

12. Health Safety and Wellbeing

Issue 12.1

The adverse effect on the health, safety and wellbeing of the community arising from a loss in the amenity values and/or quality of the environment as a result of inappropriate subdivision, land use, and development.

Objective 12.1.1

Maintain the amenity values and a quality of environment appropriate for different parts of the District which protects the health, safety and wellbeing of present and future generations, and ensure that any potential adverse environmental effects from buildings and structures, signs, glare, noise and hazardous substances are avoided or mitigated.

Structures

Policy 12.1.1.1

Maintain and enhance the positive contribution that buildings and structures, and the spaces between them, make to the character and amenity of urban areas where people reside, the neighbourhood and streetscape.

Explanation

The density, design, scale and appearance of buildings and structures contribute to the different amenity values of residential areas. This includes consideration of the effects of structures in adjacent Business or Rural Zones.

The area people consider their neighbourhood is generally within five to ten minutes walking distance although it can be perceived as further afield. Its character and visual amenity is affected by the relationship between buildings, structures, open spaces and trees and how people choose to mix these elements. A major influence on the character of residential areas is the degree of openness. This is affected by the depth of setbacks, the density, size of lots, scale, size, height and positioning of buildings and structures on a site, and the overall design of sites, roads and open spaces.

The District Plan provides a hierarchy of different amenity levels within the Residential Zones. These zones are a management technique to enable a range of environments within which people can provide for their housing and family needs. A significant element affecting residential character and amenity, and a consistent concern expressed in consultation with residents, is the location, scale and extent of multi-unit housing in urban areas. The

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District Plan standards are conservative. For Residential 2, 3, and 4A and 4B Zones one dwellinghouse is permitted on each site subject to meeting high development and activity standards. A second dwellinghouse is permitted provided it does not exceed 75 square metres in gross floor area (refer to the definition of “dwellinghouse”). This recognises changing demographics and smaller household sizes, and the desire by many people to provide for family members close to the family home. In Residential Zones, irrespective of the number of dwellings on the site, standards for site coverage, lot size and recession plane must be complied with for each dwellinghouse (other than an additional 75 square metre dwelling), to promote openness, separation of houses and address character issues.

In contrast, the Residential 1 Zone within Rangiora and Kaiapoi provides for both smaller lot subdivision, higher site coverage, and there is no limit on the number of dwellinghouses, provided that other Plan standards are complied with. This provision for multi-unit developments reflects community concerns that the characteristics, and form and function, of Rangiora and Kaiapoi are not adversely affected. The primary issue is the retention of present residential character.

Access to daylight and sunlight to adjacent sites is an important component of residential amenity, providing warmth, comfort and energy efficiency. To ensure shading effects are minimised, and to ensure there is sufficient space around buildings to allow the admission of sunlight and daylight to the site, the Plan includes height recession plane controls.

The streetscape is a public space, important for giving interest to journeys and providing a safe and enjoyable environment. The width and design of roads and associated plantings and structures affects the amenity values of the area.

Recognition is given to the reuse of dwellinghouses, through removal and relocation, as this activity does not necessarily lead to an adverse affect on the character and amenity of the area.

Within the Residential 6 and 6A Zones (Pegasus), further flexibility is provided to enable the development of a wide range of housing styles and densities, subject to controls to avoid, remedy or mitigate adverse effects on the amenity values and privacy of residents, and on the visual and amenity values and environmental quality of the town as a whole. In order to provide the opportunity for greater diversity and flexibility within this newly developing community, more flexible provision is made for comprehensive or multi-unit residential developments. As means of reducing overall energy use within the town, buildings are required to be constructed to reduce the energy demand within the building, and the town is required to be laid out and developed in a way that discourages the use of private motor vehicles for transport.

CROSS REFERENCE: Policies 15.1.1.1, 16.1.1.1 and 17.1.1.2

Methods

District Plan Rules 12.1.1.1.1

Standards for structures in terms of setbacks, height, recession plane, site coverage, and landscaping/screening – in relation to site boundaries and, where appropriate, in relation to individual dwellinghouses.

Subdivision standards for allotment areas and dimensions.

Minimum standards for roads (Table 30.1).

Standards for the relocation of dwellinghouses.

Asset Management 12.1.1.1.2

Maintenance of the streetscape and reserve areas and input into the design of new areas for residential development.

District Development Strategy 12.1.1.1.3

A non-statutory document setting out the Waimakariri District Council's preferences as service, facility and utility provider for the location and nature of future development including proposals for the integrated and staged provision of the services, facilities and utilities required by that development. The strategy is drawn around urban design principles and a 20 year planning period.

Policy 12.1.1.2

Maintain and enhance the positive amenity values associated with natural features and structures on Business Zone sites which front onto strategic, arterial and collector roads.

Explanation

Business Zones have fundamentally different characteristics to other zones in the urban environment. These differences arise in part from the lower density of building, and the scale, intensity and nature of activities that tend to come together in a location. As a working environment Business Zones usually have different amenity values to those associated with Residential Zones. There is less need to protect sites within Business Zones from the effects of neighbouring activities, with the exception of maintaining the amenity of:

- entrances to towns; and
- major roads.

In these circumstances the design of structures and the layout of sites should be compatible with community expectations that a higher quality of environment must be sustained.

This policy should be considered in conjunction with Policy 16.1.1.1 which sets out the characteristics of Business 1 and 2 Zones, and Policy 15.1.1.1 which promotes the integration of development in a way that sustains the form and function of urban areas. Site layout, and designs that complement the scale, colour and materials of buildings and structures on adjoining sites, can assist in maintaining the amenity values. Distinctions between sites through structures and landscape treatment also has a place in creating positive amenity values.

Trees and shrubs are landscaping measures preferable to fences of contrasting height, colour and materials. Screening can also reduce the impact and perception of noise and industrial/processing type activity.

CROSS REFERENCE: Policies 15.1.1.1 and 16.1.1.1

Methods

District Plan Rules 12.1.1.2.1

Standards for structures in terms of setbacks, height, recession plane, site coverage, and landscaping/screening.

Subdivision standards for allotment areas and dimensions.

Minimum standards for roads (Table 30.1).

Asset Management 12.1.1.2.2

Maintenance of roads providing entrances into the towns.

Policy 12.1.1.3

In the Rural Zones maintain the amenity values and quality of the environment by ensuring that the land is not dominated by dwellinghouses.

Explanation

Amenity values in the Rural Zones are affected by:

- the density of dwellinghouses;
- community expectations concerning dwellinghouse density;
- the location of dwellinghouses; and
- the presence of lawfully established intensive farming activities.

To assist in maintaining the amenity values and quality of the rural environment, the density of dwellinghouses, and the separation of dwellinghouses need to be controlled. A dwellinghouse is associated with the presence of people and the position of rural dwellinghouses can be an important factor in the amenity values and quality of a rural setting. Where dwellinghouses are sited close to lot boundaries there is a need to maintain a reasonable level of privacy, which will be maintained through setback controls.

Accordingly, the Council would not anticipate the establishment of dwellinghouses on lots smaller than four hectares, or that do not comply with the standards for the Mapleham Rural 4B Zone, or within 20 metres of a property boundary. A much reduced setback for farm buildings is acceptable because the community has indicated that these structures are an integral part of a rural setting.

Notwithstanding the above, there is a desire by many to provide for family members close to the family home. This circumstance is recognised in the Plan by permitting a second dwellinghouse of a limited floor area located in close proximity to a primary dwellinghouse.

Intensive farming activities are a part of the rural environment. The Rural Zone is where they should locate but they need space to find sites and to develop. The more dense the housing in an area, the greater the difficulties

for new operators to establish, and existing operators to provide for their wellbeing through continuing operations, expansion or other development.

Objective 12.1.2 and Policies 12.1.2.1, 12.1.2.2 and 12.1.2.3 and Rule 31.16 provide for additional separation distances between lawfully established intensive farming activities and the establishment of new dwellinghouses, also between existing dwellinghouses and the establishment of new intensive farming activities.

In order to avoid the effects of dwellings dominating land and having an adverse effect on rural amenity and rural character, methods employed to avoid the effects of floodwaters on structures are assessed as a discretionary activity. Policy 12.1.1.3 recognises that dwellings can dominate land, and artificially raising ground heights by earth mounds, poles, piles or other methods are not always appropriate in the Rural Zone.

CROSS REFERENCE: Policies 14.1.1.1 to 14.1.1.4 and 15.1.1.2

Methods

District Plan Rules 12.1.1.3.1

Subdivision standards for allotment areas.

Minimum site area for dwellinghouses.

Setback rules for roads and boundaries for dwellinghouses and structures.

Controls on the number of dwellinghouses on each rural lot.

Signs

Policy 12.1.1.4

Avoid, remedy or mitigate the adverse effects of signs on the amenity values in different zones and avoid detrimentally affecting the safety of the community using road and rail corridors.

Explanation

The restrictions on signs differ between zones, recognising the different community expectations about the number and use of signs in different areas and the characteristics of each zone – Rural (Policies 14.1.1.2 and 14.1.1.3), Urban (Policy 15.1.1.1), Business (Policy 16.1.1.1) and Residential (Policy 17.1.1.2).

The reliance of businesses on signs to advertise their services and products, is reflected in the rules which allow for increased number and size of signs in the Business Zones compared with Residential Zones.

In Residential Zones the tolerance for signs is much lower. Sites within Business Zones, adjoining residential areas should also have signage compatible with the residential land use. Adverse effects on visual amenity can result from inappropriate use of colours, lights, size of lettering and scale, design and number of signs.

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The Rural Zones do not have a large number of signs or a proliferation of signs. This should be maintained, requiring some control on advertising signs. Permanent signs are predominantly directional signs with minimal information. Temporary signs advertising community events are expected but, should be discouraged from accumulating in certain locations where road safety may be an issue.

Some signs utilise lighting and consideration should be given to Glare Policies (12.1.1.5 and 12.1.1.6) and associated rules.

CROSS REFERENCE: Policies 12.1.1.5, 12.1.1.6, 14.1.1.2, 14.1.1.3, 15.1.1.1, 16.1.1.1 and 17.1.1.2

Methods

District Plan Rules 12.1.1.4.1

Rules on sign size, and location on sites and with respect to roads.

Standards for the number and materials of signs on sites.

Standards for temporary signs.

Council Policy and Guidelines 12.1.1.4.2

The policy "Occupation of Legal Roads Including Footpaths Under the Control of the Waimakariri District Council" and associated guidelines promotes appropriate usage and design of signs.

Liaison 12.1.1.4.3

Liaise with groups representing business interests and other community groups.

Enforcement and Abatement Notices 12.1.1.4.4

Some adverse effects can be addressed by the general enforcement powers of the Resource Management Act 1991.

Glare

Policy 12.1.1.5

Control artificial light at a level that is appropriate to the zone.

Policy 12.1.1.6

Avoid glare from artificial light adversely affecting the amenity values and health and safety of people, on neighbouring properties and roads.

Explanation

Glare can arise from artificial illumination such as from sport field lighting, security lighting, advertising signs and from reflective glare of some structures. The impact of proposed lighting on safety will be affected by the level of background light and surrounding land uses:

- the level of road use and type of road;
- light design and legibility of sign contents;
- hours of operation; and
- brightness.

Refer to the policies that set out the characteristics of each zone: Rural (Policies 14.1.1.2 and 14.1.1.3), Urban (Policy 15.1.1.1), Business (Policy 16.1.1.1) and Residential (Policy 17.1.1.2).

In Residential Zones even low levels of artificial light can cause significant loss of amenity to properties due to the residential nature of the area. Areas dominated by residential dwellings are particularly sensitive to the timing of light spill at night. This is relevant to both residences within the larger towns and in rural communities. There is more tolerance for light levels in Business Zones because of the nature of the dominant activities, public display areas and associated signage. In Rural Zones there is an appreciation of the night sky due to current low levels of lighting and this should be protected.

District Plan rules set levels of light (measured in lux) to ensure that activities occurring within and around dwellinghouses are not distracted by glare. Standards for permitted activities focus on the light spill measured at the boundary of a site. Light levels in one site should not compromise the environment of any other site.

Dwellinghouses in the Rural Zones require some level of protection. There is an expectation that light spill onto rural land may occur occasionally as a result of farming activities. Therefore, it is not necessary to maintain low light levels within the whole of a rural property. However, more permanent lighting can be a nuisance and adversely affect the expected amenity of rural dwellers.

In all situations the effect on amenity of the light spill will depend on: the type of light, including its strength; colour; whether it flashes; siting and hours of operation; and any associated benefits.

CROSS REFERENCE: Policies 14.1.1.2, 14.1.1.3, 15.1.1.1, 16.1.1.1 and 17.1.1.2

Methods

District Plan Rules 12.1.1.6.1

Standards for light spill.

Asset Management 12.1.1.6.2

Maintenance and design of street and reserve lighting.

Enforcement Orders and Abatement Notices 12.1.1.6.3

Some adverse effects can be addressed by the general enforcement powers of the Resource Management Act 1991.

Noise

Policy 12.1.1.7

Control noise to a level that is not unreasonable, measured against the character and circumstances of the zone.

Policy 12.1.1.8

Avoid noise adversely affecting the amenity values and health and safety of people on neighbouring sites or zones.

Explanation

Community acceptance of sound will depend on the character, level and duration of the sound and whether it is reasonable, having regard to the time and day. It is recognised that dwellinghouses, including those in the Rural Zones, require some level of protection from noise. Therefore, there are noise level standards, measured at 20 metres from dwellings or at the site boundary.

In Business Zones the tolerance for noise levels is higher because of the needs of some industrial activities. The need to maintain a noise environment suitable for residential activity, particularly at night, is emphasised in the controls.

In addition to rules the enforcement order and abatement procedures of the Resource Management Act 1991 will be used to control unreasonable noise (section 16).

Noise from motorised craft on the Waimakariri River and Ashley River/Rakahuri is addressed in the Chapter 3: Water (Policies 3.1.1.1, 3.1.1.2 and 3.1.1.3).

Amenity values are affected by noise in the following ways:

- People are more sensitive to noise levels at night, particularly in residential areas. The dwellinghouse is a place of rest.
- The length of time, the level, and tonal characteristics of the noise. People may have a different tolerance for loud transient noise as compared with a quieter but more continuous noise, depending on the circumstances. In most situations occasional noise is tolerated at much higher levels than continuous noise.
- The nature and location of nearby activities. Residential activities nearby, including camping grounds, will be sensitive to noise. In the Rural Zones, transitory noise associated with farming activities is generally accepted.

- Perceptions of whether the noise source is associated with benefits to the area, community, or landowner.
- Presence or absence of noise buffers. The most effective buffers are distance and solid structures.
- In the natural environment, which includes the coast, rivers and Outstanding Landscape Area, the expectation is that noise made by human activities is not dominant.

Methods

District Plan Rules 12.1.1.8.1

Standards for noise emissions by time and zone.

Activity-based standards for helicopter landing areas, and construction sites.

Rules provide for protection of noise sensitive land uses, such as residential activities, in areas adjoining Business Zones.

Enforcement and Abatement Notices 12.1.1.8.2

Some adverse effects can be addressed by the general enforcement powers of the Resource Management Act 1991.

Guidelines 12.1.1.8.3

Guidelines for the use of aircraft which are not controlled as a land use, eg microlight aircraft and helicopters.

Liaison 12.1.1.8.4

Work with key industries, and public health agencies.

Monitoring 12.1.1.8.5

Annual measurement of representative noise sites.

Policy 12.1.1.9

Avoid or mitigate the noise effect in the receiving environment where the source of the noise is aircraft or road traffic.

Explanation

Aircraft can only be controlled in relation to the use of airports. There are also limitations on the control of traffic noise. Mitigation of the noise effect in the receiving environment involves consideration of the appropriateness of

residential development in some areas, and the extent to which building design can reduce the noise, eg insulation, setbacks.

There is no current noise data for Rangiora Airfield. However, the take-off and landing vectors are known and rules protect their use.

For Christchurch International Airport the 50Ldn dBA projected aircraft noise contour shows noise level boundaries encroaching onto land to the south west and north east of Kaiapoi (District Plan Map 138). In these areas, there are limitations on subdivision and dwellinghouse development on areas below four hectares to avoid exposing more people to the potential future adverse effects of aircraft noise.

The District Plan Maps also show the 55Ldn dBA noise contour encroaching onto land to the south and west of Kaiapoi. In this area, mitigation against the noise environment is required through controls on noise insulation for residential and other noise sensitive activities. The effect of the Christchurch International Airport is also a cross boundary issue involving Christchurch City (Chapter 19: Cross Boundary Issues).

CROSS REFERENCE: Policies 11.1.1.9, 11.2.1.1(k), 14.3.1.1, 18.1.1.4 and 18.1.1.5

Methods

Research/Information Collection 12.1.1.9.1

Measure the noise levels within land surrounding Rangiora Aerodrome.

Measure the noise levels within land adjoining strategic roads.

Information 12.1.1.9.2

Provide land developers with available information on likely noise effects from aircraft landing and taking off, road traffic and suitable methods of noise insulation.

District Plan Maps 12.1.1.9.3

Map the noise contours, and sound exposure levels for a Boeing 747-200 single event, for Christchurch International Airport.

Liaison 12.1.1.9.4

Meet with Christchurch City Council, Christchurch International Airport Ltd, and Rangiora Aerodrome users, to monitor effects of aircraft noise, and appropriateness of District Plan provisions.

Processes to Deal With Cross Boundary Issues 12.1.1.9.5

NOTE: See Chapter 19: Cross Boundary Issues

Plan Change 12.1.1.9.6

Consideration of changes to zoning in south west Kaiapoi.

Consideration of the potential for "reverse sensitivity" effects upon the operation of Christchurch International Airport Limited that may arise from complaints by future residents as a result of any plan change relating to that area within the 50Ldn dBA projected aircraft noise contour.

District Plan Rules 12.1.1.9.7

Noise insulation standards within the 55Ldn dBA noise contour of Christchurch International Airport.

Rural Zone subdivision standards for allotment area as a controlled activity.

Rural Zone minimum site areas for dwellinghouses as a permitted activity.

Hazardous Substances

Policy 12.1.1.10

Hazardous substances should be securely contained during storage, use, or transportation, and monitoring and contingency procedures established, to minimise the risk of spillage or leakage and contamination of land and water.

Explanation

The greatest risk of contamination comes from accidental loss or leakage of material from containers. Care needs to be taken to ensure that material does not escape, and that in all situations where the unexpected occurs and leakage or spillage occurs, that measures such as secondary containment and procedures be put in place to ensure that environmental damage is minimised. A contingency plan may be required as a condition on a resource consent.

Policy 12.1.1.11

Hazardous substances should be used in locations and by methods that avoid or mitigate adverse effects on the environment and health and safety.

Explanation

The nature and scale of environmental effects and risks associated with hazardous substances are influenced by their intrinsic hazard, and their location such as their proximity to water bodies or residential areas. The use and storage of hazardous substances will be controlled in relation to location and the nature of environmental effects and the level of risk.

Site design, layout, and operational and management procedures greatly affect the risks to the environment from hazardous substances. Although some sites with hazardous substances may be permitted to operate without a land use consent because the risk they pose is deemed to be low, an aggregation of such facilities may increase the level of risk, and the potential for adverse environmental effects.

Policy 12.1.1.12

Facilities that store or use hazardous substances should be sited so as to minimise adverse effects on the community's use of the road network.

Explanation

The transportation of hazardous substances puts people at risk. It is not always possible to avoid residential areas. However, vehicles should use strategic, arterial or collector routes as far as practical, and avoid local roads when transporting hazardous substances.

Policy 12.1.1.13

Co-ordinate with national and regional organisations and adjoining District Councils in the management of hazardous substances.

Explanation

The Resource Management Act 1991 requires the Canterbury Regional Council to define the appropriate role for the District Council in developing objectives, policies and rules relating to control of the use of land to deal with adverse effects of hazardous substances through the Regional Policy Statement. The Regional Policy Statement reserves the role of dealing with adverse effects on water quality of the storage, use, disposal or transportation through a pipeline of certain specified substances to the Regional Council itself. It also reserves for itself the role of developing objectives, policies and rules in relation to the use of hazardous substances in the coastal marine area.

The management of hazardous substances, particularly its transport, requires co-ordination of District Plan proposals for roading and standards for volumes of material.

Methods

District Plan Rules 12.1.1.13.1

Standards for quantities of hazardous substances by zone.

Standards for use and management of hazardous substances.

Enforcement and Abatement 12.1.1.13.2

Some adverse effects can be addressed by the general enforcement powers of the Resource Management Act 1991.

Waimakariri Solid Waste Management Strategy 12.1.1.13.3

Contains proposals for the identification, treatment, and disposal of hazardous substances.

Education 12.1.1.13.4

Increasing public awareness about the nature, risks, and degree of hazard, and appropriate responses to emergencies.

Liaison 12.1.1.13.5

Working with industry groups, the Canterbury Regional Council, emergency services, and landowners to promote good management, and co-ordinate emergency responses.

Other Legislation 12.1.1.13.6

Hazardous Substances and New Organisms Act 1996.

Processes to Deal With Cross Boundary Issues 12.1.1.13.7

NOTE: See Chapter 19: Cross Boundary Issues

Farms and Dwellinghouses

Objective 12.1.2

The establishment and expansion of both farming activities and other activities in the Rural Zones in a way which gives consideration to existing activities while maintaining a quality environment appropriate for the zone.

Policy 12.1.2.1

Encourage farm activities to avoid or mitigate adverse effects through appropriate management, siting and design of operations.

Policy 12.1.2.2

Protect lawfully established farm activities by controlling the establishment of dwellinghouses and other land uses sensitive to the adverse effects of farming activities.

Policy 12.1.2.3

Protect lawfully established dwellinghouses and other sensitive land uses from significant adverse effects from future farm activities.

Explanation

Farm activities that can potentially produce adverse effects off-site include: the intensive farming of animals in buildings and associated treatment and/or disposal of collected effluent, the production of large amounts of compost, and the construction of farm land fills and ofal pits. (Operations dealing with effluent, particularly urban sourced material, may be covered by Chapter 4: Land and Water Margins and/or Chapter 11: Utilities and Traffic Management).

Effects can include: production of offensive odour, over spray, noise or dust nuisance, and reduction in water quality. The nature of farming operations means that these effects, particularly those related to odour, can be transitory and can be weather and management dependent. Appropriate management, siting and design involves making use of currently available technology and best practice, and requires some understanding of the potential for adverse effects, for example, minimising the time between collection and application of effluent to land to reduce odour. Such practices can avoid and/or mitigate adverse effects.

Sensitive land uses are generally those activities where people dominate. Dwellinghouses are associated with high levels of occupation, both the number of people affected, and the length of time that they are present. Residential Zones have similar characteristics. The effect on the quality of the environment can depend on the surrounding land uses, zone qualities and expectations of the community. Refer to the policies that set out the characteristic of each zone: Rural (Policies 14.1.1.2 and 14.1.1.3), Urban (Policy 15.1.1.1), Business (Policy 16.1.1.1) and Residential (Policy 17.1.1.2).

For odour, the need to address adverse affects comes from the presence of people. There is generally no issue unless the odour is perceived by people.

Where the life-supporting capacity of water or land is potentially affected, the effect on the resource is the focus – the presence of people does not necessarily trigger the policy.

When a farming operation is proposed the separation distances detailed are not the optimal buffer areas. Larger distances may be appropriate and consideration should be given to relevant guidelines, ie codes of practice for pig farming.

CROSS REFERENCE: Policies 12.1.3.1, 12.1.3.2, 14.1.1.2, 14.1.1.3, 15.1.1.1, 16.1.1.1 and 17.1.1.2

Methods

Advocacy 12.1.2.3.1

Advocating with industry and farming groups for use of best practice.

District Plan Rules 12.1.2.3.2

Standards for separation of dwellinghouses and Residential Zones from intensive farm activities, effluent treatment systems (other than septic tanks); and the application of farm effluent to land.

Enforcement and Abatement 12.1.2.3.3

Some adverse effects can be addressed by the general enforcement powers of the Resource Management Act 1991.

Guidelines 12.1.2.3.4

Management, design, location of offal pits and farm landfills.

Air

Objective 12.1.3

Protect people, vegetation, animals, and other natural and physical resources, from the adverse effects resulting from the discharge of contaminants to air.

Policy 12.1.3.1

Locate and/or design activities, that lead to the discharge of contaminants to air, so that any adverse effects on people, vegetation, animals and/or other natural and physical resources are avoided or mitigated.

Policy 12.1.3.2

Avoid dwellinghouses and other sensitive land uses locating near to where contaminants are already being discharged to air, unless any adverse effects of the discharge are avoided or mitigated.

Explanation

Many adverse effects can be avoided with the use of separation distances between incompatible activities, such as between a discharge to air and a dwellinghouse. Other sensitive land uses include places where people regularly gather such as schools, hospitals, shops and some businesses where the process or product is sensitive to contaminants such as odour, chemical sprays and dust.

Methods of addressing the adverse effect of contaminants in air may also include, in addition to separation distances, barriers or dispersal techniques. The timing of activities may also be important in mitigating the adverse effects.

The definition of contaminant is such that not all contaminants will result in an adverse effect. The resource management issue exists when the presence of people or other natural or physical resources means that they are sensitive to the contaminant and their health, safety or wellbeing is adversely affected. Contaminants causing adverse effects can include dust, odour, chemical sprays, smoke and fumes.

CROSS REFERENCE: Policies 12.1.2.1 to 12.1.2.3

Methods

Advocacy 12.1.3.2.1

Working with farming and transport users, contractors and others, advocating the use of best practice.

Work with other agencies to encourage the use of heating systems which avoid or minimise contaminant discharges.

Asset Management 12.1.3.2.2

Maintenance and design of road surfaces to reduce dust problems.

Liaison 12.1.3.2.3

Working with the Canterbury Regional Council and Community and Public Health to address issues where there are overlapping responsibilities.

Plants

Objective 12.1.4

The retention of plants that contribute significantly to the amenity of a site, or the character or quality of the surrounding environment.

Policy 12.1.4.1

Plants that contribute significantly to the amenity of a site, or the immediate area, shall be recognised and provided for in any work or subdivision of land, including being protected as a condition of consent.

Policy 12.1.4.2

Retention and protection of significant plants will be taken into account in determining the extent of adverse effects in assessing land use and development.

Explanation

Plants contributing to the level of amenity can be either indigenous or exotic. Generally they are of a scale to provide shade and/or be distinguishable as features in the landscape.

Plants which are considered notable are covered by Chapter 10: Notable Plants. Policies 12.1.4.1 and 12.1.4.2 have a wider scope, assessing the value of all plants at the time of land development.

Policy 12.1.4.2 provides the opportunity for the protection of plants to be weighed against other adverse effects of the land use. Plant protection is included as a matter which can be considered in assessing the extent to which an activity or development standard can be breached.

CROSS REFERENCE: Chapter 10: Notable Plants

Methods

District Plan Rules 12.1.4.2.1

The existence of and protection of significant plants is a matter taken into account in a resource consent application.

Principal Reasons For Adopting Objectives, Policies and Methods 12.1.5

In promoting sustainable management particular regard must be given to the maintenance and enhancement of amenity values (section 7(c) Resource Management Act 1991), and the maintenance and enhancement of the quality of the environment (section 7(f) Resource Management Act 1991). Land use can affect amenity values and the existing and future quality of the environment through:

- the siting and design of structures (buildings and signs);
- the relationship between open spaces, road corridors, trees, dwellinghouses and other aspects of the built environment;
- levels and characteristics of light, noise, air borne contaminants and odour experienced by people;

- disposal of farm waste, including effluent; and
- environmental contamination from hazardous substances and waste.

Some aspects of land use become an issue because they affect people, ie noise and odour. Other effects of land use affect the life-supporting capacity of air, water, soil, or ecosystems. Both relate to the quality of the environment.

Sustainable management requires consideration of the community's health and safety (section 5 Resource Management Act 1991). There is not always a clear distinction between effects on amenity values and effects on one's health and safety. An odour, for example, may be perceived by one person as affecting amenity, while for another it is a matter of health. Signs have effects both on amenity values and on safety, particularly on roads. The policies do not always specify why a land use is being controlled as the circumstances of the case may require more weight to be given to amenity values or health or safety.

The Canterbury Regional Council controls discharge of contaminants into or onto land, air, or water, and discharges of water into water (section 30(f) Resource Management Act 1991). The District Council controls any actual or potential effects of the use, development, or protection of land (section 30(b) Resource Management Act 1991). Where a land use can result in non-point discharges of contaminants both councils have some responsibility. This is the case with odour associated with effluent production, use or disposal. Both Councils share responsibility for management of hazardous substances.

Buildings

The Council as a road controlling authority has the ability to affect the amenity value of the road corridor and reserve areas through asset management and design controls.

In urban environments site coverage controls limit the density of buildings on a site. Along with height controls and recession planes, these measures seek to maintain the building form and hence streetscape of what might be expected in an area, particularly residential areas. Consideration is focused on the effect of buildings on urban qualities and adjoining sites.

Residential Zones often adjoin Rural Zones or Business Zones and buildings and structures at the boundary should protect the amenity values of the area where people reside, primarily Residential Zones. Rules are necessary to set the minimal parameters.

Signs

Signs are a source of information. They are an essential part of many of the activities carried out in the District and are used to give information about events, businesses and to direct the public including road users. District Plan provisions only control their design, position, size and number where these are deemed to have adverse effects on amenity values and/or health and safety. Rules control signs on sites fronting roads to maintain road safety and avoid driver distraction. A particular circumstance in this District is the number of rail crossings and the need to maintain driver vigilance.

Transit New Zealand, as a body responsible for the maintenance of State Highway safety, controls the erection of signs on State Highways and Motorways. The Traffic Regulations 1976 and the Transport Act 1962 govern the

most distracting signs which can be viewed from major highways. The Building Act 2004 controls the structural integrity of signs. The Council also has a policy that regulates signs on footpaths.

Glare

Glare, as perceived by people, can adversely affect amenity values and health and safety.

In all zones the safety of people using the roads can be affected by light from other sources. Lighting can distract drivers, diverting their attention and causing a nuisance by affecting the ability of the driver to see. On the positive side, light can improve pedestrian safety and security.

There are different expectations regarding the level of light experienced in different zones so reference is made to other policies, and rules set different standards for different zones.

The Council, as a road controlling authority and a service provider, can play a key role in the lighting of the road corridor, which affects the ambient light levels.

Noise

Noise can affect people's health and perception of amenity values. It is not a contaminant and the District Plan provisions focus on the protection of people. Sound does not become noise unless perceived by people. The use of the notional boundary for the Rural Zones emphasises the need to control noise in the places where people live and sleep. The generally low level of noisy business activities and small town nature of the District is recognised by the 7pm limit for day time noise levels.

Rules recognise that different zones are expected to have different noise environments. The Rural Zones are relatively noisy. It is a working area where the main activity is farming. It is not necessary to control the noise level at the boundary of two rural sites. This could result in significant parts of adjoining farms having noise standards precluding agricultural use. Unless there are people residing near the boundary there is no need to protect the use at the boundary.

At 65dBA there is speech interference. It protects use within a Business Zone, but is not sufficient to provide a comfortable living environment.

The Resource Management Act 1991 and the New Zealand Standards exclude traffic noise so the rules do not control it, although the receiving environments, ie roadside settlement, can be designed in a way to mitigate the noise (Policy 12.1.1.9).

Policy 12.1.1.9 also addresses the effects of landing and departing aircraft. The Resource Management Act 1991 limits control of aircraft noise to that associated with airports and excludes aircraft in flight (Resource Management Act 1991 section 9(8) Resource Management Act 1991 and related definition of "airport"). As the source of the noise can not be controlled, the receiving environment is the focus of the policy.

This District contains a number of small airfields, the largest being Rangiora Aerodrome and Forest Field Aerodrome. There is currently no information available on the levels of noise experienced around these operations and this needs to be addressed.

Some areas are subject to the noise of aircraft using Christchurch International Airport, particularly south west Kaiapoi and the predicted noise contour can be used to assess the appropriateness of residential developments. The plan change process triggers this consideration. Dwellings and other noise sensitive activities are required to

meet certain noise insulation standards. Information on the likely effect of aircraft through the District Plan Maps can assist in guiding future building design.

Hazardous Substances

The potential or actual adverse environmental effects associated with the leakage or discharge of hazardous substances are likely to be significant because of the toxicity, persistence, explosive, or flammable nature of this material. Contamination of land and water may adversely affect their life-supporting capacity and indirectly the health and safety of communities. The health and intrinsic values of ecosystems may be jeopardised.

Future control of hazardous substances will be through the Hazardous Substances and New Organisms Act 1996. Significant resource management issues, however, are tied to land use choices, particularly in the community expectation that some areas of the District will have low risk to their health and safety, and to the quality of their environment.

The Regional Policy Statement assigns to this District Council specific responsibilities for hazardous substances (Policy 12.1.1.13).

Most people have a need to use hazardous substances, if only to fuel their vehicles. The scale and location of facilities giving access is offset against environmental expectations, and locations that minimise risk to vulnerable environments.

A survey of the type, volume and location of hazardous substances in the District confirms that:

- by far the most common substances are vehicle fuels;
- agrichemicals and most industrial chemicals are not stored in significant volumes, and are subject to other storage and use regulations;
- the largest volumes stored on sites are related to service stations, and timber treatment facilities;
- there are no combined facilities using, storing, or disposing of hazardous substances;
- most sites with significant quantities of material are in Business Zones, or the Rural Zone; and
- significant sites using or storing hazardous substances in Residential Zones are related to service stations, swimming pools and water treatment plants.

The District Plan provisions control hazardous substances in relation to this situation.

Farms and Dwellinghouses

As the Regional Council maintains control for discharges to water, land and air, there is overlap in control over some activities. Land use can be primarily responsible for contaminants entering the air, land and water, requiring intervention by the District Council.

Some farm activities can have associated adverse effects, affecting the amenity values of the surrounding area. In many cases appropriate siting, management practices and design of equipment can avoid or mitigate the effect, particularly as the effects are often transitory in nature. Such good practices are encouraged.

Policies 12.1.2.1 to 12.1.2.3 address the need for separation of incompatible land use. Buffer Zones provide some level of protection for existing land uses. Protection of existing farming operations is focused on, rather than all

future farming activities. This is reflected in the District Plan rules which require an intensive farming activity to apply for a consent if the operation grows over a set limit. Although intensive farms are important to the District, their continued growth in some areas may not be in the best interest of the community.

The characteristics of different animals means that the farm practices associated with them have different effects. The rules recognise the different intensive farm activities – pigs, poultry and cattle operations with appropriate separation distances. The specific circumstances of the small lot sizes permitted in the Mapleham Rural 4B Zone are recognised by the classification of intensive farms as a prohibited activity.

Air

Air pollutants do not generally stay within the boundary of the property on which they are produced/discharged. The Canterbury Regional Policy Statement (Chapter 13, Objective 2, Policy 5) seeks that the District Councils consider appropriate locations for activities discharging to air and the protection of existing activities. The Regional Council has the responsibility for setting standards for emission levels, however, the District Plan can consider the resource management issues arising from the location of land use activities associated with the discharge of contaminants to air. Policies 12.1.3.1 and 12.1.3.2 address the need for separation of incompatible land uses.

Plants

Subdivision, land use, and development are powerful agents for changing environmental quality. A simplistic approach to development based on cost-effectiveness, and efficiency, that is common in the District is to clear a site to enable its development potential, or preferred use, to be more easily achieved. This approach confers costs on the community through loss of amenity, scale, continuity of streetscape, and habitat. Retention of plants that contribute to the amenity of a site or streetscape is necessary. It has the benefits of helping new development fit into the existing urban fabric, reducing the adverse effects of new development and maintaining scale and character of an area. A fundamental premise of urban areas is that they should be pleasant and attractive places in which to live, work and socialise. Retention of significant plants, and if appropriate, non-compliance with some activity or development standards, helps to make change to a familiar environment more sustainable. Rules are an effective instrument.

The issue of site clearance is of less concern in rural areas, but the need for controls on removal of significant plants is appropriate in that context too.

Anticipated Environmental Results and Monitoring 12.2

Anticipated Environmental Result	Monitoring Indicator	Information	Monitoring Frequency
Different zones maintain their valued, distinctive qualities	Comparisons of zone qualities: density, road corridor amenity and ambient noise, light and odour	Council records Asset management qualities	Annually
The layout and design of buildings, structures and open spaces and presence of plants provides a high quality environment	Valuation of properties and areas Noise and glare assessments Perceptions of residents Plants retained as part of subdivision and land use consents and plan changes	Real Estate agents Monitoring by Council staff Regional Council assessments Conditions on subdivision, land use and building consents	Annually
People's health and safety is not adversely affected by inappropriate development, design or siting of roads, structures and signs	Accident data Incidents where safety is compromised Level of people utilising public spaces Concerns of Residents	LTSA Council records Police records Safe Waimakariri Surveys	Annually
Future development using, storing, transporting or disposing hazardous substances does not compromise the amenity values, and health and safety of residents	Conditions on subdivision and land use consents and plan change applications Level of complaints Siting and controls on facilities utilising hazardous substances	Council records Regional Council records	Annually
Future development does not put undue pressure on legitimate existing farming activities to move	Changes in land use	Industry groups	Annually
Significant plants are retained on sites subject to subdivision and/or development	Extent to which plants are retained	Subdivision and land use consent records Surveys	Annually

