

Applying for a planning permit for a pig farm

Planning Practice Note 86

December 2022

This practice note provides guidance for applicants and responsible authorities about the preparation and assessment of planning permit applications for pig farms.

Planning for sustainable animal industries

Victoria's animal industries are significant contributors to the Victorian economy. They are major employers in rural and regional Victoria, employing around 52,000 people (on farm and in processing). Animal industries contribute over 60 per cent (\$8.1 billion) of Victoria's total value of agricultural production.

The planning framework has been developed to support the growth of animal industries, while protecting the environment and community amenity.

How is a pig farm defined in the planning scheme?

The following land use definitions apply in the planning scheme:

Animal production – Land used to keep or breed farm animals for the production of livestock, eggs, fibre, meat, milk or other animal products.

Pig farm – Land used to keep or breed pigs.

What are the different types of pig farms?

A pig farm (also called a piggery) can involve any, or a combination of, three pig production stages:

- breeding - including the keeping of breeding stock during mating, gestation (pregnancy) and farrowing (giving birth)
- weaning (of piglets)
- growing/finishing (to market size).

While a pig farm may include more than one production stage, it will generally be classed as one of the following systems:

- breeder unit
- weaner or nursery unit
- grower or grower-finisher unit
- farrow-to-finish unit (which includes all stages).

Production systems can be broadly classified as **indoor** or **outdoor**.

Indoor systems

In an indoor system, pigs are housed permanently in sheds. Indoor systems may have **conventional housing** or **deep-litter housing**, or a combination of both:

Conventional housing comprises concrete flooring where effluent



collects into pits or channels, requiring regular flushing or draining.

Deep-litter housing consists of straw, sawdust, rice hulls or similar bedding substrate on a concrete or compacted earth floor. The bedding absorbs manure and removes the need for water cleaning. Spent bedding is removed and replaced at regular intervals or before a new batch of pigs enter the sheds.

Outdoor systems

An outdoor system is where pigs live outdoors in paddocks or pens. Outdoor systems can be categorised as **rotational outdoor** or **fixed housing**.

In a **rotational outdoor system** pigs live outdoors in paddocks and are moved regularly to enable paddocks to regenerate.

The placement of pigs on the land (the pig phase) forms one phase of a rotational outdoor system. Following each pig phase, a cropping/pasture phase removes excess nutrients (for example, manure and feed waste) by harvesting plants which have been grown on land after the pigs have been moved.

While the pigs can generally forage on plant material in the paddock, they will also be given feed to meet their nutritional needs. Feed is usually provided using movable self-feeders or troughs, and water is provided in permanent or moveable troughs. Mobile shelters (for example, huts) and drip or spray cooling systems are provided for climate control.

Some producers describe their rotational outdoor pig farms as 'free-range', 'pastured' or 'regenerative farming'.

In a **fixed housing system** pigs are kept in permanent outdoor pens, usually with a shelter provided. The pens have a sealed base and drainage system to manage runoff and manure.

Hybrid systems

Some pig farms include both indoor and outdoor systems. For example, breeding sows will have free access to paddocks where their piglets are born and raised. Once weaned, the piglets are transferred to indoor deep-litter housing to be grown to market size.

What is a piggery complex?

The term 'piggery complex' is used in this practice note. This refers to the following elements of a pig farm:

- Buildings, paddocks, pens or areas where pigs are housed.
- Areas where pigs are yarded, tended, loaded and unloaded for transport.
- Areas where manure and/or effluent are accumulated or treated, pending on-site reuse or transport off site.
- Areas where pig feeding facilities are maintained, or where feed is prepared, handled or stored (including feed mills).

'Piggery complex' is often used in the context of separation distances and buffers. More information is provided below.

How is the capacity of a pig farm described?

The environmental impact of a pig farm depends on the type of production system and the types of pigs being kept. Types of pigs include sows, boars, piglets, weaners, growers and finishers. Their sizes and impact vary.

The capacity of a pig farm can be described in three different ways:

1. **Standard Pig Units (SPUs):** An SPU is based on manure and waste feed output. The manure and waste feed produced by a single SPU represents the amount of volatile solid typically produced by one average-sized grower pig. For other pig sizes (e.g. piglets, weaners, sows, boars), SPU multipliers are applied to represent differing amounts of waste.

Defining the capacity of a pig farm in SPUs provides an accurate estimate of the amount of waste a pig farm will generate. Waste influences environmental risk and so the assessment and management of environmental and amenity impacts are often based on SPUs.

In the case of rotational outdoor piggeries, the stocking density of the land is sometimes expressed in SPUs per hectare.

2. **Total number of sows:** Pig numbers can be described in terms of sow numbers on the basis that farms generally maintain a constant number of sows and offspring.



3. Total number of pigs: The total number of pigs is used to consider whether an Environment Protection Authority (EPA) works approval is required. An EPA works approval is required to establish any farm of more than 5000 pigs. More information on the works approval process can be found at: epa.vic.gov.au

When is a planning permit required?

A planning permit is required to use land and to construct a building or construct or carry works for a pig farm in the following zones:

- Farming Zone
- Rural Activity Zone
- Green Wedge Zone
- Green Wedge A Zone
- Rural Conservation Zone
- Rural Living Zone
- Urban Growth Zone.

Pig farms are prohibited in commercial zones, industrial zones, residential zones and the Urban Floodway Zone.

In addition to these zone controls, there may be provisions of a planning scheme (for example, overlays and particular provisions) that have additional planning permit and other requirements (for example, a permit may be required to remove native vegetation).

The application process for low density outdoor pig farms is simplified if requirements specified in clause 53.16-2 of the planning scheme are met. The simplified process is designed for pig farms that pose a low level of risk to amenity and the environment if carefully sited and managed.

The *Victorian Low Density Mobile Outdoor Pig Farm Planning Permit Guidelines* (DEDJTR, June 2018) are incorporated into the planning scheme. They assist planners to determine if an application meets the requirements for the simplified process. See also the section on notice and Victorian Civil and Administrative Tribunal (VCAT) review below.

Before lodging a permit application, prospective applicants should contact the relevant local council to confirm:

- what planning controls affect the property
- what planning permission is required

- the matters that will need to be addressed in the application.

Depending on the size and location of the pig farm, other approvals may be required before a pig farm can commence operating or expand (for example, a works approval from the EPA).

Application considerations

This section outlines some of the matters to be considered when preparing an application for a pig farm. Information and advice in this section is drawn from the following industry guidelines:

- National Environmental Guidelines for Piggeries (Australian Pork Limited, 2018) – ‘NEGP’
- National Environmental Guidelines for Rotational Outdoor Piggeries (Australian Pork Limited, 2013) – ‘NEGROP’
- Piggery Manure and Effluent Management and Reuse Guidelines (Australian Pork Limited, 2015) – ‘Manure Guidelines’.

These guidelines present national industry best practices for the planning, design and management of pig farms to minimise environmental risk.

Appendix 1 of this practice note provides references to the relevant sections of the guidelines that can assist in the preparation and assessment of an application. See also the *Victorian Low Density Mobile Outdoor Pig Farm Planning Permit Guidelines* (DEDJTR, June 2018) where relevant.

The type of information provided with a planning permit application should be proportionate to the anticipated environmental and amenity risk of a proposal.

Some low risk proposals may meet the requirements for a simplified application process. The requirements are discussed in the section on notice and VCAT review below.

Amenity and environment impacts

To operate in a manner that is consistent with orderly and proper planning and protection of the environment, a pig farm must integrate environment and amenity protection into all aspects of siting, design and operation.

Potential amenity impacts include:

- odour
- dust



- noise
- vermin and flies
- visual impacts
- traffic movements.

Potential environmental impacts include:

- impacts of nutrients, salts and organic matter on water quality (surface and ground water), vegetation and soils
- soil erosion and compaction
- impacts on vegetation.

The risk of impacts will vary depending on the site and the scale and type of pig production system proposed. For example:

- Odour poses the greatest risk of impact to amenity for large indoor systems where a large amount of manure is concentrated.
- Nutrient management and the potential impacts to soils, surface waters and groundwater are often the greatest environmental risk for rotational outdoor systems.

Risks of impact to amenity and environment must be clearly identified through site selection, farm design, and operational and best practice management strategies.

Site selection

Site selection is an important factor in the mitigation of amenity and environmental impacts. Consideration should be given to:

- avoiding areas of identified environmental sensitivity, vegetation protection, or flooding or inundation (which may be indicated by planning scheme overlays)
- places of potential Aboriginal cultural heritage
- providing adequate land area to manage effluent, manure and contaminated stormwater
- providing adequate separation from sensitive land uses (for example, neighbouring dwellings)
- providing adequate buffers to property boundaries and environmentally-sensitive features, including surface water (waterways and waterbodies) and groundwater
- the suitability of road access for vehicles servicing the site
- any plans for future expansion.

Design, operation and management

Pig housing

For an **indoor** system, the design and layout of buildings should consider:

- the number of pigs to be housed
- herd composition
- housing types
- features of the proposed site (for example, soil type, topography and vegetation)
- local climatic conditions (and the need to insulate and ventilate housing).

For an **outdoor system**, consideration should be given to the location and rotation of facilities (such as shelters, feeders and watering points) for the management of nutrients. Pigs exhibit a distinct dunging pattern, with most manure deposited between the feeding and shelter facilities. These facilities can be regularly rotated around the paddock to disperse nutrients more evenly.

Buffer distances to surface waters and groundwater

Consideration should be given to the design and management of the piggery complex to prevent uncontrolled release of effluent, manure or contaminated stormwater.

Buffers between the piggery complex and surface waters (such as rivers, creeks and dams) assist to protect water quality by preventing sediment and nutrient transfers in runoff or eroded soil.

Groundwater quality can be affected by nutrients and salts leaching through soil. A piggery complex should be sited at least 2 metres above any groundwater and avoid areas where groundwater is shallow or poorly protected. Areas with vulnerable groundwater should also be avoided for manure reuse.

Under clause 66 of the planning scheme, an application for a pig farm must be referred to the relevant water board or water supply authority if it:

- is in a Special Water Supply Catchment Area listed in Schedule 5 of the *Catchment and Land Protection Act 1994*, and
- provides water to a domestic supply.



Separation from sensitive land uses

Separation from sensitive land uses is an important measure for mitigating the impact of odour, dust and noise on the amenity of neighbours.

There are currently no mandatory separation distances specified in the planning scheme for pig farms. However, mobile outdoor pig farms that meet setback distances (and other requirements) specified in clause 53.16-2 of the planning scheme are exempt from the third-party notice and review requirements.

The NEGP and the NEGROP can be consulted for guidance with respect to separation distances. Refer to Appendix A of the NEGP for indoor systems and Section 8 of the NEGROP for outdoor systems.

Effluent, manure and mortalities

For an indoor system, the key elements of effluent, manure and mortalities management are:

- effluent collection and treatment
- separation of solids (before treatment and reuse) – only applicable to certain pig farms
- storage and treatment of manure and mortalities – only applicable to certain pig farms
- reuse of manure and effluent, usually as inputs to a farming system (inorganic fertiliser substitutes), where nutrients added to the soil through reuse are removed through the harvesting of plants (to achieve a nutrient balance)
- mortalities management, often through composting.

For a **rotational outdoor system**, manure and waste feed are deposited directly onto the paddock. Depending on stocking density and paddock management, nutrients may accumulate quickly and typically are unevenly distributed, causing issues with nutrient runoff and leaching. Measures to manage soil nutrient levels should be considered.

Environmental management, monitoring and assessment

Consideration should be given to the ongoing management of environment and amenity risks following the farm's establishment. This may include the following:

Environmental Management Plans

An Environmental Management Plan (EMP) provides a framework for the ongoing evaluation and active

management of farms and their risks to environment and amenity. An EMP should be reviewed and updated to reflect changing practices, approaches, risks and other circumstances.

An EMP should include:

- a description of the site and the proposed operation
- strategies and measures to address odour, dust, noise, effluent, stormwater, manure, dead animals, waste chemicals, chemical containers, vermin, pest animals and weeds
- a risk assessment, including strategies and measures to address any risks identified from the assessment
- a monitoring system to assess environmental performance
- a contingency plan to manage environmental issues that may arise during construction and operation, such as:
 - loss of water or power supply
 - interruptions to feed supply
 - flooding and fire
 - disease outbreaks and mass mortalities
 - chemical or effluent spills
 - pesticide use
- procedures to:
 - respond to complaints
 - investigate causes after an environmental incident
 - review management practices and management of incidents
 - report to the responsible authority (if required)
- record keeping protocols for matters such as:
 - complaints
 - manure reuse
 - nutrient management
- a plan for the regular review and updating of the EMP
- a Nutrient Management Plan (see below).



Nutrient Management Plans

An EMP should be accompanied by a Nutrient Management Plan (NMP). A NMP focuses on managing nutrients added to the soil by holding pigs on paddocks or applying nutrients to re-use areas. An NMP:

- documents the operation
- proposes a nutrient budget
- evaluates how evenly manure nutrients are spread on pig paddocks
- identifies potential nutrient loss pathways
- provides an action plan for managing the risks
- describes the soil monitoring protocol.

A soil survey completed early in the planning phase will provide information on the range and distribution of soils to ensure an appropriate NMP can be formulated.

Environmental monitoring and assessment

Environmental monitoring involves confirming that a pig farm is operating as expected and measuring any environmental impacts through ongoing testing, evaluation, and assessment of the effectiveness of management strategies and measures. A monitoring and assessment plan may form part of a broader environmental or nutrient management plan for the pig farm.

Other considerations

Biosecurity

Biosecurity is a set of measures or practices designed to protect against the entry and spread of pests and diseases. Effective biosecurity is important for both individual farms and the broader industry.

Further information on the protection, management and treatment of pig diseases can be found on the Agriculture Victoria website at: agriculture.vic.gov.au

Agriculture Victoria can provide advice on biosecurity measures and considerations for new farm applications in proximity to existing large intensive or sensitive pig facilities.

Other requirements

As well as planning requirements, other legislation and requirements exist for pig farms. These are outside the scope of this practice note. The applicant

is responsible for understanding and complying with all other relevant legislation and requirements.

Making an application

Applicants should contact the relevant council early in the process of preparing an application to check:

- the documentation, plans and supporting information that is required
- how the responsible authority will process the application
- if there are any issues that may affect the prospects of a planning permit being granted
- that the planning policies and controls in the planning scheme generally support the proposal
- whether the application is required to be referred to other authorities
- whether the application is exempt from third party notice and review requirements.

Where relevant, applicants are encouraged to talk to neighbours to identify any concerns. Taking the time to talk to neighbours at this early stage may save time if changes can be made to the plans to address their concerns. Most people appreciate the opportunity to discuss plans before the formal notice process commences, although it will not always be possible to make changes that satisfy every concern.

Information to be submitted with an application

Guidance about the information that should be submitted with an application is provided in Planning Practice Note 87: *Preparing a Planning Permit Application for Animal Production*.

Notice and VCAT review

Giving of notice involves the formal notification of the application to the owners and occupiers of adjoining properties and anyone else who may be affected by the proposal. Section 52(1) of the *Planning and Environment Act 1987* specifies how notification is to occur.

A person who is given notice of an application has the right to apply to the VCAT for a review of the responsible authority's (council's) decision.

In some instances, proposals are exempt from the notice and review requirements.

Under clause 53.16-2, an application for a low density outdoor pig farm is exempt from notice and review if the following requirements are met:



- The number of pigs does not exceed 150 sows or 1,000 standard pig units as calculated in Table 1 (below).
- The outdoor stocking density does not exceed 12 standard pig units per hectare as calculated in Table 1.
- A Nutrient Management Plan demonstrates pigs are kept outdoors on paddocks with:
 - a minimum of 50% ground cover
 - mobile housing and feeding infrastructure that is relocated at least every three months.
- An area used as a pig range, including associated buildings and works, is setback a minimum distance of:
 - 100 metres from a building used for a sensitive use (accommodation, a childcare centre, an education centre or a hospital)
 - 400 metres from land in a residential zone.

Table 1 Standard Pig Unit Conversion Factors

Pig Class	Mass Range (kg)	Age Range (weeks)	SPU Factor
Gilt	100 - 160	24 -30	1.8
Boar	100 - 300	24 - 128	1.6
Gestating sow	160 - 230	-	1.6
Lactating sow	160 - 230	-	2.5
Sucker	1.4 - 8	0 - 4	0.1
Weaner	8 - 25	4 - 10	0.5
Grower	24 - 55	10 - 16	1.0
Finisher	55 - 100	16 - 24	1.6
Heavy Finisher	100 - 130	24 -30	1.8

More information

Information about the Victorian Government’s ongoing work on planning for sustainable animal industries is available at: planning.vic.gov.au and agriculture.vic.gov.au.

Australian Pork Limited

Australian Pork Limited (APL) is a producer-owned organisation, supporting and promoting the Australian pork industry. It encourages best practice environmental management of Australian pig farms and updates its national guidelines regularly with the latest scientific information.

Enquiries can be sent to: apl@australianpork.com.au or contact the Environment Manager or Environment Officer on (02) 6285 2200.

The Australian Pork Industry Quality Assurance Program

The Australian Pork Industry Quality Program (APIQ) is a voluntary on-farm quality assurance system based on managing farm risks. The APIQ program has seven focus areas that include environment and biosecurity. APIQ program accreditation is underpinned by annual third-party auditing.

For accredited pig farms, planners and the community can have an increased level of confidence that rigorous environmental risk assessment and management, and continued improvements in on-farm practices, are assured through the APIQ program. More details are available at: apiq.com.au



Appendix 1

Relevant sections of national guidelines

Amenity/Environmental Consideration	NEGP reference (for all systems other than rotational outdoor)	NEGROP (for rotational outdoor systems)	Manure Guidelines (for all systems)
Site selection	Section 5	Section 7	
Pig housing	Sections 8.1 and 8.2	Sections 9 -13	Section 6.2
Fixed buffer distances	Section 6.1	Section 8.1	
Separation distances	Appendix A	Section 8	
Effluent management		Sections 9, 10 and 11	Section 10 - 12
Environmental risk assessment	Section 15	Section 14	
Environmental management plans	Section 17		

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ISBN 978-1-76136-191-3 (pdf/online/MS word)

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