# GUIDELINES FOR THE ESTABLISHMENT AND OPERATION OF POULTRY FARMS IN SOUTH AUSTRALIA

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Environment Protection Authority
Inghams Enterprises Pty Limited
Joe's Poultry Processors
Primary Industries and Resources SA
South Australian Farmers Federation
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## 1. PREFACE

These guidelines do not constitute a legal or statutory document but have been prepared to promote orderly development and economic operation of poultry farms while minimising their environmental impact and protecting the welfare of the birds. They complement State legislative requirements and enhance the administrative arrangements between Local Government and State Government authorities responsible for administering the establishment and effective operation of the poultry industries.

These guidelines are intended for use by proponents when preparing a Development Application and by Councils in framing and developing planning policies. These policies can then be inserted into Development Plans to guide the assessment of such applications.

The document should be used only as a guide by proponents and planning authorities. The provisions of existing Local Council Development Plans must be the basis for any decisions made by Councils.

The principal contact for anyone considering establishing a poultry operation will be the Local Council.

These guidelines have been prepared by the South Australian Farmers' Federation. Assistance from a number of government and industry representatives is also gratefully acknowledged (see Appendix 3).

As further information becomes available it is anticipated that these guidelines will need to be modified.

## 2. PLANNING PRINCIPLES

Planning principles and objectives for any poultry development include:

1. Minimal environmental (visual, odour, noise, wastes) impact and minimal impact on adjoining uses, with allowance for future expansion of operations.

2. Must be consistent with relevant planning principles and objectives articulated in Local Council Development Plans.

3. Maximise bird welfare.

4. Minimise disease risk.

**General**

Poultry farms should not create any significant adverse impact, including denudation, erosion, pollution of the environment, nuisance, human health risk,

bird welfare problems or loss of visual amenity. Poultry farms should be sited, designed and managed to ensure that odour emissions and noise are minimised (see Section 8 for minimum suggested buffer distances.)

All buildings and other ancillary structures should be sited as unobtrusively as possible. Suitable trees and shrubs should be planted and maintained around the sheds and other ancillary structures intended for animal husbandry, to visually screen these activities from adjoining roads and properties.

**Wastes**

All effluent and other wastes must be properly managed and disposed of without adverse effects on public health and the environment, including water resources. Solid or liquid wastes should not be spread on the property within the prescribed distance of dwellings, watercourses or roads (see Section 7.1 for buffer distances for waste disposal).

**Future Expansion**

Forward planning is an essential aspect of poultry farm development. Feed storage, drainage and effluent facilities all need to be sited in an appropriate manner. Experience has shown that poultry farms often expand in size within a few years. Therefore it is sensible to plan for future expansion.

**Local Development Plans**

Applications must be consistent with the relevant planning principles and objectives contained within the Development Plan of the Local Council. Councils should take account of potential urban encroachment when granting construction approval for the poultry farm, however the prime reference will always be the Council's Development Plan.

**Pests & Diseases**

The poultry farm operation should not cause a nuisance by the harbouring of pests or diseases, for example rodents.

**Bird Welfare**

All facilities should be designed with consideration for the welfare of the birds.

## 3. PLANNING APPROVAL PROCESS

Under current South Australian planning legislation (the Development Act 1993) the term "farming" does not include poultry farms. The Regulations under this Act include poultry farms under the definition of "intensive animal keeping" (ie. intensive animal keeping means the keeping or husbandry of animals in a broiler shed, chicken hatchery, feedlot, kennel, piggery, caged layer unit or other like circumstances, but does not include horse keeping).

Accordingly, poultry farms are a change of land use from general farming. This change of use requires planning approval from the relevant authority, which is generally the Local Council.

The following Government Departments and planning authorities may be involved or consulted in preparing an application by the proponents and their consultants:-

- Local Council
- Environment Protection Authority (EPA)
- Primary Industries & Resources SA
- Department for Transport, Urban Planning and the Arts
- Local Soil Conservation Board
- Health Commission

Other Government agencies may be called upon to attend where issues may be relevant to them, e.g. National Parks and Wildlife Service, Native Vegetation Management, State Heritage and Water Resources Branches.

The tables in Appendix 1 indicate the typical information which must accompany applications for the development of poultry farms of different sizes. Additional information may be required for sensitive sites or to comply with non-poultry farm related provisions of the approval process.

As the approval process requires that the application be lodged with the Local Council, preliminary discussions with the relevant Council are advised to gain an indication of the requirements of its Development Plan.

Depending on the zoning and size of the proposal, the Local Council may have to advise adjoining property owners and publicly advertise the proposal prior to making a decision on a poultry farm development. The right of appeal of persons other than the proponent will also depend on these, and other, factors.

The Development Act 1993 prescribes the notification required for a development application:

Category 1: Application is exempt from public notification.

Category 2: Application is subject to personal notice to adjacent properties with no third party rights of appeal.

Category 3: Application is subject to personal notice to adjacent properties, together with general public notification, with third party appeal rights.

Local planning authorities may also consult with other relevant authorities.

Schedule 21 of the Development Regulations 1993 includes any activities of environmental significance, including “the keeping of poultry involving an enclosed shed area exceeding 1,000 square metres”. Under Schedule 21, all proposed new developments or expansion of poultry sheds which will have a total area in excess of 1,000 square metres must be referred to the EPA for comment. The EPA has four weeks to give those comments and the Local Council must take due regard of the report.

Planning approval will be granted/refused on the basis of information presented in the application, in objections and in government agency reports. Special conditions may be imposed on the development as conditions of approval.

Under the Environment Protection Act 1993 guidelines such as this document can play a significant role in regulating activities.

**Mount Lofty Ranges and Barossa Valley Regions**

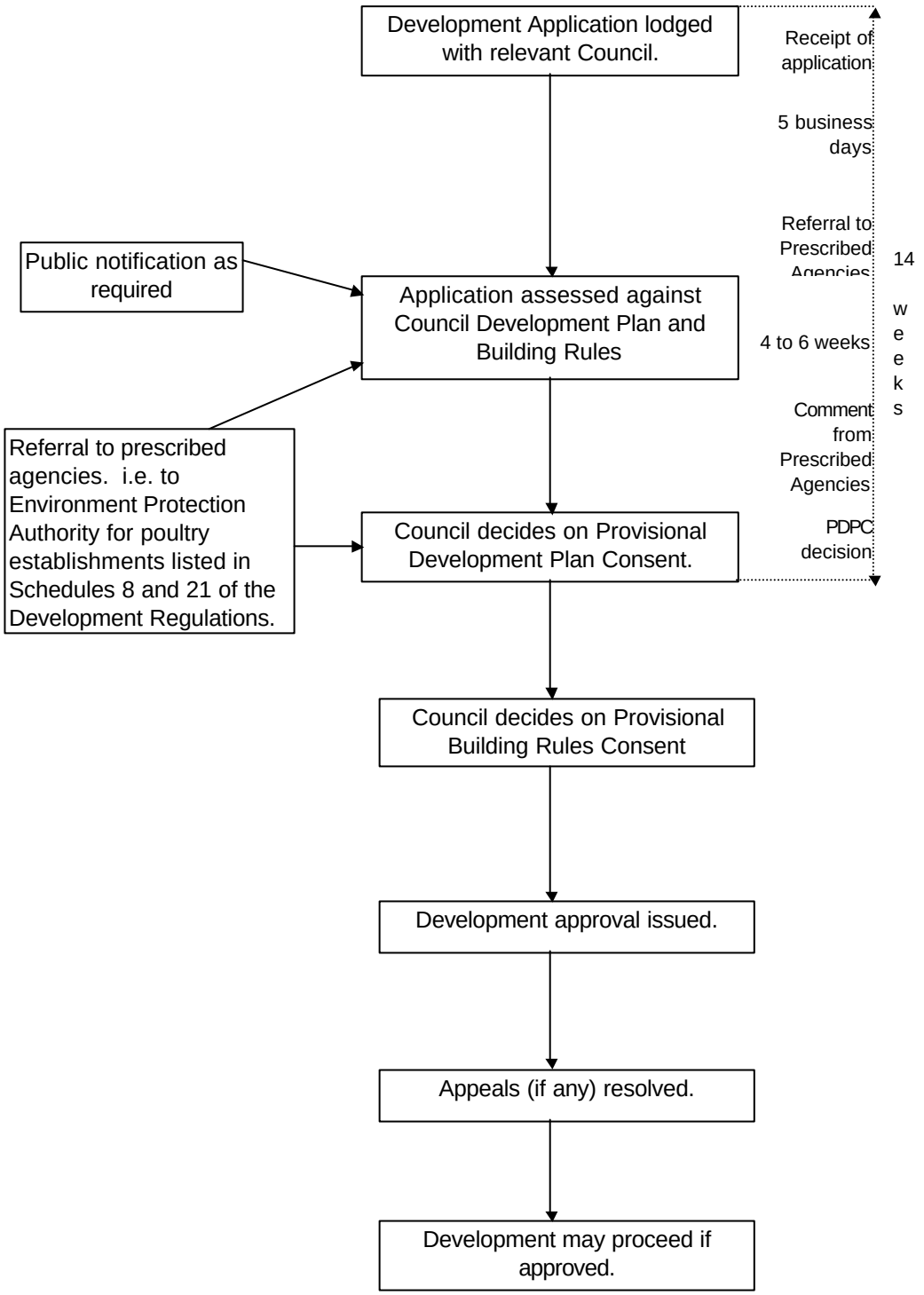
Pursuant to Schedule 8 of the Development Regulations 1993, poultry farms listed as "non-complying" development must be referred to the EPA.

In the Mount Lofty Ranges and Barossa Valley Regions, all intensive poultry farms are "non-complying" development and thus referral to the EPA is mandatory.

Public notification of the application will apply and no appeal rights are available to the applicant, but they are available to any person or organisation which has made a written representation during the public notification period.

The concurrence of the Development Assessment Commission (DAC) is required before a Council can grant a planning approval. Certain types of development applications will need to be referred to the DAC for ratification of Council's decision. The DAC is the Minister's independent decision-making body with respect to development applications.

## Figure 1 - Typical Development Approval Process for a Poultry Establishment



## 4. ENVIRONMENT PROTECTION ACT 1993

On 1 May 1995, the Environment Protection Act 1993 was proclaimed. Under this Act, all people have a general duty to minimise environmental harm and compliance with these guidelines will generally mean meeting the requirements to minimise environmental harm.

Proponents of a poultry development should be aware of the relevant provisions of this Act.

*Contact:* Environment Protection Authority. Level 7, 77 Grenfell Street, Adelaide, telephone (08) 8204 2000.

## 5. DESCRIPTION OF A POULTRY FARM

There are three distinct components to the modern poultry industry. These are layers (birds producing table eggs), broilers (production of chicken for meat) and breeder farms.

In general, thousands of purpose-bred chickens are delivered to the farm within hours of hatching. These birds are housed and raised within large, naturally or mechanically ventilated sheds, having some degree of climate control. Food is dispensed to the growing birds from bulk bins via an automatic feeder. A continuous supply of water is also made available. The shed layout depends upon the end product and is typically as follows:

### Breeder Sheds

These are the birds producing fertile eggs. They may produce layer strains or meat strains and the housing for both strains is similar.

The birds are housed on the ground with deep litter, or there may be partial or full slats. The eggs are laid in nest boxes from which they are collected frequently, then stored for transport to the hatchery. Food consumption is controlled to prevent birds becoming overweight.

At the end of their productive life, the birds are removed for processing, the used poultry litter (consisting of a mixture of bedding material and manure) is removed and usually sold as fertiliser. The shed is then cleaned and prepared for the next flock.

### Hatcheries

After collection, fertile eggs are taken to a hatchery where they are artificially incubated in machines which maintain the correct temperature and humidity for incubation to occur. Hatched chickens are usually moved off the premises to the brooding facilities within hours of hatch.

These guidelines are not designed to apply to hatcheries, as their operations are quite distinct from those of breeder, layer or grower establishments.

### Layer Sheds

Laying birds are generally housed in cages. Droppings fall through the cages' wire floor and may be caught on a belt which takes them away, or onto the floor from where they are periodically removed. Eggs can either roll onto a conveyor belt, or into a wire trough from which they can be collected. Some layer sheds may be similar to that described for breeder sheds, with similar egg collection systems.

### Grower Sheds

Replacement pullet and meat chicken growing facilities are similar, differing mainly in size (some modern meat chicken sheds may hold up to 50,000 birds) and the lengths of time the birds are kept (perhaps 6-7 weeks for meat and 10-16 weeks for layers).

Brooding is usually in part of the shed and as the birds grow, they are given more room. They are housed on the floor on litter.

While layer birds may have a restricted diet to prevent them becoming overweight, the meat chickens are fed *ad libidum* and both have free access to water.

At the end of the rearing cycle, the birds are removed, the poultry litter cleaned out and the shed sanitised ready for the next flock.

## 6. PROCESSING AND MARKETING

### Chicken Meat

The majority of meat birds are grown on a contract basis. Processors pay an agreed fee to growers who supply the expertise, capital and labour required to grow out the broilers. The processors maintain ownership of the birds and supply feed and transport.

Poultry slaughter, processing and wholesaling is governed by the SA Meat Hygiene Act 1994. Poultry processors must also comply with the Australian Standards for:

- Hygienic Production
- Construction of Premises Processing Animals for Human Consumption
- Premises Processing Meat for Human Consumption
- Transport of Meat for Human Consumption.

The SA Standard for Hygienic Processing of Poultry for Human Consumption must also be adhered to.

Poultry processing facilities must have HACCP (Hazard Analysis and Critical Control Points) based quality systems in place, are audited quarterly by SGS Australia and must be registered with the Meat Hygiene Unit of the Department of Primary Industries.

**Eggs**
The South Australian egg industry operates under a deregulated system and it is the responsibility of producers to find markets for their eggs. Egg producers may operate through marketing groups such as Southern Egg Pty Ltd or they may develop their own private markets.

There is an industry-wide move to quality assurance systems to ensure that customers' requirements are met. It is desirable that poultry enterprises develop suitable recording and management systems to facilitate the adoption of quality assurance.

## 7. SITE SELECTION AND DEVELOPMENT

Objectives:

- To ensure that noise, odour, visual impact, dust and pests do not cause unreasonable interference to the community.

- To minimise any adverse impact on adjoining land uses and the natural environment of the area.

- To ensure that soil, surface and ground waters do not become contaminated.

- To ensure effective operation of the poultry farm, including feed and water supplies, pick up and delivery of birds, and avoidance of waterlogging or flooding.

The site chosen therefore needs to take into account the following factors:

- risk of groundwater pollution and prevention of degradation of surface water
- flooding - be above the level of flooding with average recurrence interval of 100 years
- availability of suitable quality water
- road access for feed and livestock vehicles
- source of good quality rubble
- sufficient area for facilities
- manure and litter storage and disposal
- wind breaks
- dead bird disposal
- quarantine issues
- distance from existing or future residential development
- soil type
- proximity to processors
- proximity of feed mill
- availability of labour
- local topography
- local meteorology
- disposal of stormwater

## *7.1. Waste Management*

**Disposal of Dead Birds**

The EPA recommends against the disposal of poultry carcasses on-site as the burial of dead birds in trenches has the potential to cause environmental nuisance through:

- the contamination of ground and surface water;
- vermin and fly infestation;
- odour problems; and
- the creation of contaminated or degraded land.

Recommended practices are:

- Carcasses must be removed from poultry farms by an EPA licensed waste transporter or may be removed from the site by the farm operator in a vehicle that will not create and offensive condition, ie. liquids and odours must be fully contained by the vehicle. Freezing of dead birds may be an option to reduce odour problems associated with their transportation.
- Carcasses must be disposed of to an EPA licensed waste depot or to a waste treatment/disposal operation approved by the EPA.
- Carcasses must be stored on-site in sealed containers to prevent liquid and odour escape or access by vermin.
- On-site waste treatment/composting should be undertaken in an environmentally sustainable manner.

When burial methods are used, the excavation trench or pit should be a minimum of 3 metres above the water table. A final cover for all trenches and pits shall be 0.5 metres of compacted soil. The carcasses must be buried so that seepage will not issue from the pit, either surface or sub-surface, to cause spread of disease and/or pollution. When a burial pit is in use, care should be exercised to ensure that scavengers do not have access to the carcasses and that fly breeding cannot occur.

The off-site composting of poultry carcasses is the EPA preferred option as an environmentally sound method for the disposal of dead birds.

**Manure / Used Litter**

It is preferable for manure/used litter to be cleaned from the sheds and removed from the site on the same day.

For the litter to be disposed of on site, buffer distances must be preserved between land disposal areas and sensitive features. They are in addition to the buffer distances for the chicken sheds as described below and are calculated separately using Table 1. Litter storage on site should be on an impervious base with all clean rainfall runoff excluded from the site.

Distances are measured from the edge of the effluent disposal area. These buffer distances refer to dedicated waste disposal areas such as landfill and not to temporary waste storage prior to collection for off-site disposal. Some

common sense is required when waste is stored temporarily on-site to ensure that environmental impact is minimised.

If waste is incorporated into the soil (such as spreading of chicken manure), while these buffer zones need not be adhered to, care must be taken to ensure that nearby residents are not inconvenienced.

When waste is to be spread or discharged, account should be taken of actual and forecast weather conditions so as to prevent any waste being carried by the wind into the buffer zone, or the creation of an odour nuisance to neighbouring properties. In addition, nutrient loads in the soil should be taken into account.

**Table 1 - Buffer Distances Surrounding Waste Disposal Areas**

| Amenity | Distance (metres) |
|---|---|
| Urban residential zone | 500 |
| Rural farm residence not owned by poultry sheds | 100 |
| Public area | 50 |
| Public road - significant use | 50 |
| Public road - minor use | 20 |
| Any watercourse as defined by a blue line on a 1:50,000 current SA Government topographical map | 50 |

**Disposal of Waste Eggs**

Unhatched eggs should be disposed of by composting, by rendering at a byproduct plant or by any other environmentally sound procedure.

**Stormwater**

Stormwater run-off from buildings and hard soil should be directed towards a suitable, vegetated area and not directly into water courses.

**Fly and Rodent Control**

Flies and rodents should be controlled by the use of suitable hygiene management. All waste should be destroyed or removed quickly and effectively.

*Contact:* Environment Protection Authority, Level 7, 77 Grenfell Street, Adelaide, telephone (08) 8204 2001.

### *7.2. Water Supply*

Birds must have access to an adequate water supply, which is cool, clean and of suitable quality. Water is also needed for fire protection, shed sanitation and shed cooling.

Newly hatched chicks should go no longer than 72 hours without access to water and all other poultry should never be without water for more than 24 hours. Shorter periods apply during hot weather.

There should be on-farm reserves of a minimum of one day's calculated water requirements at maximum usage. The capacity of reserves should be based on water availability and reliability at the site of the development.

When a poultry enterprise is first established, or a new water source is obtained, the water should be tested for salts and bacterial contaminants. The optimum maximum salts level for normal production is 500 parts per million (ppm) and should always be less than 2,000 ppm. The ideal level of coliform bacteria is zero, however, a coliform count of up to a maximum of 100/ml could still be considered potable. The composition of bore and dam water may change with time and these sources may need more frequent monitoring.

In cages, each bird should have access to at least two drinking points where nipples or cups are used, or 10cm of trough per bird. For floor birds, the manufacturer's recommendation on the number of birds per drinker should not be exceeded and the drinkers should be checked daily to ensure they are working.

*Contact:* Primary Industries & Resources (SA) 25 Grenfell Street, Adelaide, telephone (08) 8226 0222

### *7.3. Vehicular Access*

The primary concern of the Department of Transport is to ensure that access to a development is safe and convenient.

A large poultry farm operation is likely to generate some traffic, especially large delivery vehicles and some roadworks may be necessary to accommodate this. For example, local road widening for separate right turn lanes and left turn lanes may be required. Funding for this activity would need to be negotiated by the developer, the Department of Transport and the Local Council.

Road frontage should provide safe and convenient access for farm workers and service vehicles.

Other requirements are:

- The development, including signs, should be fully contained within existing property boundaries.
- Sufficient on-site maneuvering area should be provided to enable all vehicles to enter and exit the site in the forward direction.

- Direct access will not be permitted to roads which are proclaimed controlled-access roads unless no other suitable alternative access exists.

*Contact:* Department for Transport, Urban Planning and the Arts, metropolitan area telephone 1300 360 067, country offices telephone 13 1084.

### *7.4 Electricity Supplies*

Arrangements for electricity supply need to be made with the ETSA Corporation. Supplies are generally available at minimal cost for small domestic requirements but a large poultry farm requires three phase supply which may have to be paid for by the poultry farm development at considerable cost.

*Contact:* ETSA, 1 Anzac Highway, Keswick, (08) 8404 5666.

### *7.5 Noise*

The noise generated by poultry establishments can travel large distances, causing considerable annoyance. Factors such as the number of birds, type of buildings and site topography will all influence the amount of noise emitted from poultry sheds and its level of annoyance. Noise emissions from existing poultry establishments are controlled by the Environment Protection (Industrial Noise) Policy 1994 (see Appendix 2 for details).

## 8. BUFFER DISTANCES

Environmental pollution such as water quality degradation, dust, noise and odours are affected firstly by good poultry farm design and management practices, and secondly by bird numbers and maintaining suitable buffer distances between poultry farms and impact areas. In addition, all activities which are likely to cause the increased emission of odours, dust or noise should be performed at the time of day and under prevailing weather conditions which cause least odour emission and impact on neighbouring properties.

Disease control is also an issue, with a number of serious poultry diseases being air-borne. Proximity of other poultry farms must also be taken into account (see section 8.1 on exotic disease buffers).

Development sites must be evaluated for suitability on their individual merits. Individual development applications will be assessed on their compatibility with the particular development site and the nature of the application being made. Therefore, these buffer distances provide a guide and each development application will be assessed based on the individual characteristics of the site and the proposed development.

A proposal should not depend upon neighbouring properties to supply buffer zones and Councils should also respect existing developments when a new proposal is being examined.

**Suggested** buffer distances are outlined in Table 2 below:

**Table 2 - SUGGESTED Buffer Distances Surrounding Poultry Sheds**

| Amenity | Distance (metres) | Principal Purpose of Buffer |
|---|---|---|
| Urban residential zone | 1,000 | environmental |
| Dwelling on another property | 500 | environmental |
| Dwelling on same property | 100 | environmental |
| Another poultry farm | 1,000 | disease/quarantine |
| National highway | 1,000 | disease/quarantine |
| Public road | 250 | disease/quarantine |
| Side or rear boundary* | 300 | disease/quarantine |

**If a proposed intensive poultry development is in an area where ostriches, emus or free range poultry are likely to exist, thought should be given to a greater safety margin (ie. 1,000 metres minimum).*

These buffer distances are suggestions only and indicate current industry best practice. They are not to be considered mandatory.

However, buffer distances required by Council Development Plans must be adhered to. In addition, broiler growers should confer with the processing companies regarding their buffer requirements.

Planning authorities should not support proposals for residential development in respect of:

a) a new residential zone within 500 metres of any existing poultry sheds; or
b) the rezoning of land to permit a new residential dwelling within 100 metres of any existing poultry shed.

Planning authorities are required to refer land division applications within 500 metres of a poultry farm to the EPA for comments under Schedule 21 7(7)(v) of the Development Act 1993.

### *8.1 Exotic Disease*

Most exotic avian diseases cause infection in all avian species, and it is sensible that a buffer be maintained between avian species run on separate enterprises. A buffer of 1,000 metres is the recommended standard. The birds' housing should also exclude the entry of feral or wild bird species.

## 9. MONITORING AND REPORTING

Where poultry farms are causing objectionable pollution, or are located at a sensitive site, they may be subject to additional requirements for on-going monitoring and control by the relevant government authority. For example, monitoring of ground-waters and soil for the build up of nutrients, or odour and noise, may be deemed necessary by the Council or the EPA.

If the monitoring procedures show nutrient or other impact problems, remedial action should be taken by the operator.

## 10. ANIMAL WELFARE

The Model Code of Practice for the Welfare of Animals - Domestic Poultry (3rd edition) covers topics such as housing, equipment, lighting, ventilation, temperature, protection, food, water, health and management practices.

It is the responsibility of all poultry farm operators to ensure they adhere to the standards set out in the Code of Practice. The Code includes maximum recommended stocking densities which must be observed.

A copy of the Code may be obtained from CSIRO Publications, PO Box 89, East Melbourne, 3002, telephone (03) 9418 7217.

## 11. OCCUPATIONAL HEALTH AND SAFETY

Objectives:

- To ensure the safety of poultry farm management, workers and visitors.

Attention should be given to the Occupational Health Safety and Welfare Act 1986 and accompanying regulations. The design and construction of poultry sheds and associated facilities should comply with all relevant Australian Construction and Safety Codes, provide emergency exits and have serviced fire fighting equipment.

*Contact:* Department for Industrial Affairs, 45 Pirie Street, Adelaide, telephone (08) 8207 1888.

## 12. PUBLIC AND ENVIRONMENTAL HEALTH

The Public and Environmental Health Act 1987 and Regulations provides for the Local Council to deal with environmental nuisance/unsanitary conditions, including:

- premises giving rise to a health risk
- risk of infestation by rodents and other pests
- offence to any land owner in the vicinity
- offensive odours/materials emitted from premises

- unsanitary conditions
- discharge of waste into public or another private property
- inadequate facilities for sanitation
- protection of water supplies
- disposal of dead birds

Administration of the Act and accompanying regulations in local government areas is by Local Councils, and in non-local government areas, the South Australian Health Commission.

*Contact:* Relevant Local Council

## 13. REFERENCES AND FURTHER READING

Copies of these references (other than the animal welfare Code of Practice, which is available from CSIRO) are available from Information SA in the Australis Centre, 77 Grenfell Street, Adelaide. Freecall 1800 182 234. Local Council Development Plans may be obtained from the relevant Council.


1. Standing Committee on Agriculture and Resource Management (1995) *Model Code of Practice for the Welfare of Animals - Domestic Poultry*, 3rd Edition, CSIRO
2. Environment Protection Act 1993
3. Meat Hygiene Act 1994
4. SA Standard for Hygienic Processing of Poultry for Human Consumption
5. Australian Standards for:
    - Hygienic Production
    - Construction of Premises Processing Animals for Human Consumption
    - Premises Processing Meat for Human Consumption
    - Transport of Meat for Human Consumption
6. Public and Environmental Health Act 1987
7. Occupational Health and Safety Act 1986
8. Development Act 1993
9. Local Council Development Plans

## APPENDIX 1

## DOCUMENTATION AND INFORMATION REQUIRED FOR DEVELOPMENT APPLICATION

These tables give examples of the types of documentation that may be required in a development application. Applicants should consult with the Local Council in the first instance to determine what information will be necessary.

The information required in the various plans may be shown on one plan providing it is clear.

***1. Applicant & Site Information***

| **Documentation Required** | Source of Data |
|---|---|
| Name, Postal Address, Telephone, Facsimile of:<br>1. Applicant<br>2. Owner of Subject Land<br>3. Farm Manager | Proponent |
| Real Property Description of Subject Land including Hundreds, Section numbers County, Local Government Authority and land area. Total farm area to be stated. | Local Council |
| Locality Plan No. 1<br>Cadastral plan of vicinity (preferably 1:50,000). | |
| Locality Plan No. 2<br>Topographic plan (1:50,000) showing location of all buildings, commercial, residential and recreation facilities and clearly denoting occupancy, use and separation distances. | |
| Locality Plan No. 3<br>Topographic plan showing:<br>• location of all watercourses and drainage lines<br>• limit of 1 in 100 year flood<br>• environmentally sensitive sites. | Primary Industries & Resources (SA) (PIRSA) maps |
| Locality Plan No. 4<br>Land Use plan showing local government zoning and land use in vicinity of the broiler farm. | Local Council, proponent |
| Aerial (Survey) Photograph of Site (most recent photograph). | Proponent |
| Statement of direction and strength of prevailing winds. | Bureau of Meteorology |

*2. Poultry Farm Information*

| Documentation Required | Source of data |
|---|---|
| **PROPOSAL OUTLINE**<br>outlining the proposal including proposed management, size of sheds, number of birds and other relevant details.<br><br>**SITE PLAN**<br>showing location on property of chicken sheds, silos, buildings, roads, drainage lines and waste utilisation areas.<br><br>**WASTE AND STORMWATER MANAGEMENT PLAN**<br>showing the location, area and proximity to watercourses of all land on which wastes will be utilised, estimates of quantities and types of wastes (including carcasses), waste storage areas, stormwater runoff controls and documentation outlining method, frequency and management program for manure spreading. Demonstrate how there will be substantially full nutrient uptake from the effluent / litter by crops.<br><br>**REVEGETATION PLAN**<br>showing the location and numbers of trees and shrubs to be planted around buildings as wind breaks or visual screens. Include names of species to be planted, and numbers.<br><br>**TRAFFIC**<br>details of traffic volumes, routes and access to be used, night and / or day. | Proponent |
| **ODOUR, DUST AND NOISE**<br>assess generation, impact and control of odour nuisance, statement outlining dust and noise control measures considered necessary. | PIRSA |
| **WATER SUPPLY**<br>documentation on source, quality and adequacy of supply. | ETSA |
| **ELECTRICITY SUPPLY**<br>documentation on adequacy of supply<br><br>**POULTRY FARM DEVELOPMENT PLAN**<br>documentation outlining the work and development schedule for the construction of the poultry farm and associated infrastructure, including owners' residence.<br><br>**PEST CONTROL**<br>outline of proposed pest control measures<br>(rodent, birds, flies, feral animals)<br><br>**VISIBILITY**<br>statement outlining the degree of visibility of the development by the public.<br><br>**ECONOMIC CONSIDERATIONS**<br>employment, exports, value added, local costs and benefits. | Proponent |

### *3. Soils & Groundwater Information*

| Documentation Required | Source of data |
|---|---|
| **SOIL DESCRIPTION**<br>data showing the suitability of soils for purposes intended. | Proponent, PIRSA |
| **BORE LOCATIONS**<br>plan showing location, depth of and depth to SWL of all bores on the property and all relevant neighbouring properties.<br><br>**SPRINGS AND SEEPS**<br>plan showing location of any of these. | PIRSA |
| **GROUND WATER ANALYSIS**<br>chemical and microbiological analysis of existing ground water.<br><br>**VEGETATION**<br>documentation of existing vegetation and extent of proposed clearing. | Proponent, Department for Environment, Heritage & Aboriginal Affairs |
| **GEOLOGY**<br>documentation of geology underlying the property.<br><br>**HYDROGEOLOGICAL ASSESSMENTS**<br>detailed report assessing impacts on ground water | PIRSA |

### *4. Animal Welfare*

| Documentation Required | Source of data |
|---|---|
| **ANIMAL CARE STATEMENT**<br>statement of compliance with the Model Code of Practice for the Welfare of Domestic Poultry (3rd Edition) | PIRSA |

**APPENDIX 2**

## ENVIRONMENT PROTECTION (INDUSTRIAL NOISE) POLICY 1994

This Policy prescribes maximum permitted noise levels for day and night in various types of areas. For a predominantly rural area, the maximum permitted noise levels are:

| | |
|---|---|
| 7am to 10pm | 47dB(A) |
| 10pm to 7am | 40dB(A) |

The noise levels are generally measured at a neighbouring property, or house if the house is not near the boundary.

These levels reflect the generally low level of ambient noise in rural areas. For the purposes of this Policy, the noise is "averaged" over a 15 minute period. In addition, if the noise has a pronounced tone or other disturbing component, the measured level would be adjusted by the addition of 5dB before comparison with the prescribed level.

*Design Levels for New Poultry Sheds*

This Policy is intended as a means of resolving noise from existing facilities; it is not a guide to good planning practice. The EPA recommends that noise from new development should not exceed 5dB above the pre-existing background noise level. The background noise level should be measured as the 90th percentile (L90) and the noise in question as the 10th percentile (L10).

With good management, the buffer distances in Section 8 would generally give acceptable noise levels at neighbouring houses.

**APPENDIX 3**


## ACKNOWLEDGMENTS

| | |
|---|---|
| Jeremy Wood | District Council of Kapunda & Light |
| Frank Wieser | District Council of Mallala |
| Clarry Fisher | District Council of Meningie |
| Rod Worthington | District Council of Mt Barker |
| Mike Penhall<br>Heather Treloar<br>Steve Lipson | Rural City of Murray Bridge |
| Jeff Blakemore | Steggles Limited |
| Hamish Campbell<br>Margaret Sexton<br>Dick McGuire | Inghams Enterprises Pty Ltd |
| Joe Fazzaro<br>Paul Rymer | Joe's Poultry |
| Chris Purton | BC Tonkin & Associates |
| Randall Harvey | Jamie Botten & Associates |
| Ron Ellis<br>Kim Critchley | Primary Industries & Resources (SA) |
| Chris Harris<br>John Blumson | Environment Protection Authority |
| Geoff Butler<br>Phil Brunning | Department of Housing and Urban Development |

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