and waste, and associated farm practices) can be undertaken in a manner that minimises disturbance to nearby land uses; and





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the volume and type of vehicles accessing the premises each day.

Visual impacts: Potential visual impacts can be managed by:

- using building materials that are sympathetic to local landscape character and environment;
- siting sheds and farm infrastructure to take best advantage of the screening provided by local topography; and
- utilising existing or planted vegetation as a screen.

Buffers: Piggeries may emit odour, dust, noise and light. The need for buffers and management of impacts depends on the design and operational approach taken.

Use of new technology, careful site planning and contemporary management techniques may allow substantial reductions to the buffer distances prescribed in Government policy and industry standards. Strategies include:

- vegetation screening and landscaping;
- optimal shed location, building materials and shed design;
- anaerobic digester tanks; and
- mechanised approaches to shed ventilation and cleaning.

Buffers may also be required to protect water quality in nearby waterways and wetlands. The buffer size will depend on the design and layout of the premises, the risk of water contamination, and the technology and management measures used to protect the waterway or wetland.

Further information on how to determine a buffer can be found in <u>State Planning Policy 2.5 Rural Planning</u>.

Waste management: The management of deceased pigs, spent bedding and effluent are key factors in ensuring the environmental sustainability of a piggery. Excess waste that cannot be utilised by plants or taken off-site may require large nutrient ponds. Depending on the treatment proposed, the ponds may generate impacts that are greater than those of the sheds or pens where the pigs live.

Where pigs are kept outdoors, odours will concentrate depending on the time pigs spend in the same location, particularly if the period is more than two years.

Development conditions may need to be imposed where a rotational piggery is proposed, to control the rotation cycle (referring to either the number of SPUs per hectare or by rotation frequency) considering:

- the location of vegetated strips where they can protect water bodies from nutrients;
- the location and size of effluent ponds and/or method of waste disposal; and
- drainage and proximity to watercourses.

Environmental licensing and works approval:

Piggeries are listed as a prescribed premise in <u>Schedule 1</u> of the <u>Environmental Protection</u>. <u>Regulations 1987</u>. Under sections 52 and 53 of the <u>Environmental Protection Act 1986</u> a works approval is required for construction of prescribed premises or to carry out certain work. Prescribed premises require a licence or registration if they cause emissions.

Piggeries with a production or design capacity of 1,000 animals or more are prescribed under Category 2 in <u>Schedule 1</u> of <u>Environmental Protection</u> <u>Regulations 1987</u> and require a licence under section 56 of the <u>Environmental Protection Act 1986</u>. Piggeries with a production or design capacity between 500

and 1,000 animals are prescribed under Category 69 of the above regulations, and may apply for registration instead of a licence.

As outlined in *Guidance Statement: Land Use Planning*, it is Department of Environment Regulation's policy to assess applications under Part V Division 3 of the *Environmental Protection Act 1986* concurrently with applications for development approval and to make a determination once relevant planning decisions have been made.