

C.4: LAND USE CONFLICT AND BUFFER ZONES

4.1 INTRODUCTION

Cessnock City Local Government Area (LGA) is relatively large having an area of 1,950 km². It is also relatively diverse in character. As the character and nature of the LGA evolves through new residential and rural development, increased tourist related development, and further development of resource based industries such as hard rock quarries, gravel quarries and coal mines, conflict between land uses is inevitable. Conflict can arise because of external effects such as noise, dust, vibration, chemical / pesticide sprays used for agricultural purposes and the like. Conflict can also arise because of visual intrusion.

A report titled **Background Information for Buffer Zone Development Control Plan**, provided an account of the research undertaken prior to the original document and the philosophies behind the controls proposed.

4.1.1 Application

This Chapter applies to all new development within the area to which this Chapter applies. The over-riding principle of this Chapter is that the incoming or encroaching development shall provide the buffer or other approved means of reducing or removing the conflict. The Chapter is not intended for situations where conflict already exists. These situations must be dealt with as best as possible using existing legislation, and where appropriate, mediation and negotiation.

4.1.2 Purpose

To provide consistent development guidelines for residents, developers, the Council and assessment staff when considering applications for development which:

- may conflict with existing developments or environmentally sensitive areas because of emission of an odour, noise, vibration, visual impact or other nuisance and may therefore require a separation or other means of reducing the conflict to an acceptable level;
- is proposed in a location where there is an existing development which adversely affect it and may therefore need to provide its own separation or other means of reducing or removing the conflict in order to minimise land use conflicts between potentially incompatible land uses.

4.2 IMPLEMENTATION

A three category land use classification is used in this Chapter to assist in determining whether or not a conflict / buffer investigation should be undertaken, and to what extent.

4.2.1 Existing Policies

A number of authorities have developed policies and guidelines relating to external impacts from a range of developments, and the need for separation in some instances. These include DCPs, Department of Planning (DoP) Circulars and State Environmental Planning Policies (SEPP).

Some relevant policies and their effects are set out in the table titled 'Existing Planning Policies / Guidelines relating to Buffers / Separation Distances' included in the Background report to this Chapter. The relevant parts of this table are also reproduced in each land use

category in Section 4.3. Where a separation distance is recommended by other authorities it is also recommended in this Chapter. However, the complete policies should be read where relevant to a particular development application to gain a proper understanding of the likely impacts and of the intent of the policy. This is particularly important where a land use or activity is subject to the provisions of a SEPP.

4.2.2 Three Category Classification

A three category land use classification is used to assist in determining whether or not a conflict / buffer investigation should be undertaken, and to what extent.

This is based on research undertaken by the South Australian Environment Protection Authority and is adopted in this Chapter in order to achieve as much consistency with other regulatory authorities as possible.

The categories are:

Category A: Sensitive Land Uses

Land uses which warrant protection from amenity reducing off-site effects from other land uses. These include all dwellings, caravan parks, community facilities, hospitals, pubs, serviced apartments, restaurants, schools, tourist facilities, seniors housing or other place of permanent or temporary occupation.

New Category A Land Uses may require their own buffer to protect them from existing Category B or C uses, and land zoned for those purposes. However, little or no buffer will be required between different Category A uses, so a residential development next to an existing residential development is unlikely to require any conflict / buffer investigation.

Category B: Land Uses

Land uses which neither generate significant residual emissions nor warrant specific protection from them unless the emission is harmful to health. These include some open space lands, commercial and business zones, public roads, sporting facilities and most light industries.

New Category B land uses may require their own buffer to protect them from Category C uses or land zoned for such purposes, and to prevent disturbance to Category A land uses.

Category B land uses may be able to be located within the buffer areas for Category C land uses, to minimise land sterilisation, and can generally be located in close proximity to other Category B land uses.

Category C: Land Uses

Land uses around which a buffer distance for residual emissions is required. These emissions include: noise; dust; vibration; odour; waste product whether liquid or gas; and can range from causing nuisance or discomfort to humans to being a risk to health and well-being. Examples include: coal mines; quarries; some light industrial uses; general industrial uses; and some intensive agricultural uses.

Category C uses may be able to be located within the buffer zones / separation distance of other Category C land uses, depending upon the nature of the proposal and its likely impacts.

4.2.3 List of Land Uses by Category

Category A	Category B
Tourist facilities	Aquaculture
Large lot residential development	Sporting facilities (local)
Residential development	Roads / Freeway Corridor
National Parks, Conservation zones	Light industries
Rivers, Watercourses and Wetlands	Correctional centres

Category C	
Poultry farms	Quarries
Abattoirs	Underground mining and subsidence
Viticulture	Sewage treatment works
Feedlots	Waste management facilities
Piggeries	Military uses
Horticulture	Major transport links (freeways etc)
Sex service premises	Railway lines
Animal boarding and or training establishments	Heavy industry
Mines	Airports

Note: These lists will be added to over time as Council further develops this Chapter.

4.2.4 Encroaching Development to Provide Buffer

Where an application is received which is likely to result in a conflict with existing or likely future adjoining land uses, it will be the responsibility of the 'encroaching development' to provide the recommended buffer areas or satisfactorily reduce or remove the conflict through some other approved method.

It will be generally required that where a physical separation is required it will be located on land in the ownership or under the control of the owner or operator of the encroaching development.

4.2.5 Measurement of Separation Distances

Minimum separation distances refer to a measurement from the offending development to the property boundary of the affected land use unless otherwise stated.

4.2.6 Strategic Planning and Site Selection

The Land Use Tables contained in Cessnock Local Environmental Plan (CLEP) set out those uses permitted and prohibited in particular zones. As with most LEPs this is a first sweep attempt to separate clearly incompatible uses. However, there will be many instances where uses which are permissible in the same zone are incompatible to varying degrees.

Therefore, site selection for new proposals is of vital importance, and careful consideration of potential impacts of a new development on the existing environment must form a large part of the early stages of any project feasibility.

Appropriate site selection can avoid or reduce many of the environmental problems associated with proposals and:

- reduce the need for technically based environmental mitigation measures and on-going management measures;
- result in substantial savings in establishment and operational costs;
- reduce levels of public concern; and
- avoid potential delays in approval processes.

Site selection should therefore be based on the following principles:

- is the land use permissible in the zone?
- are environmentally sensitive areas avoided?
- is the use compatible with nearby land uses?
- do initial site investigations indicate that the site is fundamentally suitable for the use proposal?

This is an essential step in locating developments which require buffers, and applicants may be required to provide an analysis of a number of sites to justify the preferred location, should that site not meet minimum separation guidelines.

4.2.7 Compatible Land Uses Within Buffers

Where physically possible, a separation distance is a very simple means of reducing conflict between uses. The buffer area or separation distance should be provided by the offending land use and on the same land as the use.

However, a disadvantage of separation distances is that they are very wasteful of land. Every effort should therefore be made:

- to minimise the land area required by use of BATEA principles; and
- to select sites carefully and consider the possible use of any required buffer zone by other compatible and perhaps less offensive land uses.

In Industrial Zones it may be possible to implement a graduated system, with those industries requiring a large buffer located in the centre of estates, and a graduated impact or buffer system towards the perimeter to ensure the most efficient use of land, (i.e. the industrial uses should be clustered rather than allowed to develop in a ribbon form). This is largely a matter for Council and Industrial Estate developers in the strategic planning of estates.

However, individual developers should consider the list of Land Use Categories and identify land uses which might be able to be attracted to develop within the buffer area. For example, *DoP Circular E3 — Guidelines for buffer areas around sewage treatment (water pollution control) plants* recommends the use of buffers for compatible purposes where possible and for treatment plants suggests flora and fauna reserves, grazing, agricultural uses, forestry, commercial plant nurseries, recreation, effluent disposal and road reserves.

4.2.8 Making an Application

Council's 'Development Application Guides' (www.cessnock.nsw.gov.au) provides the general information and plan requirements for development applications.

However, if submitting an application to which this Chapter relates, applicants shall refer to Section 4.3 which relate to the particular land uses, and sets out for each land use additional **Issues to be Addressed in Preparing Development Applications**. In particular, DoP Circulars and SEPPs may require specific information to be submitted for assessment.

While compliance with the separation distances will assist in reducing conflicts, **it will not guarantee that no conflict will occur, or that the proposal will be acceptable**. Detailed information will be required to describe the existing environment, to present an argument to Council that the separation distance or other conflict reduction measures proposed in the application are sufficient. The application shall provide sufficient information for assessment officers to evaluate the proposal.

Applicants are advised to discuss proposals with Council staff in the early feasibility stages to ensure that applications are acceptable and complete when lodged. Appointments can be made with Council's Development Assessment Unit to discuss proposals.

4.2.9 Assessment of Applications

In assessing applications under this Chapter, assessment staff shall:

- determine whether the application constitutes designated development and therefore requires an Environmental Impact Statement (EIS). If so, check that the EIS has addressed relevant issues including those required by the Director-General DoP and any other statutory authority;
- if not designated development, check application and accompanying Statement of Environmental Effects to ensure that relevant issues have been addressed. Check in particular the specific **Issues to be Addressed in preparing a Development Application** for the particular land use in Section 4.3;
- check the information provided to determine whether adequate, clear and concise information has been provided to allow a merits based assessment. This is particularly important where the need for a separation distance or buffer has been identified in pre-application discussions, or where the proposal fails to meet the minimum recommended separation distances in this Chapter;
- refuse to accept any application that does not provide clear information or 'stop the clock' for applications already lodged with inadequate information and seek the required information in order to determination the application.

4.3 RECOMMENDED MEASURES FOR REDUCING CONFLICT

This section reviews common land use types and recommends appropriate separation distances / buffer zones, if available, and options for reducing land use conflict.

The separation distances or buffer zones contained in this section are provided as a guide and minimum recommendation only for physical separation of incompatible uses. It should be noted that a physical separation is not always the most appropriate or effective solution. Council requires that every possible measure is taken to minimise emissions at their source.

Meeting the recommended separation distance will not guarantee that the proposal will not have adverse impacts, or that the application will be successful. A merits based proposal and assessment will still be necessary. The minimum separation distances recommended will be used by Council in the event that a dwelling or some other use which does not require a statement of environmental effects or similar, is proposed near an existing amenity reducing use. In these cases the incoming sensitive use will be required to be separated by at least the distance recommended from the existing use.

Each land use category has a section called 'Issues to be Addressed in Preparing Development Applications'. This highlights areas of particular concern to Council regarding that particular land use, and is in addition to the information normally submitted with a development application. All of the information requirements in these sections shall be provided in any application to Council, as well as those required by other authorities.

Measurement of minimum separation distances refers to the boundary of the affected land use (rather than the dwelling, accommodation or other improvement) unless otherwise stated.

These guidelines are recommendations only, to provide a minimum setback for uses encroaching on an existing development, and to provide 'ball park' figures for developers in the initial feasibility stages of a proposal.

A MERITS BASED PROPOSAL AND ASSESSMENT WILL BE REQUIRED IN EVERY CASE

4.3.1 Intensive Agricultural Uses

a) Poultry Farms – Category C

Potential Conflicts

Noise (from birds, delivery trucks, equipment), odour (from sheds, waste disposal areas including disposal of dead birds and direct land application of manure), dust (from sheds, feed hoppers, delivery trucks), light spillage and visual impact on adjoining properties (whether rural or urban) and on public roads and other public places.

Existing Policies or Guidelines

Part D: Specific Development, Chapter 6: Poultry Farms – Neighbouring Land Uses contains relevant guidelines for the location of new poultry developments based on NSW Industry & Investments (Agriculture) guidelines. It also designates 'zones of affectation' around existing poultry developments where development for certain other uses is restricted. Consultation with NSW Industry & Investments (Agriculture) for specialised information, including industry standards, is recommended.

Performance Standards for Reducing Conflicts

New poultry sheds, whether as part of a new development or as an extension to an existing operation, will be expected to operate without adverse impact on surrounding land uses by way of noise, odour, dust or visual intrusion.

Methods for Reducing Conflicts

New poultry developments shall comply with the guidelines and the minimum separation distance in the following table.

SITUATION	DISTANCE
Urban residential zone	500 metres
Settlements of 10 or more dwellings	300 metres
Dwelling on another property	150 metres
Property boundaries	50 metres
Public road	100 metres
Other poultry farms	500 – 1000 metres
Water course	50 metres

- *The Department of Environment, Climate Change and Water (DECC&W) recommends a 50 metre separation from intermittent watercourses and 100 metre separation from permanent watercourses should any on-site disposal of chicken litter or waste occur.*
- *Where practical, poultry sheds and ancillary structures, feed hoppers and the like will be screened from view of adjoining properties, residences, roads and other public places by landscaping, or by locating the facility where topographical features, existing developments or existing vegetation act as a natural barrier. Council recognises the need to maintain air flows through buildings for cooling purposes.*
- *Where the poultry sheds and associated structures cannot be adequately screened from nearby residences and public places by way of topographical features and / or landscaping, Council may require the structures to be constructed of colour treated materials or to be painted to blend with the existing natural environment. The need for additional insulation due to colour treated materials may be a significant cost factor for applicants.*

Issues to be Addressed in Preparing Development Applications

1. Schedule 3 of the *Environmental Planning & Assessment Regulation 2000*, identifies poultry operations over certain thresholds as designated development. Such developments require preparation of an EIS. Therefore, in addition to the requirements of *Part D: Specific Development, Chapter 6: Poultry Farms – Neighbouring Land Uses*, proponents will be required to comply with the requirements of the Director General of the Department of Planning. The Director-General sets out the issues to be addressed in particular applications, and advises which local and state government authorities shall be consulted in preparation of the EIS.
2. For developments which do not constitute designated development, the issues raised in *Part D: Specific Development, Chapter 6: Poultry Farms – Neighbouring Land Uses*, shall be addressed in a comprehensive Statement of Environmental Effects. These include but are not limited to:
 - detailed description of the site, its physical features, and the features of the surrounding locality in terms of landform, vegetation, climatic conditions such as wind direction and speed. The likelihood of cold air drainage channelling odours downhill shall be considered;

- detailed description of all surrounding land uses, including location of any residence or other form of accommodation within a 1 kilometre radius of the proposal, location of public roads and other public places within a 1 kilometre radius;
 - location of any other agricultural uses, particularly poultry farms, in the vicinity of the proposal;
 - reason for selection of site chosen, having regard to the site selection criteria contained in this Chapter, and discussion and assessment of other site alternatives;
 - comprehensive description of proposal, including: nature of operation (i.e. breeding, laying, meat); number of birds; cycle of bird replacement; number of truck movements for delivery / pick up of birds and produce; details of construction of sheds; and technology used to reduce impacts of dust, noise and odour;
 - description of likely impacts of the proposal on surrounding environment in terms of noise, dust odour or other nuisances, plus measures proposed to reduce or remove impacts, (using BATEA principles);
 - description of waste produced and methods for removing / re-use of manure, litter, dead birds and any other waste;
 - description of methods of retaining and treating if necessary any nutrient enriched runoff from cleaning out of sheds, runoff from ground surrounding sheds, and methods of ensuring no contamination of ground or surface waters.
3. Appropriate odour assessment will be required, with odour modelling required in some cases. Applicants are advised to consult with the DECC&W (EPA), NSW Industry and Investment (Agriculture) in selecting sites and in the preparation of development applications. Odour is one of the main concerns of Council, due to the many complaints about odour from existing establishments.
4. Where a proposal does not meet the **absolute minimum** separation requirements set out in *Part D: Specific Development, Chapter 6: Poultry Farms – Neighbouring Land Uses*, or where an impact is likely, due to the proximity to other sensitive land uses, the application shall provide additional information justifying the location of the shed / operation, supported by air quality, noise, dust and / or odour modelling, undertaken by a recognised and qualified consultant, to enable assessment officers and the public to make a reasonable assessment of the impact. The use of technological solutions (implementation of BATEA principles) shall be addressed, and if the best available technology is not proposed, justification for the development in its proposed form shall be provided.

b) Abattoirs – Category C

Potential Conflicts

Odour from processing, waste product, noise from penned animals, noise and dust from delivery vehicles.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Abattoirs are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

Performance Standards for Reducing Conflicts

Establishments are to be located and operated such that the conflicts listed do not adversely impact other land uses.

Methods for Reducing Conflicts

- Minimum separation distance from Category A uses of 1000 metres.
- Minimum separation from Category B uses of 600 metres.
- Other Category C uses to be determined on a merits based assessment.
- Buffer area to be owned and / or controlled by operator of abattoir and to be heavily vegetated where practical. Buffer area may be used for informal recreational activities but unlikely to be suitable for organised recreation, industry or other Category B uses because of odour.
- Development to be screened by way of topographical features or existing and / or additional vegetation.

Issues to be Addressed in Preparing Development Applications

If designated development, an Environmental Impact Statement (EIS) will be required. If not, comprehensive Statement of Environmental Effects addressing in particular:

- reasons for site selection;
- methods for controlling odour and technology available;
- technology to be utilised in this development;
- proposals for re-use, treatment or disposal of waste product;
- effluent disposal proposals; and
- visual impact.

Issues of particular concern to Council are odour, waste disposal, management of effluent and visual impact. Applicants should consult with the EPA regarding some of these issues and odour modelling may be required.

Matters to be Addressed by Assessment Officers

1. If 'designated development', does the information provided meet the requirements of the Department of Planning and other authorities.
2. Has sufficient information been provided to undertake a merits based assessment of issues such as odour, waste disposal, visual impact, maintenance of water quality and the like.

c) *Viticulture – Category C*

Potential Conflicts

Delivery traffic, dust, noise and light from night harvesting, dust and noise from guests and noise from gas scare guns. Potential for conflict with surrounding development depends upon the size and nature of the operation, and particularly upon the type and frequency of chemical / pesticide spraying. These conflicts have been comprehensively documented in *Part E: Specific Areas, Chapter 3: Vineyards District*.

Existing Policies or guidelines

Refer to *Part E: Specific Areas, Chapter 3: Vineyards District* and DoP Circular D9 - Advice Regarding Aerial Spraying.

Performance Standards for Reducing Conflicts

Refer to *Part E: Specific Areas, Chapter 3: Vineyards District*.

Methods for Reducing Conflicts

Refer to *Part E: Specific Areas, Chapter 3: Vineyards District*.

Issues to be Addressed in preparing Development Applications

Refer to *Part E: Specific Areas, Chapter 3: Vineyards District*.

d) Feedlots – Category C

Potential Conflicts

Odour, pollution of surface and ground waters, noise, dust, delivery vehicles and visual impact.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Livestock Intensive Industries are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

State Environmental Planning Policy 30 – Intensive Agriculture and DoP Circular B23.

A range of matters that must be considered when determining applications, including:

- potential for odours to adversely impact on the amenity of residences or other land uses in the vicinity of the site;
- potential for the pollution of surface and ground water;
- measures to mitigate any potential adverse impacts;
- suitability of the site in the circumstances; and
- means to ensure animal welfare.

DoP Circular E6 - Practice Guideline for preparation of an EIS for Cattle Feedlots, refers to separation distances from residential, rural residential and other land uses and recommends that they be determined on a case by case basis. It also refers to the impact of traffic / dust / noise on surrounding uses.

Performance Standards for Reducing Conflicts

There is no universally accepted specific buffer distance with guidelines recommending that each application be considered on its merits.

Methods for Reducing Conflicts (dependent upon scale of operation)

- Minimum separation from Category A uses of 1000 metres.
- Minimum separation from Category B uses of 500 metres.
- Category C uses to be determined on a merits based assessment.
- Compliance with requirements of DoP Circular E6, SEPP 30 & Circular B23.

Issues to be Addressed in preparing Development Applications

Particular concerns of Council are odour, pollution of surface and ground waters and applications shall address these issues in detail. Where the separation distances above cannot be met, odour modelling may be required to justify site selection.

e) Piggeries – Category C

Potential Conflicts

Odour, pollution of surface and ground waters, noise, dust, delivery vehicles and visual impact.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Livestock Intensive Industries are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

State Environmental Planning Policy 30 – Intensive Agriculture and DoP Circular B23.

The guidelines for cattle feed lots (above) are relevant, particularly the range of matters to be considered.

Performance Standards for Reducing Conflicts

Establishments are to operate without odour, noise or dust affecting residential properties, and with no contamination of surface and ground waters.

Methods for Reducing Conflicts (dependent upon scale of operation)

- Minimum separation from Category A uses of 1000 metres.
- Minimum separation from Category B uses of 500 metres.
- Category C uses to be determined on a merits based assessment.
- As for Cattle Feedlots, there is no generally recommended minimum buffer distance from Category A uses. Each case must be considered on its merits.
- All applications will be referred to NSW Industry & Investments (Agriculture) for comment and consultation with that Department is essential in the planning stages of any proposal.
- Developments to be screened by way of topographical features or existing and / or additional vegetation.

Issues to be Addressed in Preparing Development Applications

Particular concerns of Council are odour and pollution of surface and ground waters. Applications must address these issues in detail. Where the separation distances above cannot be met, odour modelling may be required to justify site selection.

f) Aquaculture – Category B

Potential Conflicts

Aquaculture has potential to cause significant ground and surface water contamination. Introduction of disease into native species is also possible, visual impacts and resultant noise from aeration equipment and vehicles.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Aquaculture is 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

DoP Circular E2 refers to significant potential impacts from fish farming and 'designated development' status under certain circumstances.

Performance Standards for Reducing Conflicts

Applicants shall demonstrate that there will be no impact on water quality in nearby water courses and the catchment.

Methods for Reducing Conflicts

- Compliance with requirements of DoP Circular E2.
- All applications will be referred to the NSW Department of Industry and Investment for comment, and applicants will be required to comply with any requirements. Consultation with these authorities is therefore essential in the planning stages of any proposal.
- Generally a minimum 50 metre buffer to an intermittent water course and a 100 metre
- buffer to a permanent water course.

Issues to be Addressed in Preparing Development Applications

Council is particularly concerned with the potential for contamination of surface and ground waters. This issue shall be addressed in detail in any application.

g) Horticulture – Category C

Potential Conflicts

The nature of the conflict depends on the scale and intensity of the use. Impacts will be similar to viticulture where pesticides or fertilisers are applied aurally. Other impacts include odour (from fertilisers), noise and dust from cultivation and from delivery vehicles. There is potential for significant contamination of ground and surface waters. Where greenhouses are required, there are visual impacts.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Agricultural Produce Industries are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

DoP Circular D9 - Aerial Spraying

Refers to Orders under *Pesticides Act 1999* requiring notification and concurrence of persons within 150 metres of spraying, and recommends Councils take into account in strategic and development assessment planning.

Performance Standards for Reducing Conflicts

Council will consider a reduction of the recommended separation distances depending upon the nature of the operation, use of pesticides and need for aerial spraying.

Methods for Reducing Conflicts

- Minimum separation from Category A and B uses of 150 metres.
- A defined 20 metre buffer between irrigated area and water courses.
- Compliance with requirements of the *Pesticides Act 1999* (administered by the EPA) with regard to Aerial Spraying.
- Compliance with Council and the NSW Department of Industry and Investment (I&I) (Agriculture) recommendations, and with requirements of the Department of Environment, Climate Change and Water (DECC&W) where contamination of ground and / or surface waters is possible.

Issues to be Addressed in Preparing Development Applications

Issues of particular concern to Council are the: use of pesticides; need for ground or aerial spraying; potential for contamination of ground and surface waters; potential for soil erosion and sedimentation; and odour from fertilisers.

Licences may be required from the DECC&W.

Visual impact will need to be addressed, particularly where greenhouses, shade structures, igloos and the like are proposed.

4.3.2 Brothels / Sex Services Premises – Category C

Potential Conflicts

Potential to affect the amenity of land used for educational, recreational, residential, cultural, religious or community purposes or neighbourhood business purposes, noting that it is only a permissible land use in the IN2 Light Industrial and IN3 Heavy Industrial zones.

Existing Policies or Guidelines and Performance Standards

Refer to *Part D: Specific Development, Chapter 10: Brothels / Sex Service Premises* for further information.

Methods for Reducing Conflicts

Shall not to be located within 100 metres of a residential zone and 150 metres from any place of public worship, educational establishment, hospital or child care centre.

Issues to be Addressed in Preparing Development Applications

Refer to *Part D: Specific Development, Chapter 10: Brothels / Sex Service Premises* for further information.

4.3.3 Animal Boarding or Training Establishments – Category C

Potential Conflicts

Noise from animals (barking etc.), smell from kennels, waste disposal, possible contamination of ground and surface waters, dust and noise from client vehicles. Visual impact depending upon scale of proposal.

Existing Policies or Guidelines

Nil.

Performance Standards for Reducing Conflicts

Demonstrated ability to sustain compliance with noise, waste and odour requirements is required before Council will consider reduction of minimum separation distances.

Use of mounding in association with landscaping, acoustic barriers and the like may reduce the separation distance required where acceptable standards can be achieved.

Methods for Reducing Conflicts

- Minimum separation distance of 500 metres from Category A land uses.
- Minimum separation distance of 250 metres from Category B land uses.

Issues to be Addressed in preparing Development Applications

Issues of particular concern to Council are noise from barking dogs (due to a large number of complaints regarding existing premises), appearance, odour, runoff contaminating surface and ground waters, and disposal of waste. These shall be addressed in detail in all applications. It is very important to identify on a plan all residences or other land uses likely to be affected by noise, and design the premises to minimise the impact. An acoustic assessment will be required to accompany applications unless the proposal is very remote or on a very large property.

4.3.4 Extractive Industries

a) Coal Mines – Category C

Potential Conflicts

Potential conflicts include noise, dust, vibration, blast over-pressure, fly-rock from blasting, disruption and contamination of ground and surface waters. Potential for significant visual impact. Impacts on vegetation and habitat from clearing for open cut mining, surface facilities etc. (see also Subsidence from Underground Mining.)

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* identifies Coal Mines as 'designated development' subject to various criteria. Applicants shall establish whether or not their proposal is affected.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 is applicable.

DoP Circular PS 05-009 - Section 117 Direction 5 - Coal, Other Minerals, Petroleum & Extractive resources - relates to draft local environmental plans which include provisions prohibiting or restricting mining or extractive industries.

Performance Standards for Reducing Conflicts

The requirements for separation from other land uses will depend upon the nature of the mine, the mine operations plan, topography and climatic conditions to name a few. Each case will be determined on its merits. Other land uses which do not require an EIS and which are encroaching on a coal mine will be required to comply with the separation distances unless technical evidence is provided to indicate otherwise.

The recommended separation distances are a guideline only for initial assessment and preparation of development applications, and to provide a buffer for incoming development (such as dwelling houses) which do not in themselves require an EIS.

Methods for Reducing Conflicts

- Minimum self-contained buffer of 1000 metres from Category A land uses.
- Minimum self-contained buffer of 500 metres from Category B land uses.
- Category C uses to be determined on a merits based assessment.

Issues to be Addressed in preparing Development Applications.

In most cases the requirements will relate to preparation of an EIS with the Director-General of the Department of Planning providing issues to be addressed and authorities to be consulted.

b) Quarries – Category C

Potential Conflicts

Potential conflicts include noise, dust, vibration, blast over-pressure, fly-rock from blasting, disruption and contamination of ground and surface waters. Potential for significant visual impact. Impacts on vegetation and habitat from clearing.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Extractive Industries are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 is applicable.

DoP Circular E7 - Practice guideline for preparation of EIS - Extractive Industries – Quarries - suggests that at the time of site selection (location of resource permitting) any conflicts with rural residential communities (from blasting, dust impacts, road safety) should be considered and options for reducing or preventing conflicts investigated:

- for proposals involving blasting recommends identification of any dwelling houses or residential zones within approximately 2 kilometres of the site;
- no set minimum separation, but merits based assessment.

Performance Standards for Reducing Conflicts

The requirements for separation from other land uses will depend upon the nature of the quarry, the quarry operations plan, topography and climatic conditions to name a few. Each case will be determined on its merits. Other land uses which do not require an EIS and which are encroaching on a quarry will be required to comply with the separation distances unless technical evidence is provided to indicate otherwise.

Methods for Reducing Conflicts

- Minimum self-contained buffer of 1000 metres from Category A land uses.
- Minimum self-contained buffer of 500 metres from Category B land uses.
- Category C uses to be determined on a merits based assessment.

Issues to be Addressed in preparing Development Applications.

In many cases the requirements will relate to preparation of an EIS with the Director-General of the Department of Planning providing issues to be addressed and authorities to be consulted.

Issues of concern to Council are noise, vibration, dust, fly rock, visual intrusion, contamination of surface and ground waters and blast over-pressure.

c) Underground Operations – Category C

Potential Conflicts

Potential conflicts include damage to buildings and property through subsidence, which can occur at any time after mining operations have ceased. Damage can be caused to public roads and services through severe subsidence.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Mining, Extractive Industries, etc., are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 is applicable.

Specific controls from the Mine Subsidence Board are only applicable on Proclaimed Mine Subsidence Districts, where the Board regulates / restricts the nature of development permissible in some areas.

Performance Standards for Reducing Conflicts

Nil

Methods for Reducing Conflicts

- No underground mining outside Declared Mine Subsidence Districts.
- No Category A uses in areas affected by underground mining.
- Category B and C uses to be determined on a merits based assessment.

Issues to be Addressed in preparing Development Applications.

In most cases the requirements will relate to preparation of an EIS with the Director-General of the Department of Planning providing issues to be addressed and authorities to be consulted.

4.3.5 Sewage Treatment Works – Category C

Potential Conflicts

The principal conflict is odour affecting surrounding land uses. Other conflicts include visual impact and potential for contamination of ground and surface waters in some circumstances.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Sewerage systems and sewer mining systems are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

DoP Circular B32 - Draft SEPP for Sewerage Works - does not relate to buffers, but allows a public authority to construct sewerage works regardless of provisions of any other planning instrument.

DoP Circular E3 - Guidelines for buffer areas around sewage treatment (water pollution control) plants:

- provides a description of a buffer;
- states that buffer should be at least 400 metres wide, but variable to suit local conditions;
- use meteorological data to work out most likely movement of air flows and widen buffers in those areas;
- buffers should ideally be created by way of Local Environmental Plan (i.e.. zoned) and Councils should avoid any rezonings that permit more intensive uses;
- public authorities may need to acquire properties in immediate proximity of plants;
- buffers should be used for compatible purposes where possible, eg. flora and fauna reserves, grazing, agricultural uses, forestry, commercial plant nurseries, recreation, effluent disposal, road reserves.

Performance Standards for Reducing Conflicts

There is no universally accepted specific buffer distance.

Demonstrated ability to sustain compliance with relevant requirements is required before Council will consider reduction of minimum separation distances.

For Category B uses densely landscaped buffer areas may reduce the required setback.

Methods for Reducing Conflicts

- Minimum self-contained buffer of 500 metres from Category A land uses.
- Category B and C uses to be determined on a merits based assessment.

Issues to be Addressed in preparing Development Applications

Principal concern to Council is odour.

4.3.6 Waste Management Facilities – Category C

Potential Conflicts

Potential conflicts include odour, wind-blown refuse, noise, visual impact, traffic, dust, and significant potential for contamination of ground and surface waters.

Existing Policies or Guidelines

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* provides that Waste management facilities or works are 'designated development' over certain thresholds. Applicants shall establish whether or not their proposal is affected.

DoP Circular B38 relates to the acceptance of waste from more than one Local Government Area (LGA), but does not refer to separation. Does not relate to landfills serving only one LGA.

DoP Circular EJO - Landfilling EIS Practice Guideline:

- site selection is major concern;
- identifies sensitive areas to be avoided, including separation distances from residential zones, dwellings, educational establishments or hospitals;
- discusses separation distances and recommends that the buffer be owned or controlled by the operator of the landfill;
- includes a table titled 'Appropriate Separation Distances from Certain Land Uses'; and
- the need for and extent of 'buffer' areas should be determined on a case specific basis.

Performance Standards for Reducing Conflicts

Nil

Methods for Reducing Conflicts

- Minimum separation from Category A land uses of 1000 metres, but determined on the basis of a merits based assessment.
- Minimum separation from Category B land uses of 500 metres, but determined on the basis of a merits based assessment.
- Category C uses to be determined on a merits based assessment.
- Compliance with guidelines contained in DoP Circular E10.

Issues to be Addressed in Preparing Development Applications

Most applications will be 'designated development' and require preparation of an EIS. Site selection is of paramount importance, and every application shall include a detailed analysis of site options and reasons for selecting preferred site.

4.3.7 Military Uses – Category C

Potential Conflicts

Noise and vibration from training exercises (bombs, gunfire, heavy vehicles), noise and vibration from low flying aircraft, light spillage, dust and noise from heavy vehicles.

Existing Policies or Guidelines

Singleton Lone Pine Army Base has requested that all tourist development proposals in the vicinity of the Base be referred to it for comment, and has also previously requested Council to advise purchasers through Section 149 Certificates about noise, low flying aircraft and the like.

Performance Standards for Reducing Conflicts

Compliance with requirements of Department of Defence in regard to construction standards for tourist developments, dwellings and other accommodation in close proximity to Lone Pine Barracks.

Methods for Reducing Conflicts

- Minimum separation distance of 1000 metres from Category A and B uses.
- Category C uses to be determined on a merits based assessment.
- Individual applications are referred to the Army for comment and assessment.

Issues to be Addressed in Preparing Development Applications.

Any application proposing development within the separation distances will be required to provide information as to how noise will be controlled i.e. construction methods and an acoustic assessment indicating that acceptable levels will be achieved.

4.3.8 Sporting Facilities – Category B

Potential Conflicts

Light spillage from flood lighting, noise (spectators and players), traffic, parking and dust.

Existing Policies or Guidelines

Nil

Methods for Reducing Conflicts

- Minimum separation of 100 metres from Category A land uses.
- Minimum separation of 50 metres from Category B land uses.
- Category C uses to be determined on a merits based assessment.

Performance Standards for Reducing Conflicts

There is no universally accepted specific buffer distance. Use of mounding in association with landscaping, acoustic barriers and the like may reduce the separation distance required where acceptable noise levels can be achieved.

Issues to be Addressed in Preparation of Development Applications

Site selection is of paramount importance. On existing sites, information shall be provided as to the frequency and type of events proposed, and an acoustic assessment will be required.

4.3.9 Transport Corridors

a) Roads – Category B

Potential Conflicts

Noise, light, vibration, storm water runoff and air pollution.

Existing Policies or Guidelines

Roads and Traffic Authority advises that developments in the vicinity of major roads are assessed on their merits.

Future developments should be designed such that the road traffic noise is mitigated in accordance with the Department of Environment Climate Change and Water (DECC&W) criteria for new developments (*Environmental Criteria for Road Traffic Noise*).

The NSW RTA's *Environmental Noise Management Manual* provides practical advice for selecting noise mitigating treatments.

Appendix 1: Guideline for sensitive land uses and road traffic noises with additional information on site design, building design, building techniques (insulation and absorption) and noise barriers.

Performance Standards for Reducing Conflicts

Use of mounding in association with landscaping, acoustic barriers and the like may reduce the separation distance required where acceptable standards can be achieved.

Methods for Reducing Conflicts

- The RTA does not have specific guidelines for setbacks from main roads, with each case being determined on its merits.
- The following are the minimum setbacks required by Council's Building Line Policy however, the proximity of major roads may necessitate an increase in the required setback.

SITE DESCRIPTION	MINIMUM BUILDING LINE SETBACK
Residential R2 & R3 Zones	6.0 metres
Industrial IN2 & IN3 Zones	6.0 metres
Corner allotments (Residential R2 & R3 Zones & Industrial IN2 & IN3) *	6.0 metres from the major road frontage and 4.0 metres from the minor road frontage
Cul-de-sac street endings (residential only)	5.0 metres in the 'bulb' of the cul-de-sac
R5 Large Lot Residential Zone	12 metres
Rural RU2 Zone	18 metres (all frontages)

- *The major road is that road where traffic has right of way. The minor road is that road where the traffic is required to give way or stop by virtue of signs or the 'T intersection rule.'*
- Category A uses fronting unsealed roads shall have a minimum setback of 50 metres from the road reserve to reduce dust nuisance. A planted buffer strip along the road is also recommended and if provided could facilitate a reduced setback.
- No direct vehicular access shall be permitted via individual properties to/from the State Road. All direct property access should desirably be via the local road network.

Issues to be Addressed in Preparing Development Applications

Any new development encroaching near roads will be required to comply with the separation distances recommended or provide technical information by way of acoustic assessment and air quality assessment demonstrating that adverse impacts from roads can be mitigated. Proposals near major roads shall consult with the RTA prior to preparation of a development application. It is to be noted that the developer may be responsible for the provision and costs of required noise attenuation measures.

b) Freeway Corridor – Category B

Potential Conflicts

Noise, light, vibration, storm water runoff and air pollution.

Existing Policies or Guidelines

Roads and Traffic Authority advises that developments in the vicinity of major roads are assessed on their merits.

Future developments should be designed such that the road traffic noise is mitigated in accordance with the Department of Environment Climate Change and Water (DECC&W) criteria for new developments (*Environmental Criteria for Road Traffic Noise*).

The NSW RTA's *Environmental Noise Management Manual* provides practical advice for selecting noise mitigating treatments.

Appendix 1: Guideline for sensitive land uses and road traffic noises with additional information on site design, building design, building techniques (insulation and absorption) and noise barriers.

Performance Standards for Reducing Conflicts

Building design to shield the building from noise, use of natural features or landscaping (including earthworks), acoustic barriers, insulation and the use of various materials, may reduce the separation distance required where acceptable standards can be achieved.

Methods for Reducing Conflicts

- The RTA does not have specific guidelines for setbacks from Freeways, with each case being determined on its merits.
- The Freeway Corridor (including its exclusion zone), borders properties zoned as follows: RU2: Rural Landscape; R2: Low Density Residential; R3: Medium Density Residential; R5: Large Lot Residential; B2: Local Centre and IN2: Light Industrial.

- The following are the minimum setbacks required by Council's Building Line Policy, however, the proximity to the Freeway Corridor may necessitate an increase in the required setback.
- No direct vehicular access shall be permitted via individual properties to/from the State Road. All direct property access should desirably be via the local road network.

SITE DESCRIPTION	MINIMUM BUILDING LINE SETBACK
Residential R2 & R3 Zones	6.0 metres
Industrial IN2 & IN3 Zones	6.0 metres
Corner allotments (Residential R2 & R3 Zones & Industrial IN2 & IN3 Zones).	6.0 metres from the major road frontage and 4.0 metres from the minor road frontage
Cul-de-sac street endings (residential only)	5.0 metres in the 'bulb' of the cul-de-sac
R5 Large Lot Residential Zone	12 metres
Rural RU2 Zone	18 metres (all frontages)

Issues to be Addressed in Preparing Development Applications

Any new development adjoining the Freeway Corridor (including its exclusion zone) or within 300 metres, will be required to demonstrate by way of technical information (acoustic assessment and air quality assessment) that adverse impacts can be mitigated.

The RTA's Noise Assessment March 2007 (prepared by Atkins Acoustics dated February 2007) indicated that, in the absence of noise mitigation, the predicted road traffic noise levels from the proposed Link (Corridor) would exceed the assessment goals at a number of properties in built-up residential areas and at isolated properties exposed to the road corridor.

Conceptual noise control options including acoustic barriers / earth mounds, provision of acoustic treatments to the affected dwelling houses and property acquisitions have been considered for the purpose of reducing road traffic noise exposure.

The final selection of traffic noise mitigation would be dependent on feasibility and practicality, secondary factors such as visual characters, consultation with community, affected property owners and relevant authorities. It is to be noted that the developer may be responsible for the provision and costs of required noise attenuation measures.

Applicants shall consult with the RTA prior to preparation of a Development Application and reference should be made to *Reducing Traffic Noise: A Guide for Homeowners, Designers and Builders*, published by the RTA / EPA.

c) Railway Lines – Category C

Potential Conflicts

Noise, light, vibration, storm water runoff and air pollution.

Existing Policies or Guidelines

State Rail Guideline - 'Rail Related Noise and Vibration'

- suggests use of 'insensitive' uses to shield 'sensitive' uses, and use of EPA criteria for rail traffic noise in different building types;

- suggests use of buffers where possible. Suggests noise impact studies to determine an appropriate buffer, which will vary with the terrain; and
- discusses use of physical barriers, vegetation and building guidelines, again based on EPA criteria.

Department of Planning - 'Development Near Railway Corridors and Busy Roads - Interim Guidelines'. A copy of the guidelines can be found at:
http://www.planning.nsw.gov.au/planningsystem/pdf/guide_infra_devrailroadcorridors_interim.pdf.

Performance Standards for Reducing Conflicts

There is no universally accepted specific buffer distance. Use of mounding in association with landscaping, acoustic barriers and the like may reduce the separation distance required where acceptable standards can be achieved.

Incoming uses near railway lines will be required to comply with separation distances unless technical information (i.e. acoustic assessment) is provided to indicate that impacts can be mitigated.

Methods for Reducing Conflicts

- Minimum separation of 100 metres from Category A uses.
- Compliance with State Rail guidelines for development in proximity to rail lines. Compliance with the State Rail guideline entitled ***Rail Related Noise and Vibration*** and the ***Department of Planning - 'Development Near Railway Corridors and Busy Roads - Interim Guidelines'***.
- Buffer zones are recommended by State Rail where possible, with an acoustical report required to determine the actual buffer depending on conditions and topography, etc.

Issues to be Addressed in preparing Development Applications

Most applications affected will relate to incoming uses encroaching on existing railway lines. In these cases, developments will be required to comply with the separation distance recommended or with the State Rail Guidelines. Information regarding construction methods, acoustic information and the like will be required to be submitted with applications.

4.3.10 Industrial Zones – Category B or C

Potential Conflicts

Potential conflicts include noise, dust, odour, vehicle movements, light spillage, air pollution, and contamination of soil, ground and surface waters.

Existing Policies or Guidelines

DoP Circular E12 - The Assessment of Potentially Hazardous Development - discusses 'multi-level risk assessment' and standard hazard conditions.

DoP Circular F3 - Liquefied Petroleum Gas Automotive Retail Outlets - Draft Locational Guidelines:

- decisions should be made on the basis of merit; and

- careful consideration to be given to the specifics of each case, the location and the way the activity is to be carried out.

SEPP 33 - Hazardous and Offensive Development:

- hazardous and / or offensive is defined as when use will pose a threat to human life or property or to the bio-physical environment when all mechanisms (including separation / isolation) have been employed to reduce or minimise the impact.

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* identifies certain industrial development as 'designated development'.

Performance Standards for Reducing Conflicts

Demonstrated ability to sustain compliance with relevant requirements with regard to noise, vibration, light, air pollution and surface and ground water contamination is required before Council will consider a reduction of minimum separation distances.

The use of acoustic barriers may reduce the separation distance required for noise.

Methods for Reducing Conflicts

1. ***IN2 Light Industrial zoned land: Category B***
 - Minimum separation distance of 100 metres from Category A land uses.
 - Category B and C uses to be determined on a merits based assessment.
2. ***IN3 General Industrial zoned land: Category C***
 - Minimum separation distance of 200 metres from Category A land uses.
 - Minimum separation distance of 50 to 100 metres from Category B uses.
 - Category C uses to be determined on a merits based assessment.

All buffer zones are to be mounded to a minimum height of 1.5 metres and densely landscaped with species native to the locality. The subdivider / developer of the encroaching development shall provide details as to the on-going ownership of the buffer areas and the means by which landscaping will be maintained to Council's satisfaction.

N.B: Separation distances are measured from the zoning boundary of the industrial land.

Issues to be Addressed in Preparing Development Applications

Issues of concern to Council are the relationship of industrial development to residential development and the resultant loss of residential amenity. This can occur even if the proposal is in an existing Industrial zone, and applications will be expected to identify premises likely to be affected in the vicinity of the proposal and include methods for mitigating impacts in the proposal.

An assessment of technology available to reduce emissions and treat waste products will also be required, with justification for the level of technology incorporated.

4.3.11 Tourist Facilities – Category A, B or C

Potential Conflicts

Potential conflicts include noise, dust, traffic, light spillage and visual impact. The impact will vary greatly depending on the size, design and location of the facility. Minor developments will be Category A, while a large integrated facility with a number of components may constitute a Category C use.

Existing Policies or Guidelines and Performance Standards

Refer to *Part D: Specific Development, Chapter 4: Purpose-Built Rural Tourist Accommodation* and *Part E: Specific Areas, Chapter 3: Vineyards District*, as applicable.

Performance Standards for Reducing Conflicts

Applications for tourist developments shall demonstrate that they are appropriate in the locality in terms of their size, scale and appearance. The capability of the land to sustain the proposal will be considered by Council.

Methods for Reducing Conflicts

Compliance with relevant setbacks in *Part D: Specific Development, Chapter 4: Purpose-Built Rural Tourist Accommodation* and *Part E: Specific Areas, Chapter 3: Vineyards District*, as applicable.

- **Residential Areas**

Minimum separation distance from Category A uses of 50 metres.
Minimum separation distance from Category B uses of 20 metres.

- **Village Areas** - as above.

- **Rural Areas**

Minimum separation distance from Category A uses of 100 metres.
Minimum separation distance from Category B uses of 50 metres.

Issues to be Addressed in Preparing Development Applications

In the rural area, Council is concerned as to the appropriateness of developments in the rural landscape, and the capability of the land to support them. In rural and urban areas, conflicts due to noise, traffic and light spillage are important, and these issues shall be specifically addressed in all applications.

4.3.12 Large Lot Residential Development – Category A

Potential Conflicts

Rural residential developments often occur at the urban / rural interface and are likely to be adversely affected by some agricultural pursuits, rural industries, etc. The impacts include noise, dust, odour, spray drift and the like.

Impacts from rural residential development include: visual impact; traffic generation; light spillage; nutrient enrichment from stormwater runoff (see Section 4.3.15 - Rivers,

Watercourses and Wetlands); erosion and sedimentation; littering and rubbish disposal; companion animals; and access roads.

Existing Policies and Guidelines

Refer to relevant Chapters in this DCP for various Large Lot Residential areas. The Department of Natural Resources recommends no further subdivision of stream or river frontages.

Performance Standards for Reducing Conflicts

Developments are to blend with the surrounding environment and be screened by topographical features or vegetation. Detailed assessment of surroundings and measure for mitigating impacts on or from surrounding land uses will be required for Council to consider reduction in separation distances.

Methods for Reducing Conflicts

- Dwelling-houses shall have a minimum setback of 50 metres from the boundary with land zoned RU2 or land that is used for general agricultural purposes.
- Where use of aerially applied pesticides is known to occur on adjoining land a minimum separation of 150 metres will be required from the boundary.
- Where Category C uses are located nearby, the setback will be determined on the merits of the case.
- Developers of large lot residential estates will be required to provide 20 metre wide, densely landscaped buffers along all outer boundaries of estates to reduce visual intrusion into the rural landscape. Larger estates will require additional landscaping internally where the estate can be viewed from surrounding higher ground.
- Developers will be required to submit details of arrangements for on-going ownership of buffer areas and maintenance of landscaping with development applications.

Issues to be Addressed in Preparing Development Applications

Issues of concern to Council are access (particularly to main roads), visual impact of proposals, and the likelihood of complaints from occupants of rural residential estates about agricultural pursuits on nearby land.

Applications shall include an assessment of all surrounding land uses and apply buffer zones or other impact mitigating methods accordingly. Arrangements for on-going ownership and maintenance of buffers and vegetated areas shall be submitted with the application.

4.3.13 Residential Development – Category A

Potential Conflicts

Conflicts are likely at zone boundaries, where residential meets industrial or commercial, or where new residential estates occur at the rural edge of towns and villages. Potential conflicts include adverse impacts from agricultural and rural industries such as noise, dust, odour and spray drift, and from industrial uses by way of noise, vibration, air pollution and surface and ground water contamination.

Impacts from residential development include: visual impact; noise; light spillage; nutrient enrichment from stormwater runoff (see Section 4.3.15 - Rivers, Watercourses and

Wetlands); changes in runoff volumes; erosion and sedimentation; littering and rubbish disposal; companion animals; and access roads / intersections.

Existing Policies or Guidelines

There are numerous documents relating to design and location of residential areas, such as AMCORD. Little relates specifically to need for buffer zones. DNR recommends that no further subdivision of stream or river frontages be permitted.

Performance Standards for Reducing Conflicts

Residential development shall comply with the minimum setbacks recommended in this document for other land uses whenever residential development is encroaching on them. If development is proposed within the separation distances recommended, a range of technical information will be required in relation to noise, air quality, drainage, erosion and sedimentation control and the like. The specific reports required will depend upon the nature of the proposal and its surroundings.

Methods for Reducing Conflicts

- Dwelling-houses shall have a minimum setback of 50 metres from land zoned RU2 or used for general agricultural purposes.
- Where use of aerially applied pesticides is known to occur on adjoining land a minimum separation of 150 metres will be required from the boundary.
- Where Category C uses are located nearby, setback will be determined on the merits of the case.
- Developers of large lot residential estates will be required to provide 20 metre wide, densely landscaped buffers along all outer boundaries of estates to reduce visual intrusion.
- Landscaping will also be required along internal roads and open space areas.
- Developers will be required to submit details of arrangements for on-going ownership of buffer areas and maintenance of landscaping with development applications.

Issues to be Addressed in Preparing Development Applications

Information shall be provided regarding all adjacent and adjoining land uses, as encroaching residential development shall comply with the separation distances recommended in this plan for other land uses. Residential development will not necessarily be permitted up to zoning boundaries. A vegetated buffer or other means of reducing conflict may be required. Proposals are to be detailed in the development application.

4.3.14 National Parks, Conservation Zones – Category A

Potential Conflicts

Areas having high environmental value such as National Parks, Nature Reserves, State Forests, Environmental Protection Zones and water catchment areas can be adversely impacted by encroachment of rural, rural residential and urban developments.

Impacts include predation of wildlife by domestic animals, invasion of exotic weeds, nutrient enrichment from stormwater runoff and environmental damage from uncontrolled use by motorcycles, four wheel drives and the like.

Existing Policies or Guidelines

DoP Circular B35 - SEPP 44: Koala Habitat Protection, relates to identification of core habitat, not specifically to buffers.

Native Vegetation Act 2003, relates to the need for development consent for clearing of remnant native vegetation and protected re-growth.

Performance Standards for Reducing Conflicts

Where it can be demonstrated that degradation of the adjoining environment protection area can be minimised through appropriate fencing, landscaping, management plan or other method, the separation distances may be reduced.

Methods for Reducing Conflicts

- Minimum separation from Category A and B land uses of 200 metres.
- In urban situations this land can be utilised for open space purposes provided that appropriate animal proof fencing and dense landscaping is provided at the boundary with the environment protection area.
- Category C land uses to be determined on a merits based assessment.

Issues to be Addressed in Preparing Development Applications

Most applications will relate to incoming development in proximity to National Parks and Conservation Zones. Such developments shall comply with the recommended separation distances, or provide information such as a flora and fauna assessment or details of fencing, screening or other measures proposed to reduce impacts on the conservation areas.

4.3.15 Rivers, Watercourses and Wetlands –Category A

Potential Conflicts

Rivers, streams, watercourses and wetlands can be adversely impacted by a range of other land uses. Separation or some other means of protection is necessary to maintain water quality, and protect the aesthetic, recreational and habitat values of the water course and riparian vegetation.

Existing Policies or Guidelines

Water Management Act 2000 and *Native Vegetation Act 2003*, require setbacks from prescribed streams and requirements for preservation of native vegetation.

Performance Standards for Reducing Conflicts

Separation distances may be reduced where applicants can demonstrate that effective storm water controls, landscaped and fenced buffer or other means of protection will adequately protect the environment protection area.

Methods for Reducing Conflicts

- Minimum separation of 50 metres from the nearest point of any unsewered development or associated effluent disposal system or outlet to the bank of any river stream or watercourse.

- Minimum separation of 30 metres from any the nearest boundary of sewerage developments to the boundary of any river, stream or water course.
- Minimum setback for all development of 40 metres from any 'prescribed stream'.
- Development subject to this DCP will be required to maintain separation distances recommended for that particular land use.

Issues to be Addressed in Preparing Development Applications

Most applications will relate to developments encroaching on a watercourse, river or stream, and are required to comply with the setbacks recommended in this section. However, if the development is subject to setbacks recommended in another section of this Chapter, it shall comply with those setbacks, unless technical information is provided demonstrating that there will be no adverse impact on water quality.

4.3.16 Airports - Category C

Potential Conflicts

Protection around airports is necessary to ensure a safe and predictable environment for aeroplanes, and also to protect surrounding land uses from noise and other nuisance.

Existing Policies or Guidelines

DoP Circular C15 - Development near Licensed Aerodromes, relates to Aircraft Noise Exposure Forecast (ANEF) units, generally not a problem under 20 ANEF.

Clauses 6.3 & 6.4 of CLEP, relate to flight paths and noise with regard to land at Nulkaba, which is affected by ANEF contours between 20 and 25. Construction shall be in accordance with provisions of AS 2021 - 'Acoustics - Aircraft Noise Intrusion - Building Siting and Construction'.

Performance Standards for Reducing Conflicts

Compliance with AS 2021 and information as to the nature of the development and limited impact of airport or airport noise will be required for Council to reduce development restrictions.

Methods for Reducing Conflicts

- No structure shall be erected on land within the area surrounding Cessnock Air Transport Facility, above the Obstacle Height Limitation Surface (OBL), without the consent of Council.
- Council will consult with the Commonwealth Department of Transport and Regional Services and the Civil Aviation Safety Authority.
- No Category A land use will be permitted on land with a Noise Exposure Forecast higher than 25.
- Council consent is required for any Category A land use on land with a Noise Exposure Forecast of between 20 and 25. Council consent will not be granted unless buildings comply with the requirements AS 2021 – 'Acoustics - Aircraft Noise Intrusion - Building Siting and Construction', or any document replacing or amending that standard.

Issues to be Addressed in Preparing Development Applications

Developments not complying with recommended requirements will be required to submit acoustic assessments, details of building construction and / or details of nature of development for Council assessment in considering any reduction in development restrictions.

4.3.17 Correctional Centres – Category B

Potential Conflicts

Potential conflicts depend largely upon the nature of the facility, and include: visual impact; light spillage; and to a large degree, adverse public perception.

Existing Policies or Guidelines

Nil.

Methods for Reducing Conflicts

- Minimum separation from Category A and B uses of 500 metres.
- Category C uses to be determined on a merits based assessment.

Performance Standards for Reducing Conflicts

Separation distances may be reduced depending on the design of the facility and its compatibility with surrounding developments, and the use of landscaping or other appropriate screening.

Appendix 1: Site Design

Careful planning of the building site is a vital first step in reducing traffic noise. The following techniques can be used to reduce traffic noise levels.

- Place the building as far away from the Freeway as possible. Doubling the distance from the road will reduce the average noise level by 3 – 4 decibels and reduce peak levels by 6 decibels.

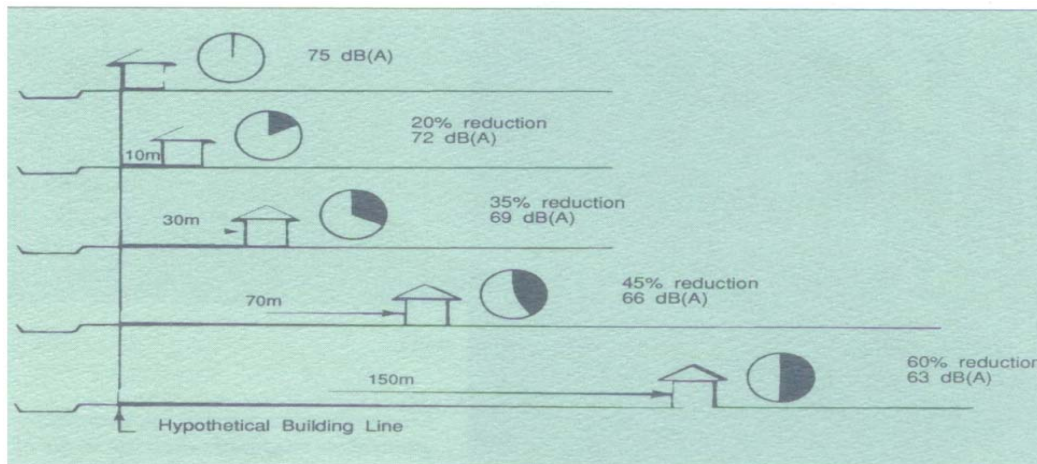


Figure 1: How distance reduces traffic noise
(Source: *Reducing Traffic Noise*, 1991)

- Use parking lots, open spaces and garages to shield the building from noise.

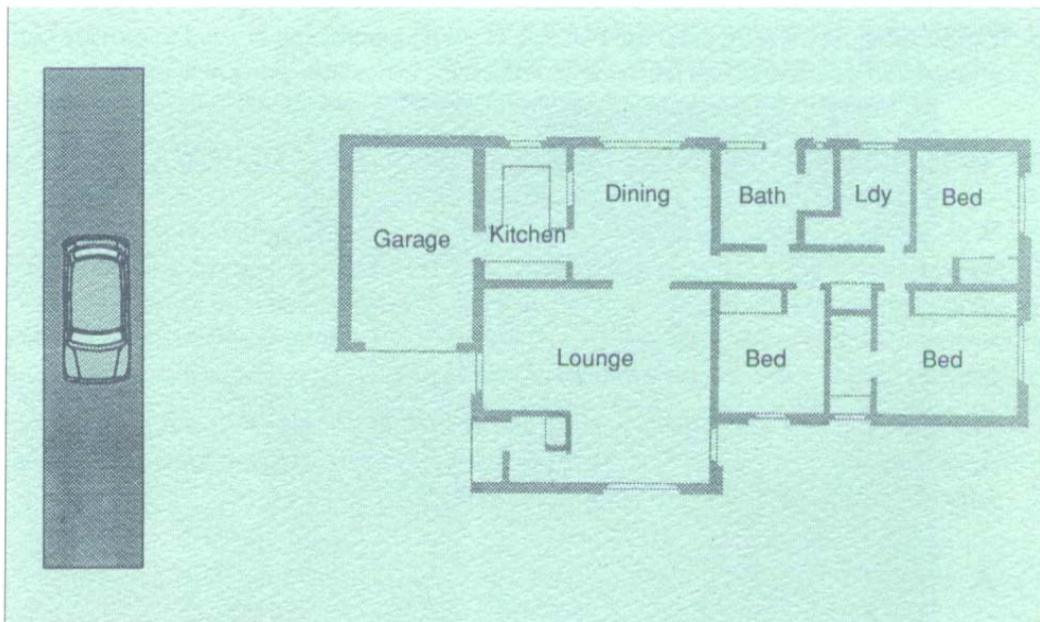


Figure 2: Good acoustic layout
(Source: *Reducing Traffic Noise*, 1991)

- Use the dwelling house and other buildings to shield outdoor living areas such as courtyards or BBQ areas.

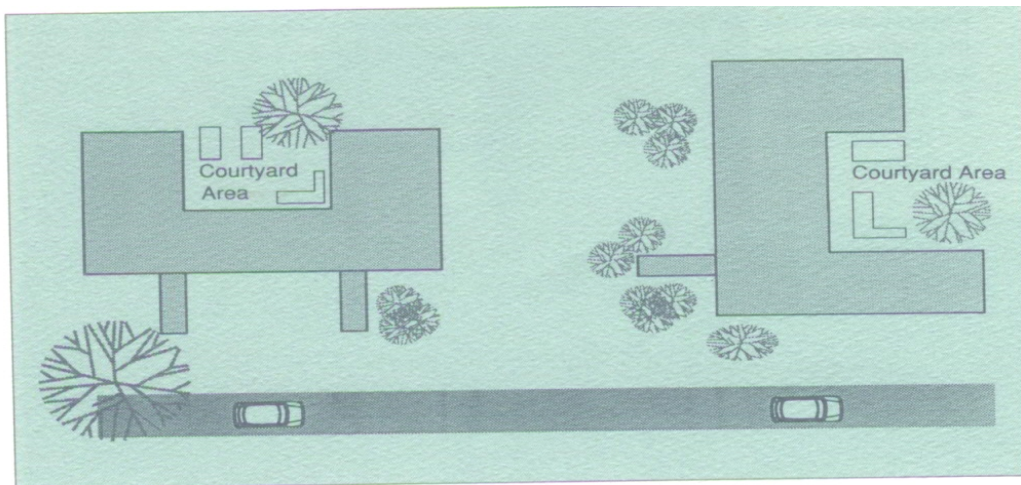


Figure 3: Acoustic site planning
(Source: *Reducing Traffic Noise*, 1991)

- Exploit existing natural features such as slopes, and in some circumstances, excavate to provide better noise protection.

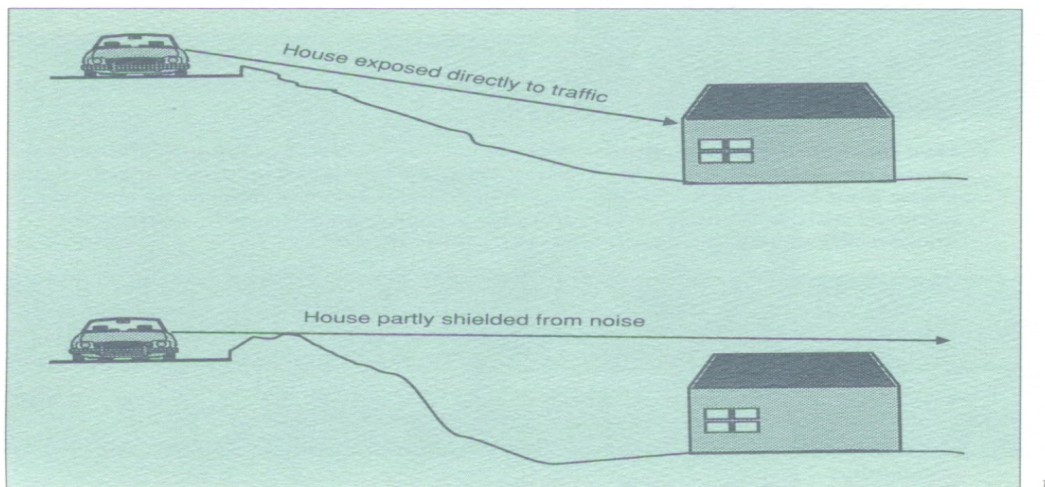


Figure 4: Use of natural land features
(Source: *Reducing Traffic Noise*, 1991)