21 August 2008 Chapter 22- Noise

22.0 Noise

22.1 Introduction

Noise is a normal part of most activities and a necessary part of day to day life. Provision for appropriate activities through the Plan needs to include provision for reasonable noise associated with those activities. At the same time, unreasonable, excessive or unnecessary noise should be controlled. Whether that noise should be subject to control will depend in many cases on the circumstances. For example, lower noise levels are properly associated with residential amenities, however, this needs to be balanced in particular circumstances, such as in Picton, with associated or nearby port activity. In such circumstances the plan provisions need to reflect the established use of these areas and the general acceptance by neighbouring residences of the existing ambience when assessing the effects of noise.

Noise can affect people physically, psychologically and socially. Absence of adverse noise effects positively contributes to amenity values and is consequently an indication of sustainable resource management.

Generally, complaints occur when noise is at sufficient levels to create adverse effects. The desirable upper limit for night time noise exposure is determined by criteria to protect the community from either disturbance to the onset of sleep or awakening thresholds of noise for the average person. However, adverse effects of noise are subjective and influenced by:

- Time, frequency and duration of noise; and
- Individual sensitisation to a particular noise.

Most frequent noise related complaints arise from:

- Music band practices, parties, public bars;
- Industrial operations generators, processing equipment and machinery;
- Transportation vehicle movement, loading and unloading vehicles;
- Rural activities crop sowing, tending and harvesting
- machinery and equipment, animals;
- Home occupations tools, machinery; and
- Barking dogs.

The Council has set limits for noise around the Port Zone which reflect existing levels of noise from port related activities at the ports of Picton and Havelock. This is considered an appropriate approach given that there have been no complaints from residents in Picton about existing levels of noise from activities at the port of Picton—over recent years and no complaints from residents in Havelock about existing levels of noise from Sanford's factory, wharf and the main wharf areas. Furthermore, section 16 of the Act continues to apply, requiring all persons including those using the ports to use the best practicable options to ensure that their emissions of noise do not exceed reasonable levels.

Description of Areas Affected by Existing Noise Levels

The areas affected by noise from 24 hour activities at Picton lie predominantly to the south, west and north of the main Port facilities and at Havelock to the west and east. The Picton township lies to the south and has its own noise associated with road traffic, commercial activities, etc. and is relatively unaffected by noise from port activities.

The primary area of existing noise impact at Picton is along the western hillsides which are zoned rural immediately to the west of the port, and overlooking it. This area includes all land to the west of the Port both below and above Queen Charlotte Drive. At Havelock the primary area of existing noise impact is to the west of the port.

Existing Noise Sources

The areas described above receive sounds from arrival and departure, berthing, cargo loading and unloading (and includes at Picton Cook Strait ferries) and other vessels operating at the ports.

The noise sources at Picton include stationary, and mobile sources associated with road transport and rail, and loading activities taking place within the port including noise from light and heavy vehicle traffic within the port areas (excluding noise from vehicles on public roads).

Existing Noise Levels

Measurements undertaken during both daytime and night-time during 2005 and 2006 indicate L_{10} levels between 55 and 66 dBA at all assessment points above Queen Charlotte Drive and 50 dBA at Havelock. Noise levels at assessment points representative of existing dwellings in the area above Queen Charlotte Drive have been measured at between L_{10} 55 dBA and 60 dBA at times of port activity over 24 hour periods during 2005 and 2006. Some variability in sound levels occurs due to variations in port activity throughout the day.

22.2 Issue

Adverse effects of noise on community health, including environmental and amenity values, due to disturbance, disruption or interference.

21 August 2008 Chapter 22- Noise

These adverse effects of noise could include:

- Sleep disturbance;
- Stress;
- Disturbance and stress related health problems;
- Disruption of speech and hearing;
- Interference with concentration;
- Disturbance with relaxation; and
- Reduction of amenity values.

22.3 Objectives and Policies

Objective 1	To avoid, remedy and mitigate the adverse effects of unreasonable noise, while allowing for reasonable noise associated with port activities.
Policy 1.1	Avoid, remedy and mitigate community disturbance, disruption or interference by noise within coastal, rural, and urban areas.
Policy 1.2	Include techniques to avoid the emission of excessive or unreasonable noises within the design of any proposal for the development or use of resources.
Policy 1.3	Accommodate inherently noisy activities and processes which are ancillary to normal activities within industrial, port and rural areas.
Policy 1.4	Accommodate defined transport corridors by requiring methods to mitigate the adverse effects of noise caused by vehicle movement.
Policy 1.5	Recognise that residential activity adjoining port and rail facilities can be subject to higher noise levels than would normally be experienced, and that resulting effects may be justified in certain circumstances.
Policy 1.6	At Picton and Havelock, recognise that the residential settlement is built up around existing port and rail facilities, whose effective and efficient operations need to be provided for by allowing for noise limits at existing levels of noise.

Residential areas have noise levels that create an amenity value conducive to rest, relaxation and sleep.

Commercial and industrial areas have amenity values which are noisier than residential areas but still require limitations on unreasonable noise. The noise from some processes in industrial areas cannot be avoided.

At Havelock and Picton, the port areas have played an integral part in the development of the towns. This historic close association between place of work and living has led to the current land use pattern where residential properties are often very close to port areas. Port areas are vital for the economic wellbeing of the community, and residential activities adjoining the port may have amenity values compromised by noise arising from these existing activities.

Notwithstanding existing uses, the noise emitted from these areas is still subject to the obligations imposed under section 16 of the Act, which requires occupiers of land to adopt the best practicable option to ensure that the emission of noise from land does not exceed a reasonable level.

Rural areas are often perceived to be quiet, tranquil places – but this is not always true. Many rural activities involve noisy mobile equipment and machinery with some special audible characteristics of that noise (e.g.; birdscaring). People living in rural areas also have to accept, as part of their lifestyle, reasonable noise that is generated by legitimate rural activities, including noise from animals.

However, rural activities cannot operate in such a manner that the amenity values of rural areas are reduced. Consequently, rural activities will be required to avoid emission of unreasonable noise and mitigate the effects of noise adjacent to other areas.

Transport corridors and marshalling areas are known and expected to be subject to higher noise levels than some other areas.

Segregation of noise-sensitive activities from transport corridors, commercial, industrial, port or rural areas is a practicable method for avoiding noise effects. Noise-sensitive activities which establish within transport corridors, commercial, industrial, port or rural areas should do so in the knowledge that the environment is more noisy than others. The occupiers of land and every person who carries out an activity has a duty to avoid unreasonable noise and to ensure that the noise does not exceed any relevant noise limits. A noise-sensitive activity which establishes in a noisier environment should have no expectation that reverse sensitivity will apply. If it is not a practicable option to reduce noise, the noise-sensitive activity should be required to have appropriate acoustic treatment of buildings or places where such activities occur.

22.4 Methods of Implementation

Rules	Set noise performance standards for different areas to reflect the existing amenity values.
Guidelines	Development of guidelines for the operation of inherently noisy rural equipment and machinery (eg; wind machines, birdscarers). These will address:
	 Location of activity;
	 Operation of equipment and machinery;
	 Operating techniques and hours of operation;
	 Noise levels relative to notional boundaries;
	 Design and form of any structures; and
	 Means to mitigate emission of excessive noise.
Enforcement	The Council will use the noise abatement provisions of the Act where the emission of noise is excessive or unreasonable.
Monitoring	Monitoring of noise to establish annual and seasonal profiles and to ensure compliance with rules and consent conditions.

21 August 2008 Chapter 22- Noise

22.5 Anticipated Environmental Results

Implementation of the policies and methods for management of noise will result in:

- Enhancement of individual and community health, and amenity values; and
- Improved conditions within which the community can provide for its social, economic and cultural wellbeing.