OVERVIEW (Updated April 2007)

The effects of noise on the environment and on the health and welfare of communities is an issue which is given particular recognition in the Resource Management Act. Section 16 (1) of the Act states that:

"Every occupier of land (including any premises and any coastal marine area), and every person carrying out an activity in, on or under a water body or the coastal marine area shall adopt the best practicable option to ensure that the emission of noise from that land or water does not exceed a reasonable level."

Section 16(2) of the Act also provides local authorities with the right to prescribe noise emission standards in plans.

The existing noise environment of any district is determined by the nature of activities which take place within it. Banks Peninsula has a unique noise environment. Ambient noise levels range from the tranquility experienced in parts of the Residential, Rural, Papakainga and Small Settlement Zones to the industrial levels existing at Lyttelton Port. The wide range of existing noise levels require methods, including noise controls, that recognise and allow for long established activities within the District while protecting public health, maintaining levels of amenity and, where practicable, enhancing those levels. (Updated April 2007)

The proximity of Lyttelton Port to Lyttelton means that there is a potential for conflict between noise generating activities taking place within the Lyttelton Port Zone and noise sensitive activities within the township. To enable the Lyttelton Port to continue to operate and develop in an efficient and effective manner, landuse controls for noise sensitive activities in close proximity to the port are introduced. The preparation and implementation of a port noise management plan and a port noise mitigation plan is a requirement of the Lyttelton Port Recovery Plan. (Updated April 2007)

ISSUE 1	Noise generated by activities can adversely affect public health and detract from amenity values in the various areas of the District.
OBJECTIVE 1	To ensure that noise generated by activities does not exceed levels considered to be reasonable and appropriate.

POLICIES

- **1A** Levels of noise shall be consistent with guidelines set out in the relevant New Zealand Standards.
- **1B** The frequency, intensity and duration of noise generated by activities shall be kept to a level which is as low as is reasonably achievable.

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- 1C The frequency, intensity and duration of noise generated by an activity shall not have more than a minor adverse effect on the existing amenity of any adjacent site.
- **1D** Noise levels in Rural Areas shall be such that amenity values are maintained but without unduly restricting normal primary production activities.

EXPLANATION AND REASONS (Updated April 2007)

The Resource Management Act contains special provisions for noise. Councils have a duty to control the emission of noise and to control the effects of noise. The controls in the Plan are based upon the New Zealand Standards which contains guidelines for setting noise limits to provide acceptable protection for the health and welfare of the community. Section 16 of the Act also requires every occupier of land to adopt the best practicable option to ensure that the emission of noise does not exceed a reasonable level. Generally, noise limits for the District recognise the existing noise environment and allow for the maintenance of current levels in order to protect existing levels of amenity. Noise limits for the Rural Zone recognise that noise from some agricultural activities is of limited duration and aim to maintain the amenity of rural dwellings.

ISSUE 2	The efficient and effective operation, use and				
	development of Lyttelton Port may be compromised				
	by the establishment of nearby noise sensitive				
	activities;				
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OBJECTIVE 2	Avoid the potential for noise sensitive activities in				
	Lyttelton township creating a reverse sensitivity issue				

for noise generating port activities.

POLICIES (Updated April 2007)

(Updated April 2007)

- 2A Avoid the establishment of port noise sensitive activities within the Port Influences Overlay Area in Lyttelton Township in order to minimise the likelihood of reverse sensitivity effects occurring.
- 2B Notwithstanding Policy 2A, enable noise affected property owners to replace or extend their existing dwellings within the Port Influences Overlay Area of the Residential Zone and the Residential Conservation Zone provided that such replacement or extension is of a similar character, intensity and scale and that any new or extended habitable room is acoustically insulated to the appropriate standard.
- 2C Notwithstanding Policy 2A, recognise that a limited number of new apartments of a minimum floor area may, in appropriate circumstances, establish upstairs in existing heritage or notable buildings within the Town

Centre Zone so as to give owners a further option that would assist in the conservation of these buildings, provided that it is demonstrated that the potential for reverse sensitivity effects are minimised.

- When considering any resource consent for a restricted discretionary activity to establish a port noise sensitive activity in the Port Influences Overlay Area considerable weight must be placed on whether:
 - i) Acoustic insulation is to be provided to the appropriate standard,
 - ii Written approval has been obtained from the Lyttelton Port Company Limited,
 - iii) A no-complaints covenant has been entered into, and
 - iv) Any other relevant methods to minimise the potential for reverse sensitivity effects have been incorporated, including minimising the exposure of outdoor living to port noise.

EXPLANATION AND REASONS (Updated April 2007)

The Council recognises that Lyttelton Port and the township of Lyttelton have coexisted for a long time and, as a result, residential housing is already located in close proximity to the Port. However, there is the potential for reverse sensitivity effects on noise generating port activities and hence the Lyttelton Port Company Limited, to arise. Because Lyttelton Port is infrastructure of regional significance, cannot locate elsewhere, and generally requires to operate 7 days a week, 24 hours a day, the Council considers it prudent to ensure the potential for reverse sensitivity effects are not increased by avoiding intensification of noise sensitivity activities in the Port Influences Overlay Area, as set out in Policy 2A. However, there are two exceptions to this policy direction.

First, under Policy 2B, the replacement of an existing dwelling, or an extension to an existing dwelling, in a noise affected property is anticipated so that people can reasonably meet their residential living expectations provided that the character, intensity and scale of the building is similar. For example, an owner seeking an additional bedroom or extension to a lounge or dining room, or the complete replacement of a dwelling with a new one of a similar scale, is anticipated provided that the necessary acoustic insulation measures are completed. Any significant intensification of residential use would require resource consent.

Second, under Policy 2C, a limited number of apartments located in the upper storeys of the heritage or notable buildings in the Port Influences Overlay Area of the Town Centre Zone may be appropriate in certain circumstances if limited residential use facilitates the use, and hence the conservation, of these buildings. However, in assessing any resource consent all measures to minimise the potential for reverse sensitivity effects on port activities and the Lyttelton Port Company Limited should have been undertaken, including the necessary acoustic insulation of such apartments, written approval obtained from the Lyttelton Port Company Limited and the entering into a no-complaints covenant.

The Council considers a fundamental tool in managing the possible limited establishment of new habitable rooms under Policies 2B, 2C, and 2D is the

employment of a no-complaints covenant in favour of the Lyttelton Port Company Limited. This is expected to be an important matter for it when considering whether to give its written approval. This covenant should apply to the title of the land so that it applies both to existing and future owners and occupiers.

RULES

1. Conditions for Permitted Activities

1.1 Within the Town Centre Zone

Any activity undertaken within the Town Centre Zone for Lyttelton shall be designed and conducted so as to ensure that the following noise limits are not exceeded:

 At any point outside the site boundary and within the Town Centre Zone.

ú At any time - 65 dBA (L10)
ú At night time - 85 dBA (Lmax)

• At any point within the Residential or Residential Conservation Zones:

ú At night time - 40 dBA (L10) 70 dBA (Lmax)

ú At all other times - 50 dBA (L10)

1.2 Within the Industrial Zone for Lyttelton

Any activity undertaken within the Industrial Zone for Lyttelton shall be designed and conducted so as to ensure that the following noise limits are not exceeded:

 At any point outside the site boundary and within the Industrial Zone for Lyttelton.

ú At night time - 45 dBA (L10) ú At all other times - 60 dBA (L10)

At any point within the Residential or Residential Conservation Zones:

ú At night-time - 40 dBA (L10) 70 dBA (Lmax) ú At all other times - 50 dBA (L10)

1.3 Within the Rural Zone

All activities shall be designed and conducted so as to ensure that the following noise limits are not exceeded at any point within the notional boundary of any dwelling, other than a dwelling on the same site:

At night-time
40 dBA(L10)
70 dBA(Lmax)

· At all other times - 50 dBA(L10)

1.4 Within All Parts of the District not Referred to in Rules 1.1 to 1.4 above

Any activity shall be designed and conducted so as to ensure that the following noise limits are not exceeded at any point outside the site boundary:

- At night time - 40 dBA(L10) 70 dBA(Lmax)

At all other times
50 dBA(L10)

1.5 Blasting

Where blasting is undertaken as part of a permitted or controlled activity, vibration from the site shall not exceed a peak particle velocity of 5 mm/sec, provided that this level may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level shall not exceed 120 dB (Lin peak) at any time.

Airblast overpressure from blasting on any land shall not exceed a peak non-frequency weighted (linear or flat) level of 115dB provided that this level may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level shall not exceed 120dB (Lin Peak) at any time.

1.6 Exceptions

The noise limits set out in Rules 1.1 to 1.6 (above) shall not apply in the following circumstances:

- · Where warning devices are operated by an emergency service.
- On any site where construction activity is taking place. In this circumstance construction noise in any management area shall comply with the provisions of the New Zealand Standard NZS 6803P:1984 The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work. Any discretionary adjustments provided for in clause 6.1 of this standard shall be mandatory within the District.
- In the case of temporary military training activities (as defined). These activities shall be conducted such that the following noise limits are not exceeded at any point within the notional boundary of any site on which a dwelling, residential institution or educational facility is located:

ú At night-time - 60 dBA(L10)

75 dBA(Lmax)

ú At all other times - 75dBA(L10)

90dBA(Lmax)

Impulsive noise arising from the use of explosives, ammunition or pyrotechnics at any time shall not exceed a peak non frequency-weighted sound pressure level of 120dB.

Provided that these limits shall not apply between the hours of 10:00am and 5:00pm on no more than two days in any period of 12 months where any exhibition of military activities is open to the public.

The Armed Service engaged in temporary military training activities shall ensure that liaison is maintained with the neighbouring community before and during each such occasion.

- Routine residential maintenance activities (other than construction activities) between the hours of 7:30am and 8:00pm.
- Activities (such as harvesting) required as part of normal farming practice in those zones where farming is a permitted or controlled activity. (Note: this clause does not relieve those carrying out such activities of the duty to comply with the provisions of s16 of the Act).
- Noise arising from the use of roads by vehicles.

1.7 Measurement and Assessment of Noise

- Where standards for noise are specified the measurement of noise shall be in accordance with NZS 6801:1991, 'Measurement of Sound' and assessed in accordance with NZS 6802:1991, 'Assessment of Environmental Sound'.
- For the purposes of administering the rules of this section of the Plan the following meanings shall apply:
 - ú dBA means the A-frequency weighted sound pressure level in decibels relative to a reference sound pressure of 20 micro pascals.
 - ú L10 means the L10 exceedance level set in A-weighted decibels which is equalled or exceeded ten percent of the total measurement time.
 - ú Lmax means the maximum A-frequency-weighted sound level (dBA L max) during a stated time period.
 - ú Night-time means the period of time between 10 pm and 7 am the following day.
 - Long-term average sound level shall be the time-average sound level (day-night level) Ldn and shall be determined from the inverse-logarithmic mean of the measured Ldn level for each day over any five day period within a week.
 - ú The 'notional boundary' of any dwelling shall be 20 metres from the façade of that dwelling, or the legal boundary of the site where this is closer to the dwelling.

1.8 Determination of the Appropriate Internal Design Sound Level (Updated April 2007)

For the purposes of Rule 3.9 (b) in Chapter 24, Rule 6.4 in Chapter 25, and Rule 5.12 (c) in Chapter 26, in determining an appropriate design to the achieve an internal design sound level of a habitable room, the external noise environment will be the modelled level of port noise taken from the predicted dBA Ldn (5 day) contour closest to the habitable room, in accordance with the methodology of NZS 6809:1999 Port Noise Management and Land Use Planning.

Note: There will be a port noise contour map attached to the Port Noise Management Plan, which is to prepared and regularly updated in

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accordance with the Lyttelton Port Recovery Plan. This map will show the dBA Ldn (5 day) contour lines, in 1 dBA increments, across Lyttelton Township and would be available for a property owner's acoustic design consultant to use.