

Blue = Additions

Red = Deletions

36 Living 1, 2 and 3 Environment Rules

36.3.11 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured within the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none">i) 45 dBA L_{10} between 0700 and 2200; andii) 35 dBA L_{10} at any other time; andiii) 60 dBA L_{max} on any day between 2200 and 0700, except for emergency service vehicles and the operation of emergency service call out sirens; and <p>b)a) Sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none">i. Maximum level of noise likely to be generated;ii. The nature and frequency of the noise, including any special audible characteristics;iii. Effect on nearby residential units;iv. Compatibility within the Environment;v. Compatibility with surrounding Environments;vi. Length of time for which the specified noise level is exceeded, especially at night;vii. Likely adverse effects on site and beyond the site;viii. Mitigation measures to reduce noise generation. <p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>
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36.3.12 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, meets the limits in NZS 6803:1999 Acoustics - Construction Work; and</p> <p>b)a) Sound levels are to be measured in accordance with NZS 6803:1999.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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36.3.13

Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none">i. Duration, time and type of vibration;ii. Health and safety;iii. Effects on amenity values.
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Noise

~~Noise is one of the principal factors that can adversely affect the appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. A high level of amenity, in respect of noise is required to meet the objectives of the Living Environments. The adoption of the standard in this rule will achieve this. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.~~

Construction Noise

~~The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.~~

Vibration

~~Vibration has nuisance effects, like noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.~~

38 Countryside and Coastal Countryside Environment Rules

38.3.10

Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, as measured at any point within the notional boundary of a residential unit on any other site, does not exceed:</p> <ul style="list-style-type: none">i) 50 dBA L_{10} between the hours of 0700 and 2200; andii) 35 dBA L_{107} and 60 dBA L_{max7} between the hours of 2200 and 0700 or <p>b) The noise is generated by:</p> <ul style="list-style-type: none">i) Limited duration events associated with agricultural, horticultural or forestry activities. Limited duration events are those activities normally associated with industry practice, of relatively short duration and where no reasonable alternative is available. The occupier of land on which the limited duration events are undertaken shall adopt the best practicable option to ensure that the emission of noise does not exceed a reasonable level. This will require	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none">i. Maximum level of noise likely to be generated;ii. The nature and frequency of the noise, including any special audible characteristics;iii. Effect on nearby residential units;iv. Compatibility within the Environment;v. Compatibility with surrounding Environments;vi. Length of time for which specified noise level is exceeded, especially at night;
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<p>that the site is planned and managed according to best industry practice and the operation and maintenance of any machinery on the site is undertaken in accordance with both manufacturer's specifications and best industry practice.</p> <ul style="list-style-type: none"> • Horticulture/Agriculture Spraying and harvesting of crops; frost control but not including crop protection by bird scaring; • Forestry Activities associated with forestry but not including milling or processing. <p>ii) The operation of emergency service vehicles or emergency service call-out sirens; and</p> <p>iii) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>e) Air blast Over Pressure does not exceed 120 dBC (peak), measured at any point within the notional boundary of any residential unit.</p>	<p>vii. Likely adverse effects on site and beyond the site;</p> <p>viii. Mitigation measures to reduce noise generation.</p>
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Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.

38.3.11 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work does not exceed the limits in NZS 6803:1999 Acoustics Construction Noise; and</p> <p>b) <u>a)</u> Sound levels are to be measured in accordance with NZS 6803: 1999 Acoustics Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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38.3.12 Bird Scaring Devices (Deleted See NAV Chapter)

<p>The use of bird scaring devices is permitted if:</p> <p>a) Devices are only operated during day light hours; and</p> <p>b) They are operated at a frequency of not more than 6 events per hour; and</p> <p>c) <u>a)</u> The sound from any device shall not exceed 85 dBC weighted peak level at the notional boundary of any residential unit.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility within the Environment;
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	<ul style="list-style-type: none"> v. Compatibility with surrounding Environments; vi. Length of time for which specified noise level is exceeded, especially at night; vii. Likely adverse effects on site and beyond the site; viii. Mitigation measures to reduce noise generation.
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38.3.13 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Duration, time and type of vibration; ii. Effects on health and safety; iii. Effects on amenity values.
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Noise

~~Noise is one of the principal factors which can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule seeks to protect countryside dwellers from unnecessary night time noise, when ambient noise levels can be very low, while permitting a reasonable amount of noise to be made during the day, in keeping with the working environment. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.~~

Construction Noise

~~The acceptability of construction work noise to the community depends on the type of activities which are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.~~

Bird Scaring Devices

~~These devices are commonly regarded as a nuisance. This rule encourages the use of non-audible systems, so that the Countryside noise climate is not degraded by crop protection practices.~~

Vibration

~~Vibration has nuisance effects similar to noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration effects to a standardised acceptable level.~~

39 Business 1 Environment Rules

39.3.7 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the site boundary or within the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 60 dBA L10 at any time; or 	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated;
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<p>b) Noise generated by the activity, measured at or within the boundary of the nearest site in a Living Environment or at the notional boundary of any dwelling in the Countryside Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 50 dBA L₁₀ between the hours of 0700 and 2200; and ii. 40 dBA L₁₀, and 65 dBA L_{maxT} between the hours of 2200 and 0700, except for the operation of emergency service vehicles and emergency service call-out sirens; and <p>c) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>d)a) Air blast over pressure does not exceed 120 dBC (peak), measured at the notional boundary of any residential unit.</p>	<ul style="list-style-type: none"> ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility within the Environment; v. Compatibility with surrounding Environments; vi. Length of time for which specified noise level is exceeded, especially at night; vii. Likely adverse effects on-site and beyond the site; viii.i. Mitigation measures to reduce noise generation.
<p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>	

39.3.8 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <ul style="list-style-type: none"> a) Noise from construction, maintenance and demolition work meets the limits in NZS 6803:1999: Acoustics Construction Noise; and b)a) Sound levels are to be measured in accordance with NZS 6803:1999: Acoustics Construction Noise. 	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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39.3.9 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <ul style="list-style-type: none"> a) It does not exceed the vibration limits given in Appendix 10. 	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Duration, time and type of vibration; ii. Effects on health and safety; iii. Effects on amenity values.
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Noise

~~Noise is one of the principal factors which can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits, both at site boundaries and within the Living and Countryside Environments where people sleep. Sound levels shall be measured in accordance with the~~

provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

Construction Noise

The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.

Vibration

Vibration has nuisance effects like noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.

40 Business 2 Environment Rules

40.3.8 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the site boundary or within the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none">i. 65 dBA L10 at any time; or <p>b) Noise generated by the activity, measured at the boundary of the nearest site in a Living Environment, or at the notional boundary of any dwelling in the Countryside Environment, does not exceed:</p> <ul style="list-style-type: none">i. 50 dBA L10 between the hours of 0700 and 2200; andii. 45 dBA L10, and 70 dBA L_{maxT} between the hours of 2200 and 0700, except for emergency services and the operation of emergency service call-out sirens; and <p>c) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>d) a) Air blast over pressure does not exceed 120 dBC (peak) measured within the notional boundary of any residential unit;</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none">i. Maximum level of noise likely to be generated;ii. The nature and frequency of the noise, including any special audible characteristics;iii. Effect on nearby residential units;iv. Compatibility within the Environment;v. Compatibility with surrounding Environments;i. Length of time for which specified noise level is exceeded, especially at night;ii. Likely adverse effects on-site and beyond the site;iii.i. Mitigation measures to reduce noise generation.
<p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>	

40.3.9 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, meets the limits in NZS 6803:1999: Acoustics Construction Noise; and</p> <p>b) a) Sound levels are to be measured in accordance with NZS 6803:1999: Acoustics Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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40.3.10 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Duration, time and type of vibration; ii. Health and safety; iii. i. Effects on amenity values
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Noise

~~Noise is one of the principal factors which can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits, both at site boundaries and within the Living and Countryside Environments where people sleep. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.~~

Construction Noise

~~The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.~~

Vibration

~~Vibration has nuisance effects, like noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.~~

41 Business 3 Environment Rules

41.3.10 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 55 dBA L₁₀ at any time; and <p>b) Noise generated by the activity, measured at the boundary of the nearest site in a Living Environment or at the notional boundary of any residential unit in the Countryside Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 50 dBA L₁₀ between the hours of 0700 and 2200; and ii. 40 dBA L₁₀ and 65 dBA 	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility within the Environment; v. Compatibility with surrounding Environments;
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<p>L_{max}, between the hours of 2200 and 0700, except for emergency service vehicles and the operation of emergency service call-out sirens; and</p> <p>e) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>d)a) Air blast over pressure does not exceed 120 dBC (peak) measured at the notional boundary of any residential unit.</p>	<p>vi. Length of time for which specified noise level is exceeded, especially at night;</p> <p>vii. Likely adverse effects on-site and beyond the site;</p> <p>viii.i. Mitigation measures to reduce noise generation.</p>
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41.2.11 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, meets the limits in NZS 6803:1999 Acoustics – Construction Noise; and</p> <p>b)a) Sound levels are to be measured in accordance with NZS 6803: 1999 Acoustics – Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p>i. Maximum level of noise likely to be generated;</p> <p>ii. The nature and frequency of the noise, including any special audible characteristics;</p> <p>iii. Effect on nearby residential units;</p> <p>iv. Compatibility within the Environment;</p> <p>v. Compatibility with surrounding Environments;</p> <p>vi. Length of time for which specified noise level is exceeded;</p> <p>vii. Likely adverse effects on-site and beyond the site;</p> <p>viii.i. Mitigation measures to reduce noise generation.</p>
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41.3.12 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p>i. Duration, time and type of vibration;</p> <p>ii. Health and safety;</p> <p>iii.i. Effects on amenity values.</p>
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Noise

~~Noise is one of the principal factors which can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits both at site boundaries and within the Living and Countryside Environment where people sleep. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.~~

Construction Noise

The acceptability of construction work noise to the community depends on the type of activities which are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.

Vibration

Vibration has nuisance effects, like noise, and can have major effects upon people's enjoyment of their property. Therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.

42 Business 4 Environment Rules

42.3.9 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the boundary of any other site in the Environment, does not exceed:</p> <p style="padding-left: 40px;">i. 75 dBA L₁₀ at any time; and</p> <p>b) Noise generated by the activity, measured at the boundary of the nearest site in a Living Environment or at the notional boundary of any residential unit in the Countryside Environment, does not exceed:</p> <p style="padding-left: 40px;">i. 55 dBA L₁₀ between the hours of 0700 and 2200; and</p> <p style="padding-left: 40px;">ii. 45 dBA L₁₀, and 75 dBA L_{max}, between the hours of 2200 and 0700, except for emergency service vehicles and the operation of emergency service call-out sirens; and</p> <p>c) Except where expressly provided elsewhere in the Plan, sound levels are measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>d) Air blast over pressure does not exceed 120 dBC (peak) measured at the notional boundary of any residential unit.</p> <p>e) a) Noise generated within Port areas complies with NZS6809:1999 Acoustic Port Management and Land Use Planning.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p style="padding-left: 20px;">i. Maximum level of noise likely to be generated;</p> <p style="padding-left: 20px;">ii. The nature and frequency of the noise, including any special audible characteristics;</p> <p style="padding-left: 20px;">iii. Effect on nearby residential units;</p> <p style="padding-left: 20px;">iv. Compatibility within the Environment;</p> <p style="padding-left: 20px;">v. Compatibility with surrounding Environments;</p> <p style="padding-left: 20px;">vi. Length of time for which specified noise level is exceeded, especially at night;</p> <p style="padding-left: 20px;">vii. Likely adverse effects on-site and beyond the site;</p> <p style="padding-left: 20px;">viii.i. Mitigation measures to reduce noise generation.</p>
<p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>	

42.3.10 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance</p>	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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<p>and demolition work, meets the limits in NZS 6803:1999 Acoustics – Construction Noise; and</p> <p>b) a) Sound levels are measured in accordance with NZS 6803: 1999 Acoustics – Construction Noise.</p>	
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42.3.11 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Duration, time and type of vibration; ii. Effects on health and safety; iii. i. Effects on amenity values.
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Noise

Noise is one of the principal factors that can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits, both at site boundaries and within the Living and Countryside Environments where people sleep. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1994 Assessment of Environmental Sound.

Construction Noise

The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.

Vibration

Vibration has nuisance effects, like noise, and can have major effect upon people's enjoyment of their property. Therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.

43 Town Basin Environment Rules

43.3.9 Noise (Deleted See NAV Chapter)

<p>Noise from any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 55 dBA L_{10} at any time; and <p>b) Noise generated by the activity, measured at the boundary of the nearest site in a Living Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 50 dBA L_{10} between the hours of 0700 and 2200; and ii. 40 dBA L_{10} and 65 dBA L_{max7} between the hours of 2200 and 0700, except for emergency service vehicles and the operation of emergency service 	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity except that any activity seeking to exceed to noise limits for a temporary activity in condition (c) is a discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential activities or other potentially noise sensitive activities within the Environment; iv. Likely time of noise level exceedance;
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<p>call-out sirens;</p> <p>e) Except that noise generated by any temporary activity in the environment may exceed the above limits on 12 calendar days of every year, providing it does not exceed 65 dBA L_{10} and 75 dBA L_{max} in a Living Environment; and</p> <p>d) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>e)a) Air blast over pressure does not exceed 120 dBC (peak), measured at the notional boundary of any residential unit.</p>	<p>v.i. Mitigation measures to reduce noise generation.</p>
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43.3.10 Construction Noise (Deleted See NAV Chapter)

<p>Noise from any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, meets the limits in NZS 6803:1999 Acoustics Construction Noise; and</p> <p>b)a) Sound levels are to be measured in accordance with NZS 6803:1999 Acoustics Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <p>i. These matters set out for Noise in Table 43.3.9 above.</p>
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43.3.11 Vibration (Deleted See NAV Chapter)

<p>Noise from any activity is a permitted activity if it does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <p>i. Duration, time and type of vibration;</p> <p>ii. Health and Safety impacts.</p>
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Noise

In recognition of the cultural resource of the Town Basin, provision has been made for temporary activities which may generate higher noise levels for short periods of time (for example, an outdoor concert). The noise limits for these temporary activities are similar to those limits considered appropriate for construction noise beyond the standard working hours, recognising that (similar to construction) these noise levels are of short duration. However, activities generating such noise levels are limited to 12 calendar days per year, in recognition of the potential for cumulative adverse impacts if they were to occur over longer or more regular periods.

44 Marsden Point Port Environment Rules

44.3.9 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the boundary of any other site in the Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 75 dBA L₁₀ at any time; and b) Noise generated by the activity, measured at the boundary of the nearest site in a Living Environment or at the notional boundary of any dwelling in the Countryside Environment, does not exceed: <ul style="list-style-type: none"> i. 55 dBA L₁₀ between the hours of 0700 and 2200; and ii. 45 dBA L₁₀, and 65 dBA L_{maxT} between the hours of 2200 and 0700, except for emergency service vehicles and the operation of emergency service call-out sirens; and <p>e) Sound levels are measured in accordance with NZS 6801:1991 Measurement of sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental sound; and</p> <p>d)a) Air blast over pressure does not exceed 120 dBC (peak), measured at the notional boundary of any residential unit.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility within the Environment; v. Compatibility with surrounding Environments; vi. Length of time for which specified noise level is exceeded, especially at night; vii. Likely adverse effects on-site and beyond the site; viii.i. Mitigation measures to reduce noise generation.
<p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>	

44.3.10 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, where these activities are temporary, meets the limits in NZS 6803:1999 Acoustics Construction Noise; and</p> <p>b)a) Sound levels are measured in accordance with NZS 6803:1999 Acoustics Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a discretionary activity.</p>
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44.3.11 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p>
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- i. ~~Duration, time and type of vibration;~~
- ii. ~~Health and safety;~~
- iii. ~~i. Effects on amenity values.~~

Noise

Noise is one of the principal factors that can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits, both at site boundaries and within the Living and Countryside Environments where people sleep. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

Construction Noise

The acceptability of construction work noise to the community depends on the type of activities which are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.

Vibration

Vibration has nuisance effects, like noise, and can have a major effect upon people's enjoyment of their property. Therefore, this rule controls vibration effects to a standardised acceptable level for people and buildings.

45 Airport Environment Rules

45.3.6 Noise (Deleted See NAV Chapter)

<p>Any activity, other than aircraft engine testing and aircraft movement, is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at or beyond the boundary of the Airport Environment, does not exceed:</p> <ul style="list-style-type: none"> i. 50 dBA L_{10}, between the hours of 0700 and 2200; and ii. 40 dBA L_{10}, between the hours of 2200 and 0700; and iii. 70 dBA L_{max}, between the hours of 2200 and 0700, except for emergency services vehicles and the operation of emergency service call-out sirens; and <p>b) Sound levels shall be measured in accordance with NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>c) Air blast over pressure does not exceed 120 dBC (peak) measured at the notional boundary of any residential unit.</p> <p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility within the Environment; v. Compatibility with surrounding Environments; vi. Length of time for which specified noise level is exceeded, especially at night; vii. Likely adverse effects on site and beyond the site; viii. i. Mitigation measures to reduce noise generation.
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in accordance with the rules in Chapter 64

45.3.7 Noise (Aircraft Engine Testing) (Deleted See NAV Chapter)

<p>Aircraft engine testing is a permitted activity where:</p> <p>a) Between the hours of 0700 and 2300, the noise generated by aircraft engine testing, as measured within the boundary of any Living Environment, does not exceed 55 dBA L_{eq} (16 hours) and 65 dBA L_{eq} (15 minutes);</p> <p>b) Between the hours of 2300 and 0700, noise generated by aircraft engine testing, as measured within the boundary of any Living Environment, does not exceed 45dBA L_{eq} (8 hours) and 65dBA L_{max};</p> <p>c) Between the hours of 2300 and 0700, for the purposes of essential, unscheduled maintenance and engine testing on a maximum of 15 occasions within any calendar year, noise generated within the boundary of any Living Environment does not exceed 55 dBA L_{eq} (8 hours) and 70dBA L_{max}. In these circumstances the noise limits set out in b), above shall not apply;</p> <p>d) The time, duration and other essential details of any testing undertaken in accordance with the requirements of c) above shall be recorded and advised to the Whangarei District Council within two weeks of any such event;</p> <p>e)a) Subject to the above rules, noise shall be measured in accordance with the requirements of NZS 6801:1999 Measurement of Sound and assessed in accordance with the requirements of NZS 6802:1991 Assessment of Environmental Sounds.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ol style="list-style-type: none">Maximum level of noise likely to be generated;The nature and frequency of the noise including any special audible characteristics;Effect on nearby residential units;Compatibility within the Environment;Compatibility with surrounding Environments;Length of time for which specified noise level is exceeded, especially at night;The number of times the specified noise is to be exceeded in any calendar year;The consent duration;Likely adverse effects on site and beyond the site;Mitigation measures to reduce noise generation.
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Note: The Airport Noise Rules Chapter (refer to Rule 62.3) and the Aerodrome designation (DW 124) control noise from aircraft operations.

45.3.8 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work meets the limits in NZS 6803:1999 Acoustics Construction Noise; and</p> <p>b)a) Sound levels are to be measured in accordance with NZS 6803:1999</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ol style="list-style-type: none">Maximum level of noise likely to be generated;The nature and frequency of the
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<p>Acoustics—Construction Noise:</p>	<p>noise, including any special audible characteristics;</p> <p>iii. Effect on nearby residential units;</p> <p>iv. Compatibility within the Environment;</p> <p>v. Compatibility with surrounding Environments;</p> <p>vi. Length of time for which specified noise level is exceeded;</p> <p>vii. Likely adverse effects on site and beyond the site;</p> <p>viii.i. Mitigation measures to reduce noise generation.</p>
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45.3.9 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <p>i. Duration, time and type of vibration;</p> <p>ii. Effects on health and safety;</p> <p>iii.i. Effects on amenity values.</p>
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Noise

Noise is one of the principal factors that can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits both at site boundaries and within the Living Environment where people sleep. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

Aircraft Engine Testing

Special rules relate to aircraft engine testing, which is expected to occur from time to time at the airport. The proximity of the residential areas requires special consideration to be given to this aspect.

Construction Noise

The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.

Vibration

Vibration has nuisance effects, like noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties. Therefore, this rule controls vibration effects to a standardised acceptable level.

46 Marsden Point Port Environment Rules

46.3.6 Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by the activity, measured at the boundary of a site in a Living Environment or the notional boundary of any residential unit in a Countryside Environment, does not exceed:</p> <ul style="list-style-type: none"> i 50 dBA L_{10} between 0700 – 2200 Monday to Sunday; and ii 40 dBA L_{10} at any other time; and iii 65 dBA L_{max} on any day between 2200 – 0700, except for emergency service vehicles and the operation of emergency service call-out sirens; or <p>b) Noise is generated by non-amplified voice noise; and</p> <p>e)a) Except where expressly provided elsewhere in this Plan, sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> i Maximum level of noise likely to be generated; ii The nature and frequency of the noise, including any special audible characteristics; iii Effect on nearby residential units; iv Compatibility within the Environment v Compatibility with surrounding Environments; vi Length of time for which specified noise level is exceeded, especially at night; vii Likely adverse effects on-site and beyond the site; viii Mitigation measures to reduce noise generation.
<p>Provided always and notwithstanding the noise requirement in this Rule, if the activity under consideration is a mineral extraction activity and it is located within a Mineral Extraction Area then the noise standards for that activity will be determined in accordance with the rules in Chapter 64.</p>	

46.3.7 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work meets the limits in NZS 6803:1999 Acoustics Construction Noise; and</p> <p>b)a) Sound levels are measured in accordance with NZS 6803:1999.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a non-complying activity.</p>
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46.3.8 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none"> i Duration, time and type of vibration; ii Effects on amenity values; iii Effects on health and safety.
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Construction Noise

The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land-use, and with the activities likely to occur at different times of the day.

Noise

Noise is one of the principal factors that can adversely affect appreciation of amenity. It can have an affect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. The rule sets a variety of noise limits both at site boundaries and within the Living and Countryside Environments where people sleep. Provision is made for noise on Open Space associated with sports and limited duration events, by excluding the noise generated from people playing and supporting sport, where the combined sound of a number of voices may exceed the noise limit. Sound levels shall be measured in accordance with the provisions of NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

Vibration

Vibration has nuisance effects, like noise, and can have a major effect upon people's enjoyment of their property. Therefore, this rule controls vibration effects to a standardised acceptable level for people and buildings.

50 - Port Nikau Environment

50.6.9 Noise Zone 1 (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by any activity measured within the boundary of any other site in Noise Zone 1 as it applies to the Port Nikau Environment does not exceed:</p> <p style="margin-left: 20px;">i) 65dBA $L_{Aeq(15min)}$ at any time; and</p> <p style="margin-left: 20px;">ii) 70dBA L_{Amax} between 2200 and 0700.</p> <p>b) Noise generated by the activity measured within the boundary of any site in Noise Zone 2 as it applies to the Port Nikau Environment does not exceed:</p> <p style="margin-left: 20px;">i) 60dBA $L_{Aeq(15min)}$ between the hours of 0700 and 2200; and</p> <p style="margin-left: 20px;">ii) 55dBA $L_{Aeq(15min)}$ and 70dBA L_{Amax} between the hours of 2200 and 0700</p> <p>c) Noise generated by the activity measured at the boundary of the nearest site in a Living Environment or at the Notional Boundary of any residential unit in the Countryside Environment does not exceed:</p> <p style="margin-left: 20px;">i) 55dBA L_{10} between the hours of 0700 and 2200; and</p> <p style="margin-left: 20px;">ii) 45dBA L_{10} and 70dBA L_{max} between the hours of 2200 and 0700 except for emergency service vehicles and the operation of emergency service call-out sirens; and</p> <p>d) Except where expressly provided elsewhere in the Plan, sound levels in (a) and (b) shall be measured</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ol style="list-style-type: none"> i. Maximum level of noise likely to be generated; ii. The nature and frequency of the noise, including any special audible characteristics; iii. Effect on nearby residential units; iv. Compatibility with the Environment; v. Compatibility with surrounding Environments; vi. Length of time for which the specified noise level is exceeded, especially at night; vii. Likely adverse effects on-site and beyond the site; viii. <u>i.</u> Mitigation measures to reduce noise generation;.
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<p>and assessed in accordance with NZS6801:2008 Acoustics— Measurement of Environmental Sound and assessed in accordance with NZS6802:2008 Acoustics— Environmental Noise; and</p> <p>e) Except where expressly provided elsewhere in the Plan, sound levels in (c) shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound; and</p> <p>f) <u>a)</u> Air blast over-pressure does not exceed 120dBC (peak) measured at the notional boundary of any residential unit.</p>	
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50.6.10 Noise Zone 2 (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise generated by any activity measured within the boundary of any other site in Noise Zone 2 as it applies to the Port Nikau Environment does not exceed:</p> <p>i) 60dBA $L_{Aeq(15min)}$ between the hours of 0700 and 2200; and</p> <p>ii) 55dBA $L_{Aeq(15min)}$ and 70dBA L_{Amax} between the hours of 2200 and 0700</p> <p>b) Noise generated by the activity measured within the boundary of the nearest site in a Living Environment or at the Notional Boundary of any residential unit in the Countryside Environment does not exceed:</p> <p>i) 55dBA L_{10} between the hours of 0700 and 2200; and</p> <p>ii) 45dBA L_{10} and 70dBA L_{max} between the hours of 2200 and 0700 except for emergency service vehicles and the operation of emergency service call-out sirens; and</p> <p>c) Except where expressly provided elsewhere in the Plan, sound levels in (a) shall be measured and assessed in accordance with NZS6801:2008 Acoustics— Measurement of Environmental Sound and assessed in accordance with NZS6802:2008 Acoustics— Environmental Noise; and</p> <p>d) Except where expressly provided</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p>i. Maximum level of noise likely to be generated;</p> <p>ii. The nature and frequency of the noise, including any special audible characteristics;</p> <p>iii. Effect on nearby residential units;</p> <p>iv. Compatibility with the Environment;</p> <p>v. Compatibility with surrounding Environments;</p> <p>vi. Length of time for which the specified noise level is exceeded, especially at night;</p> <p>vii. Likely adverse effects on-site and beyond the site;</p> <p>viii. <u>i.</u> Mitigation measures to reduce noise generatio-</p>
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<p>elsewhere in the Plan, sound levels in (b) shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound; and</p> <p>e)a) Air blast over-pressure does not exceed 120dBC (peak) measured at the notional boundary of any residential unit.</p>	
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50.6.11 Internal Noise Environment (Deleted See NAV Chapter)

<p>The establishment or alteration or addition to any residential unit, facility for the care of the elderly or sick people, or the education or care of children, noise sensitive activity or place of assembly is a permitted activity if:</p> <p>a) The building is designed and constructed in a manner as to provide an internal noise environment of:</p> <p style="margin-left: 20px;">i) 35dB L_{Aeq(60min)} in any bedroom, at any time; and</p> <p style="margin-left: 20px;">ii) 45dB L_{Aeq(60min)} in any habitable rooms, or room for sleeping, convalescing, care or learning, at any time; and</p> <p style="margin-left: 20px;">iii) The noise being generated externally to the uses detailed above is being produced within the relevant levels defined in Rules 50.7.9 and 50.7.10.</p> <p>b) At the same time and under the same physical conditions as the internal noise levels in (a) above, all bedrooms and other habitable rooms, or room for sleeping, convalescing, care or learning, will be adequately ventilated in accordance with the Building Code; and</p> <p>c) After completion of the construction of the building, the consent holder shall submit a report to the satisfaction of Council, which is signed by a suitably qualified person, and which certifies that the building has been built in compliance with the noise and ventilation rules in (a) (i) and (ii) above.</p> <p>d) In assessing compliance with the ventilation requirements of the Building Code for the purposes of</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p style="margin-left: 20px;">i. Maximum level of noise likely to be received;</p> <p style="margin-left: 20px;">ii. Potential effects on people's health and safety;</p> <p style="margin-left: 20px;">iii. Compatibility of the proposed use within the Environment;</p> <p style="margin-left: 20px;">iv. Compatibility of the proposed use with surrounding existing uses;</p> <p style="margin-left: 20px;">v. The length of time for which the internal noise environment will be greater than that specified, especially at night;</p> <p style="margin-left: 20px;">vi. The practicability of mitigation measures to reduce noise effects.</p>
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<p>part (b) of this rule above, no source or means of ventilation shall be taken into account unless it is available at all times while achieving the internal noise levels required under part (a) of this rule. For example, adjustable doors, windows or louvres may not be relied upon to meet the ventilation requirements of the Building Code if they can be adjusted to allow internal noise levels to exceed those specified in part (a) of this rule, above.</p> <p>e) The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meter, Type 1.</p> <p>f)a) Except where expressly provided elsewhere in the Plan, sound levels shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound.</p>	
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50.6.12 Construction Noise (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) Noise from construction, maintenance and demolition work, meets the limits in NZS 6803:1999 Acoustics— Construction Noise; and</p> <p>b)a) Sound levels are measured in accordance with NZS 6803: 1999 Acoustics— Construction Noise.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p>
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50.6.13 Vibration (Deleted See NAV Chapter)

<p>Any activity is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p><i>Discretion is restricted to:</i></p> <ul style="list-style-type: none"> i. Duration, time and type of vibration; ii. Effects on health and safety; iii.i. Effects on amenity values.
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Noise

~~Noise is one of the principal factors which can adversely affect appreciation of amenity. It can have an effect on people's health in a psychological and physiological sense. It may interfere with communication and disturb concentration. In order to effectively manage noise in the Port Nikau Environment two 'Noise Zones' have been developed.~~

~~Noise Zone 1 is designed to enable 24 hour a day operations to occur and in particular makes allowance for land uses such as boat building and other light industrial and commercial operations to occur. It is recognised that the allowable noise limits in Zone 1 are such that very limited amenity would be available in outdoor living areas associated with residential activities and noise sensitive activities and the like, however these uses are permitted in this area (except for where they are specifically controlled in the buffer and transitional areas) subject to compliance with the internal noise environment rule which enables the interior of noise sensitive activities such as residential uses to be designed in such a manner as to enable indoor activities to occur in an appropriate environment. Noise Zone 2 is designed to provide a greater level of amenity for residential uses and noise sensitive activities and provide more of a mixed use environment than Zone 1 enables and this is reinforced through the lower night-time noise limits. However, it is recognised that the noise limits proposed for Zone 2 have the potential to have a negative effect on residential uses and noise sensitive activities; therefore the internal noise environment rule also applies in this~~

~~Combined the rules set a variety of noise limits, both at internal site boundaries and within the more sensitive Living and Countryside Environments. Sound levels shall be measured in accordance with the relevant New Zealand Standards, defined in the rules, to avoid confusion and ambiguity.~~

Construction Noise

~~The acceptability of construction work noise to the community depends on the type of activities that are affected by the noise, the expected duration and the normal background noise level at the places affected. Consequently, the recommended maximum noise level varies with the type of land use, and with the activities likely to occur at different times of the day.~~

Vibration

~~Vibration has nuisance effects, like noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration effects to a standardised acceptable level for people and buildings.~~

Marsden Primary Centre

TCSE.1.5. Discretionary Activities

1. Any of the following activities are Discretionary Activities except as otherwise limited or provided for in the Commercial or Residential Policy Areas, or a Precinct Plan.
 - (i) Activities involving the development or construction of buildings which do not comply with:
 - a) the Town Centre South Precinct 1 Plan and Standards in Section F; or
 - b) the provisions of the relevant Commercial or Residential Policy Areas.
 - (ii) Activities exceeding the allocations in the Spatial Budget in Appendix G.
 - (iii) Activities exceeding the levels and limits specified in the Specific Effects Thresholds in Section E:
 - a) Part A: Specific Effects Thresholds for Noise Zone 2 (since replaced by NAV Chapter); and
 - b) Part B.

COMMERCIAL POLICY AREA

2. Activities within the Town Centre South - Commercial Policy Area:
 - (i) which do not provide the number of car parks required for that activity under Appendix 6 - Road Transport except for the following:
 - c) Restaurants (excluding Drive through Facilities and take-away food bars) seating more than 30 people; a minimum of 75% of the number required by Appendix 6 - Road Transport.
 - d) Restaurants (excluding Drive through Facilities and take-away food bars) seating 30 people or less: No parking required.

- (ii) that exceed the Internal Noise Environment noise levels set out in the ~~Part A: Specific Effects Thresholds in Section E, for residential units, office, retail, hotels, tertiary education facilities, and health care facilities;~~ NAV Chapter;

RESIDENTIAL POLICY AREA

3. Activities within the Town Centre South - Residential Policy Area that:
 - (i) generate more than 20 daily vehicle movements per residential unit excluding any movements directly associated with the domestic activities of permanent occupants of a household unit;
 - (ii) exceed the noise levels set out in ~~Part A: Specific Effects Thresholds in Section E~~ the NAV Chapter for Noise Zone 2;

TCSE.1.7. General Policies

Vibration

16. To avoid adverse effects arising from vibration in regard to:

- (i) duration, time and type of vibration;
- (ii) effects on health and safety;
- (iii) effects on amenity values;
- ~~(iv) the additional matters listed in Appendix 10~~

IE.2.5. Discretionary Activities

1. Any one or more of the following activities are Discretionary Activities except as otherwise limited or provided for in the Residential Compatible Industry, Light Industry or Neighbourhood Centre Commercial Policy Areas, or a Precinct Plan:
 - (i) Activities involving the development, construction or use of buildings which do not comply with:
 - a) the Industry Precinct 2 Plan and Standards in Section F; and/or
 - b) the provisions of the relevant Residential Compatible Industry, Light Industry, and Neighbourhood Centre Commercial Policy Areas.
 - (ii) Activities that exceed the noise levels set out in the NAV Chapter ~~Part A: Specific Effects Thresholds in Section E~~ applied as follows:
 - a) Industry Environment and Neighbourhood Centre Commercial Policy Area
Noise Zone 1 and Internal Noise Environment.
 - b) Light Industry Policy Area and Residential Compatible Industry Policy Area:
Noise Zone 2 and Internal Noise Environment.

SPECIFIC EFFECTS THRESHOLDS

PART A

Noise Zone 1 (Deleted See NAV Chapter)

- ~~a. Noise generated by any activity measured within the boundary of any other site in Noise Zone 1 as it applies to the Marsden Primary Centre shall not exceed:

 - i) 65dBA LAeq(15min) at any time; and
 - ii) 70dBA LAmax between 2200 and 0700.~~
- ~~b. Noise generated by the activity measured within the boundary of any site in Noise Zone 2 as it applies to the Marsden Primary Centre shall not exceed:

 - i) 60dBA LAeq(15min) between the hours of 0700 and 2200; and
 - ii) 55dBA LAeq(15min) and 70dBA LAmax between the hours of 2200 and 0700~~
- ~~c. Noise generated by the activity measured at the boundary of the nearest site in the Town Centre Environment or at the Notional Boundary of any residential unit in the Environment does not exceed:

 - i) 55dBA L10 between the hours of 0700 and 2200; and
 - ii) 45dBA L10 and 70dBA Lmax between the hours of 2200 and 0700 except for emergency service vehicles and the operation of emergency service call-out sirens; and~~
- ~~d. Except where expressly provided elsewhere in the Plan, sound levels in (a) and (b) shall be measured and assessed in accordance with NZS6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with NZS6802:2008 Acoustics – Environmental Noise; and~~

- ~~e. Except where expressly provided elsewhere in the Plan, sound levels in (c) shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound; and~~
- ~~f.a. Air blast over-pressure shall not exceed 120dBC (peak) measured at the notional boundary of any residential unit.~~

Noise Zone 2 (Deleted See NAV Chapter)

- ~~a. Noise generated by any activity measured within the boundary of any other site in Noise Zone 2 as it applies to the Marsden Primary Centre shall not exceed:~~
- ~~i) 60dBA LAeq(15min) between the hours of 0700 and 2200; and~~
 - ~~ii) 55dBA LAeq(15min) and 70dBA LAmx between the hours of 2200 and 0700~~
- ~~b. Noise generated by the activity measured within the boundary of the nearest site in a Living Environment or at the Notional Boundary of any residential unit in the Countryside Environment does not exceed:~~
- ~~c. 55dBA L10 between the hours of 0700 and 2200; and~~
- ~~d. 45dBA L10 and 70dBA Lmax between the hours of 2200 and 0700 except for emergency service vehicles and the operation of emergency service call-out sirens; and~~
- ~~e. Except where expressly provided elsewhere in the Plan, sound levels in (a) shall be measured and assessed in accordance with NZS6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with NZS6802:2008 Acoustics – Environmental Noise; and~~
- ~~f. Except where expressly provided elsewhere in the Plan, sound levels in (b) shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound; and~~
- ~~g.a. Air blast over-pressure does not exceed 120dBC (peak) measured at the notional boundary of any residential unit.~~

Internal Noise Environment (Deleted See NAV Chapter)

~~The establishment or alteration or addition to any residential unit, facility for the care of the elderly or sick people, or the education or care of children, noise sensitive activity or place of assembly shall meet the following requirements:~~

- ~~a) The building is designed and constructed in a manner as to provide an internal noise environment of:~~
- ~~i) 35dB LAeq(60min) in any bedroom, at any time; and~~
 - ~~ii) 45dB LAeq(60min) in any habitable rooms, at any time; and~~
 - ~~iii) The noise being generated externally to the uses detailed above is being produced within the relevant levels defined in Rules 50.14.8 and 50.14.9.~~
- ~~b) At the same time and under the same physical conditions as the internal noise levels in (a) above, all bedrooms and other habitable rooms will be adequately ventilated in accordance with the Building Code; and~~
- ~~c) After completion of the construction of the building, the consent holder shall submit a report to the satisfaction of Council, which is signed by a suitably qualified person, and which certifies that the building has been built in compliance with the noise and ventilation rules in (a) (i) and (ii) above.~~
- ~~d) In assessing compliance with the ventilation requirements of the Building Code for the purposes of part (b) of this rule above, no source or means of ventilation shall be taken into account unless it is available at all times while achieving the internal noise levels required under part (a) of this rule. For example, adjustable doors, windows or louvres may not be relied upon to meet the ventilation requirements of the Building Code if they can be adjusted to allow internal noise levels to exceed those specified in part (a) of this rule, above.~~
- ~~e) The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meter, Type 1.~~
- ~~f) Except where expressly provided elsewhere in the Plan, sound levels shall be measured and assessed in accordance with NZS6801:1991 Measurement of Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound.~~

PART B

The following specific effects thresholds apply except than where Environment Rules apply different standards.

Construction Noise (Deleted See NAV Chapter)

- ~~a. Noise from construction, maintenance and demolition work, shall meet the limits in NZS 6803:1999 Acoustics – Construction Noise; and~~
~~for~~
- ~~b.a. Sound levels are measured in accordance with NZS 6803: 1999 Acoustics – Construction Noise.~~

Vibration (Deleted See NAV Chapter)

~~c. b. Any activity shall not exceed the vibration limits set out in Appendix 10 of the Plan~~

Urban Transition Environment

Urban Transition Environment.2.1 Discretionary Activities

~~c. Any activity that exceeds the noise levels set out in the Living 3 Environment. See NAV chapter for noise limits relating to the Urban Transition Environment.~~

62 Airport Noise Rules (Deleted – See NAV Chapter)

62.1 Introduction

~~This Chapter contains rules relating to management of aircraft noise and land use activities within the Airport Air Noise Boundary and the Outer Control Boundary. These areas are shown on the Planning Maps by lines on the Resource Area Maps. These rules apply in addition to any other rules in this Plan applicable to the same areas or sites.~~

62.2 Calculation of Noise Contours

~~Aircraft noise contours at Whangarei Airport have been established based on the principles and recommended practice contained in New Zealand Standard NZS 6805:1992, 'Airport Noise Management and Land Use Planning', and in consultation with airport operators, airline representatives and the Whangarei Airport Authority. The contours have resulted in the location of an Airnoise Boundary and an Outer Control Boundary.~~

~~The relevant considerations in the development of the aircraft noise contours are:~~

- ~~• The unit of measurement is Ldn (level day-night) which is a method of quantifying 24-hour noise levels (in dBA). A 10 decibel penalty is applied to all aircraft noise events occurring between 2200 and 0700 reflecting the sensitivity to noise events during this period.~~
- ~~• The noise contours represent projections of aircraft noise up until 2027, based on air traffic volumes and aircraft types consistent with growth estimates provided by the aviation industry.~~
- ~~• The future predictions of noise levels were undertaken using the Integrated Noise Model Version 6.0 developed by the Federal Aviation Administration of the United States. This method is recommended in NZS 6805:1992. The formulation of the Air Noise Boundary and Outer Control Boundaries has been based on a combination of the modelled Air Noise contours, noise monitoring measurements and topographical correction computer modelling, in order to take into account the effects of terrain on the way sound from aircraft is received at residential locations in the area around Whangarei Airport.~~

62.3 Noise from Aircraft Operations

- ~~a) Noise from aircraft operations shall be so managed that the rolling 3-month average 24-hour night weighted sound exposure does not exceed 65dBA Ldn at, or at any point outside, the Air Noise Boundary; and~~
- ~~b) Helicopter hovering (other than hovering included in normal take off landing) is restricted to the area identified as "Helicopter Hovering Area" on Planning Map 46; and~~

- ~~e) Noise from aircraft operations, measured as the rolling 3-month average 24-hour night weighted sound exposure may exceed the noise limits in Rule 62.3 a) in the event of:~~
- ~~i. Aircraft landing in an emergency; and~~
 - ~~ii. The operation of emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency; and~~
 - ~~iii. The operation of unscheduled flights required to meet the needs of a national or civil defence emergency declared under the Civil Defence Act 1983; and~~

~~62.4 Prohibited Activities~~

~~62.4.1 Prohibited Activities~~

The following activity is a prohibited activity for which no resource consent shall be granted:

- ~~• New noise-sensitive activities inside the Air Noise Boundary for Whangarei Airport.~~

~~62.5 Airport Noise Rule Table~~

~~62.5.1 Activities Generally~~

<p>Within the Air Noise Boundary and in the Air Noise Margin for Whangarei Airport, any activity is permitted if:</p> <ul style="list-style-type: none"> a) It is permitted by the provisions of the relevant Environment and all other Resource Area rules in the Plan; and b)a) It is not listed in rule table 62.5 and rule 62.6 below. 	
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62.5.2 Within the Air Noise Margin

<p>Within the Air Noise Margin, the following is a permitted activities:</p> <p>a) A minor addition or alteration to an existing building, which is not to be used as a habitable room.</p> <p>Within the Air Noise Margin, the following are Controlled activities:</p> <p>a) The addition of a habitable room;</p> <p>b) The construction of a new residential unit if:</p> <p>i. The net site area associated with each residential unit is at least 1000m²; or</p> <p>ii. The proposed construction is of a first residential unit upon an allotment that is less than 1000m², and that allotment existed before 1 December 2005.</p> <p>c) Visitors accommodation.</p> <p>Control is reserved over: The effect of Airport noise on the living standard within such building or habitable room. Whether the design and materials used in construction achieves an internal design level of 40dBALdn for noise within any new habitable rooms.</p>	<p>Any activity that does not comply with a standard for a Controlled activity is a discretionary activity.</p> <p>New noise sensitive activities and expansion of existing noise sensitive activities, are a discretionary activity within the Air Noise Margin.</p> <p>Specific criteria for considering a discretionary activity under this Rule are set out below in Clause 62.6 below.</p>
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62.6 Assessment of Controlled Activities within the Air Noise Margin of the Whangarei Airport.

The achievement of an internal design level of 40dBALdn is generally achievable through good design, utilising normal construction techniques that accord with the New Zealand Building Code. Applicants can either obtain a certificate of compliance from an appropriately qualified or experienced acoustician (Council may provide advice on this matter) or achieve an acceptable design solution (new method in 24.5.1).

62.6.1 Air Noise Boundary

<p>Visitor accommodation is a discretionary activity within the Air Noise Boundary.</p>	<p>Any activity that does not comply with a standard for a Permitted, Controlled or a Restricted Discretionary activity is a discretionary activity.</p> <p>Specific criteria for considering a discretionary activity under this rule, are listed in Clause 62.6.</p>
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62.7 Assessment of Discretionary Activities within the Air Noise Boundary and the Air Noise Margin for Whangarei Airport

The matters the Council shall consider in the exercise of its discretion include, but are not limited to:

- a) Consideration of the proposed location of the noise sensitive activity in relation to airport activities;

- ~~b) Effects, or potential effects arising from the proximity of the airport, aircraft approach/takeoff paths, lead-in lighting, navigational aids; and the potential of buildings or structures to create glare, electromagnetic interference, smoke, mechanical turbulence or other adverse effects;~~
- ~~c) The effect, or potential effect of the noise sensitive activity on the operation of Whangarei Airport; particularly having regard to helicopter TLOF and hover points and the runway centreline alignments, requirements for aircraft on approach, and aircraft utilising navigational aids/lighting.~~
- ~~d) The effect, or potential effect of airport operations, in particular noise, and health/safety effects from low flying aircraft, on the noise sensitive activity, given low ground clearances for aircraft on approach/ takeoff over this area, and high single event noise levels and average daily noise levels;~~
- ~~e) The effect of topographical characteristics of the land in relation to shielding of airport noise;~~
- ~~f) Relevant objectives and policies, as they relate to the protection of a regionally significant transportation resource;~~
- ~~g) Any remedial measures to avoid, remedy or mitigate potential conflict with the safe and efficient operation of the airport;~~
- ~~h) Whether there has been adequate and meaningful consultation with the Airport Authority with respect to the current or potential effects associated with the operation of the airport resource, whether any issues have been resolved and any mitigation measures that have been proposed.~~

Notes:

~~1. Conditions of consent~~

~~Any application for land use consent for a residential or other noise sensitive activity in the outer control boundary, will be required to have a notice registered against its title and included in the LIM report which alerts the owner that the property falls within a noise sensitive area and can therefore expect noise levels higher than would normally be expected in that Environment.~~

~~2. Notification~~

~~Council has identified reverse sensitivity effects that new noise sensitive activities may have on the safe and efficient operation of the Whangarei Airport. It has also identified potential adverse effects of the Airport on noise sensitive activities. Therefore, applications for resource consent may require the written approval of the Whangarei Airport, as an affected party if such applications are to be considered on a non notified basis.~~

~~62.8 Principal Reasons for Rules / Explanations~~

~~Associated with future development of the Whangarei Airport at Onerahi, it is predicted that noise exposure levels from aircraft using the Airport will increase to the extent where the noise may affect the health and amenity of residents living around the airport. This Plan proposes various methods to manage the effects of airport related noise:~~

- ~~a) The airport is required to comply with the specified noise levels set out as a condition on the Aerodrome designation.~~
- ~~b) Engine testing is controlled by a condition on the Aerodrome designation.~~
- ~~c) The Council proposes to establish a Noise Management Committee pursuant to NZS 6805.~~
- ~~d) A Noise Management Plan shall be prepared and implemented within six months of the Plan becoming operative specifically to deal with management of airport operations in order to avoid and or mitigate adverse effects from noise. The NMP should be approved by the Director of Civil Aviation and subject to annual independent audit by an auditor approved by the Director of Civil Aviation.~~

- e) ~~The airport is required to adopt environmental management systems for the airport.~~
- f) ~~Rules, based upon NZS 6805:1992, provide for the identification of areas around the airport which are predicted to be subject to moderate to high levels of noise over the planning period to 2027. These areas are contained within an outer noise contour, being the Outer Control Boundary and an inner noise contour, being the Air Noise Boundary, shown on Planning Map 46R. The Air Noise Boundary establishes a boundary at which noise exposure from aircraft operations can be monitored and controlled. New noise-sensitive activities and subdivision are prohibited activities within the Air Noise Boundary, due to potential exposure to high levels of aircraft noise. Additions to existing noise-sensitive activities are **discretionary** activities, where the scale of development is not detrimental to airport activities and public health. The Whangarei Airport Authority has indicated that it will purchase any land that becomes vacant within this area. Both new noise-sensitive activities, subdivisions and additions to existing noise-sensitive activities are **controlled** activities within the Air Noise Margin, where minimum density or lot size is 1000m². Proposals seeking a higher density of development will be subjected to assessment aimed at avoiding new noise-sensitive activities from being adversely affected by airport noise. The Rules allow for the development of a single residential unit on existing vacant lots that may be less than 1000m².~~
- g) ~~Visitors' accommodation inside the Air Noise boundary is a **discretionary** Activity and it is a **controlled** activity in the Air Noise Margin. This is in recognition of the transient nature of occupants and the different expectation from travellers' accommodation, as compared with residential accommodation and outdoor living.~~

~~The Airport Environment Rules control development within the Airport boundary which is not subject to the Provisions of the Aerodrome designation.~~

64 – Mineral Extraction Areas

64.3.2 Operating Noise (Deleted See NAV Chapter)

<p>Mineral extraction in a Mineral Extraction Area is a permitted activity if:</p> <p>a) In those areas classified as low noise areas, the sound of the activity, assessed at any point within the notional boundary of any residential unit not owned or controlled by the quarry owner or operator, does not exceed the following limits within the stated time frames:</p> <p style="padding-left: 20px;">i) between the hours of 0630 and 2130:</p> <ul style="list-style-type: none">• 50 dBA L_{10}; and <p style="padding-left: 20px;">ii) between the hours of 2130 and 0630:</p> <ul style="list-style-type: none">• 40 dBA L_{10}; and• 65 dBA L_{max}; <p>or</p> <p>b) In those areas classified as high noise areas, the sound of the activity, assessed within the notional boundary of any residential unit not owned or controlled by the quarry owner or operator, does not exceed the following limits within the stated time frames:</p> <p style="padding-left: 20px;">i. between the hours of 0630 and 2130:</p> <ul style="list-style-type: none">• 55 dBA L_{10}; and <p style="padding-left: 20px;">ii. between the hours of 2130 and 0630:</p> <ul style="list-style-type: none">• 45 dBA L_{10}; and• 70 dBA L_{max}; <p>c) Or sound of the activity, generated within the Mineral Extraction Area, assessed at any point within the notional boundary of any residential unit not owned or controlled by the quarry owner or operator, does not exceed the limits within the stated timeframes as listed in Appendix 14; and</p> <p>d) <u>a)</u> The Air blast over pressure from blasting activities from a site in any noise area, as measured within the notional boundary of any residential unit not owned or controlled by the quarry owner or operator, does not exceed 120 dBC (peak) or 126 dB linear (peak) at a statistically demonstrated 90% compliance confidence limit with an absolute upper criterion of 122 dBC (peak) or 128 dB linear (peak); and</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <ul style="list-style-type: none">i. Maximum level of noise likely to be generated;ii. The nature and frequency of the noise, including any special audible characteristics;iii. Effect on nearby residential units;iv. Compatibility within the environment;v. Compatibility with surrounding environments;vi. Length of time for which specified noise level is exceeded, especially at night;vii. Likely adverse effects on-site and beyond the site; <p>viii. i. Mitigation measures to reduce noise generation.</p>
<p>e) Where expressly provided elsewhere in the Plan, sound levels shall be measured in accordance</p>	

<p>with NZS 6801:1999 Acoustics – Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound; and</p> <p>f) The background sound level (L_{90}) and the background continuous sound level (L_{eq}) shall be derived in accordance with clause 8.8 (Determination of Background Sound Level) of NZS 6801:1999 Acoustics – Measurement of Environmental Sounds.</p> <p>Notes:</p> <p>1. A low noise area is defined as a locality where the background sound level (L_{90}) has been determined as less than or equal to 45 dBA (L_{90}) between the hours of 0630 and 2130; or less than or equal to 35 dBA (L_{90}) between the hours of 2130 and 0630.</p> <p>2. A high noise area is defined as a locality where the background continuous equivalent sound level (L_{eq}) has Except been determined as equal to or more than 50 dBA (L_{eq}) between the hours of 0630 and 2130; or equal to or more than 40 dBA (L_{eq}) between the hours of 2130 and 0630.</p>	
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64.3.3 Vibration (Deleted See NAV Chapter)

<p>Any activity in a Mineral Extraction Area is a permitted activity if:</p> <p>a) It does not exceed the vibration limits given in Appendix 10; or</p> <p>b) It does not exceed the vibration limits in the conditions of any relevant land use consent.</p>	<p>Any activity that does not comply with a condition for a permitted activity is a restricted discretionary activity.</p> <p>Discretion is restricted to:</p> <p>i. Duration, time and type of vibration;</p> <p>ii. Effects on health and safety;</p> <p>iii. <u>i.</u> Effects on amenity values.</p>
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Noise

~~Generally, noise generated by mineral extraction activities will be higher than noise levels permitted in the underlying Environments, even after allowing for all practical mitigation measures. To provide for mineral extraction activities, while also reducing the adverse effects of noise, this rule seeks to control the noise level by using the background noise level of the surrounding area as a base. Therefore, those mineral extraction activities located in areas with high background noise levels are allowed higher noise threshold limits than those activities located in areas with low background noise levels. There are two identified levels of background noise – low and high. To give certainty to operators within existing Mineral Extraction Areas, the noise limit for each area has been classified in Appendix 14.~~

Vibration

~~Vibration has nuisance effects similar to noise, and can have major effects upon people's enjoyment of their property. This is particularly so for residential properties, therefore this rule controls vibration to standardised acceptable level (or as otherwise established through the resource consent process).~~

71— Airport Noise Rules

71.2.1 Prohibited Activities

The following activity is a prohibited activity for which no resource consent shall be granted:

- ~~Subdivision for new noise-sensitive activities inside the Air Noise boundary for Whangarei Airport.~~

85 – Designations

85.2.10- Northpower Limited

Conditions to DNP 16

That additional to the design and construction condition RC40137 and the Court's instructions the following conditions as determined in RQ1000005 to the designation will be applicable.

3. All activities within the designation area shall be conducted so as to ensure the following noise limits are not exceeded outside of the designation:
 - a) 45dB L_{Aeq} ~~dB~~ L_{10} between 0700 and 2200; and 35dB L_{Aeq} ~~dB~~ L_{10} at any other time; and
 - b) 60dB L_{max} ~~dB~~ L_{AFmax} any day between 2200 and 0700, except for emergency service vehicles and the operation of emergency service call-out sirens; and
 - c) Sound levels shall be measured in accordance with NZS 6801: 2008 "Acoustics – Measurement of Environmental Sound" ~~1999 Measurement of Sound~~ and assessed in accordance with NZS 6802: ~~1991 Assessment of Environmental Sound~~ 2008 "Acoustics – Environmental Noise"

82.2.17 Whangarei District Council

5. DW 130: Landfill Puwera: Portland

- e) Noise

All noise associated with the site and access construction and shall comply with the requirements of NZS 6803: 1999 Acoustics Construction Noise.

All other activities undertaken, including transport of refuse on the site, placement of refuse on the site, covering of refuse and stripping of placement of top soil shall be conducted to ensure that noise levels, at or within the notional boundary of any dwelling, do not exceed 50dB L_{Aeq} ~~dB~~ (L_{10}) between ~~the hours of 7 a.m. and 10 p.m.~~ 0700 and 2200. Any on-site activities outside of these hours shall not exceed 35dB L_{Aeq} ~~dB~~ (L_{10}) & 60dB L_{AFmax} ~~A~~ (L_{max}) .

- i. Access to the landfill by vehicles transporting refuse shall be permitted only between ~~the hours of 7.00 am and 6.00 pm~~ 0700 and 1800, Monday to Saturday inclusive, excluding Good Friday and Christmas Day.
- ii. This restriction does not apply to the transportation of overburden material from Golden Bay Cement Ltd site using the internal haul road.

REF.1 Referenced Documents

a. Noise

NZS 6801: ~~1991~~ 2008 New Zealand standard for *Acoustics – Measurement of environmental sound* ~~Measurement of Sound~~

NZS 6802: ~~1991~~ 2008 New Zealand standard for *Acoustics – Environmental Noise* ~~Assessment of Environmental Sound~~

NZS 6809: 1999 New Zealand standard for Acoustic Port Management and Land Use Planning

NZS 6803: 1999 New Zealand standard for Acoustics – Construction Noise

NZS 6808: 2010 New Zealand standard for Acoustics – Wind farm noise

NZS 6807: 1994 New Zealand standard for Noise Management and Land Use Planning for Helicopter Landing Areas

NZS 6805: 1992 New Zealand standard for Airport Noise Management and Land Use Planning

NZS 6806: 2010 New Zealand standard for Acoustics - Road-traffic noise - New and altered roads

~~e. **Vibration**~~

~~NZS/ISO 2631-2:1989 New Zealand standard for Environmental Performance Criteria for Human Exposure to Vibration~~

~~NZS/ISO 2631-1:1997 New Zealand standard for Mechanical Vibration and Shock – Evaluation of Human Exposure to Whole-Body Vibration – Part 1: General Requirements~~

~~DIN 4150:1986 German Vibration Standard Part 3 Structural Vibration in Buildings~~

~~NZS/ISO 8041: 1990 New Zealand standard for Traffic Vibrations in Buildings~~

Appendix 10 – Vibration (Deleted – See NAV Chapter)

A10.1 Introduction

~~Vibration from any activity shall comply with criteria for both human exposure (A10.2) and vibration in structures (A10.3).~~

A10.2 Human Exposure

~~The vibration criteria for human exposure are determined by:~~

- ~~a) Vibration from any activity, measured at or within the boundary of any other site within the Environment, shall not exceed the level specified in Table A10.2.~~
- ~~b) Vibration from any activity measured at or within the boundary of any site within another Environment, shall not exceed the lesser of the two relevant levels specified in Table A10.2.~~

~~Table A10.2 – Environmental Performance Criteria for Human Exposure to Vibration: NZS/ISO 2631-2:1989 Curve Numbers and Scaling Factors~~

Environment	Continuous or intermittent vibration, as defined in the Standard. (Typically can include: road and rail traffic, pile driving, intermittent machinery, pavement breakers etc.) Curve Number or Scaling Factor	Transient or Impulsive Vibration (e.g. blasting) Curve Number or Scaling Factor
Living 1, 2 and 3 (night)	1.4	1.4
Living 1, 2 and 3 (day)	4	60
Countryside and Coastal Countryside	4	60
Business 1, 2, 3, Town Basin and Airport	4	90
Business 4 and Marsden Point Port	6	90

The levels in Table A10.2 are satisfied, where either:

- a) The peak particle velocity is less than the value in the appropriate combined axis, weighted curves of NZS/ISO 2631-2:1989, Figure 5C. (Refer Figure A10.2)
- b) The rms acceleration is below the levels specified in the z axis and the x, y axis one third octave band graphs in NZS/ISO 2631-2:1989, Figures 2(a) and 3(a) scaled using the values in Table A10.2. Alternatively, the frequency weighted rms acceleration (refer NZS/ISO 2631-1:1997 E, Section 6) is below the base acceleration magnitude in the frequency band of greatest sensitivity, defined in NZS/ISO 2631-2:1989, Table 1.

A10.3 Effects on Structures

A10.3.1 Short-Term Vibration

Short-term vibration from any activity, on any site measured on any foundation or uppermost full storey of any building on any other site, shall not exceed the limits set out in Table 1 of DIN 4150:1986 Part 3, Structural Vibration in Buildings, as shown in Table A10.3, and illustrated in Figure A10.4.

Figure A10.3 Vibration in Buildings—Combined-Direction Peak Velocity Curves—(Figure 5(c) from NZS/ISO 2631-2:1989)

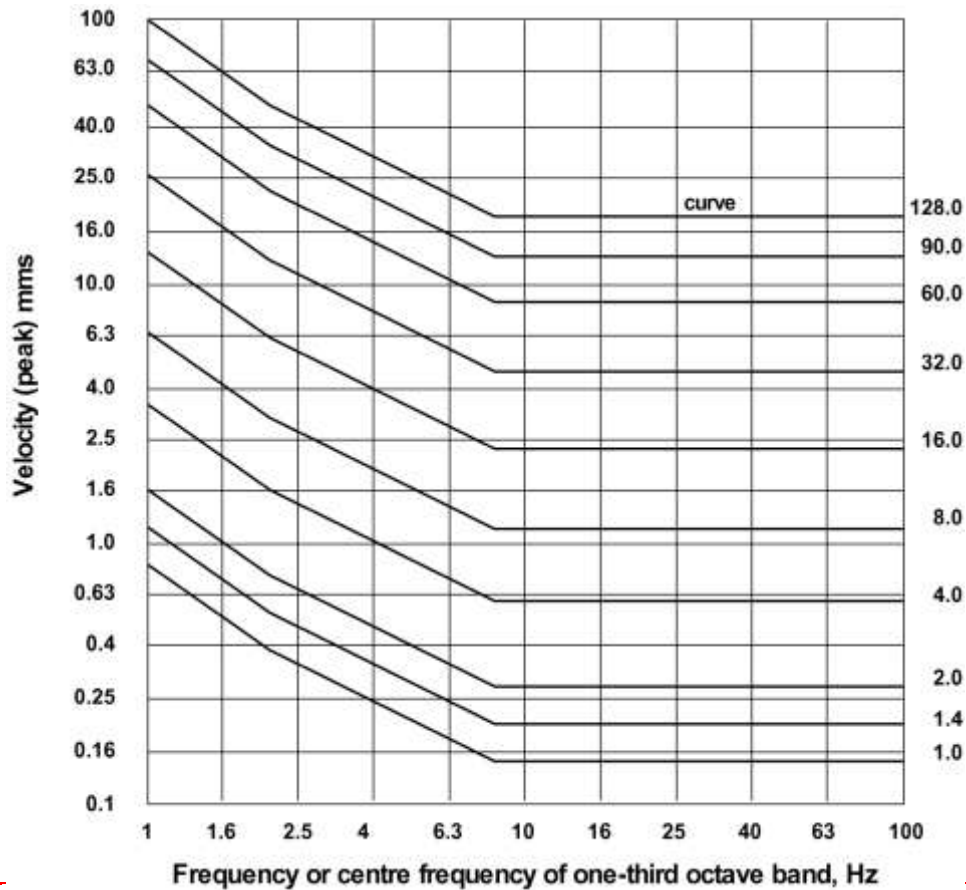


Table A10.4 — Environmental Performance Criteria for Short Term Vibration in Structures (refer DIN 4150-3:1986)

Line No	Type of Structure	Peak Component Velocity (mm/s) at Foundation for Short-Term Vibration			Plane of Floor of Uppermost Storey
		Vibration Frequency			Frequency Mixture
		<10Hz	10-50Hz	50-100Hz	
1	Buildings used for industrial purposes, industrial buildings and buildings of similar design	20	20-40	40-50	40
2	Dwellings and buildings of similar design and/or use	5	5-15	15-20	15
3	Structures that, because of their particular sensitivity to vibration, do not correspond to those listed in rows 1 and 2, and are of great intrinsic value (e.g. buildings that are under a preservation order)	3	3-8	8-10	8

Note:

1. The effects of vibration caused by vibratory hammers and vibrators are not to be regarded as short-term effects.
2. For practical purposes, monitoring should be carried out at a suitable point(s), representative of the nearest structures not connected to the site. Where there is doubt about compliance, the DIN standards shall apply.
3. The criteria shall be applied for design of a single or of infrequent events. When applied for production blasting and recurring construction activities, the criteria for residential buildings (Line 2) may, at the Council's discretion, be used on statistically demonstrated 97.5% compliance confidence limits with an absolute upper criterion of 20mm/s.

A10.3.2 Steady State Vibration

Steady state vibration from any activity on any site measured on any foundation or uppermost full storey of any building on any other site, shall not exceed the limits set out in Sections 4.1 and 5.1 of DIN 4150:1986 Part 3 Structural Vibration in Buildings as shown in Table A10.3 below.

Table A10.3 — Environmental Performance Criteria for Steady State Vibration in Structures: (Based on DIN 4150-3:1986)

	Type of Structure	Peak Component Velocity (mm/s) of Steady State Vibration	
		Horizontal Vibration of Structure	Vibration of Building Components (e.g. floor)
1	Buildings used for industrial purposes, industrial buildings and buildings of similar design	5	10
2	Dwellings and buildings of similar design and/or use	5	10
3	Structures that, because of their particular sensitivity to vibration, do	No data available, consider on a	No data available, consider on a

	not correspond to those listed in rows 1 and 2 and are of great intrinsic value (e.g. buildings that are under a preservation order)	case-by-case basis	case-by-case basis
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Note:

Peak component velocity (v_i) is defined as the absolute value of the maximum of any one of three orthogonal component particle velocities measured during a given time period.

A10.4 Specification for Vibration Monitoring Instruments

Measure of vibration shall be undertaken with an instrument which can meet the following performance criteria:

- ~~a) Vibration monitoring instrumentation shall be accurate to within $\pm 10\%$ over the frequency range 1-100Hz, after a suitable warm-up period (refer ISO 8041:1990 (E) sections 4.4 and 6.7);~~
- ~~b) The duration of vibration measurements, and the dynamic range and sampling frequency of measuring instrumentation, shall be sufficient to ensure reasonable statistical precision, and ensure that the sampled data is typical of the exposures that are being assessed (refer ISO 2631-1:1997 (E) section 5.4 and 5.5);~~
- ~~c) Reporting of vibration measurements shall specify the transducer type, location and mounting systems, the duration of measurements, and methods of data analysis;~~
- ~~d) The indication of any vibration measuring instrument, under constant conditions, shall not vary by more than $\pm 6\%$ during any one hour period of continuous operation, after a warm-up period (refer ISO 8041:1990 (E) section 4.6);~~
- ~~e) Simultaneous transverse vibration shall not introduce an error greater than $\pm 6\%$ in the value measured on the main axis of any transducer (refer ISO 8041:1990 (E) section 4.7);~~
- ~~f) The preferred measurement technique is one which records unfiltered time histories of acceleration for human exposure, and acceleration or velocity for structure exposure, from which any desired value can be later determined (NZS/ISO 2631-2:1989 section 3.5).~~

Appendix 14 - Schedule Of Existing Mineral Extraction Areas

Quarry Name	Mineral Extraction Area	Planning Map Number	Noise Limit
Golden Bay Cement – Portland Quarry	ME1	15, 50	Daily, between the hours of 0630 and 2130 - 55dB L_{Aeq} dB A L10 ; and Daily, between the hours of 2130 and 0630 - 45dB L_{Aeq} dB A L10 ; and 70dB L_{AFmax} dB A Lmax .
Winstone Aggregates – Otaika Quarry and access way	ME3	12, 45	Daily, between the hours of 0630 and 2130 - 55dB L_{Aeq} dB A L10 ; and Daily, between the hours of 2130 and 0630 - 45dB L_{Aeq} dB A L10 ; and 70dB L_{AFmax} dB A Lmax ; and Subject to any restrictions on night time operation of the access way contained in LUC RC38907, as may be amended from time to time.

McBreen Jenkins – Takahiwai Quarry	ME4	15	Daily, between the hours of 0630 and 2130 - 50dB L_{Aeq} dB A-L10 ; and Daily, between the hours of 2130 and 0630 - 40dB L_{Aeq} dB A-L10 ; and 65dB L_{AFmax} dB A-Lmax
Balance Agriculture – Mata Quarry	ME6	15	
United Carriers – Woods Road Quarry	ME5	11	
Mountfield Rd Quarry	ME7	18	
Dicksons Transport – Dicksons Road Quarry	ME8	12, 36	The noise limit imposed by Land Use Consent RC 37434
Golden Bay Cement – Wilsonville Quarry	ME2	7, 28	The noise limit imposed by Land Use Consent LU 00/573
J Pullman – Robsons Quarry, Otaika	ME9	45	The noise limit imposed by Land Use Consent LU 98/904