Change to the District Plan - First Review

Plan Change 87
Frost Protection Fans

Section 32 Report
1.0 Introduction

1.1 General Introduction and Background

The purpose of this report is to consider a plan change to provide greater flexibility and protection for the operation of frost protection fans within the rural environment. In addition, it has been identified that there is a need to clarify some of the existing rules relevant to frost protection fans. Some minor changes are proposed to address these issues.

2.0 Resource Management Act 1991

2.1 Section 32 – Requirements for Preparing Evaluation Reports

Before a proposed plan change can be publicly notified the Council is required under section 32 ("s.32") of the Resource Management Act 1991 ("the Act" or "RMA") to carry out an evaluation of alternatives, costs and benefits of the proposal. With regard to the Council’s assessment of the proposed plan change s.32 requires the following:

(1) An evaluation report required under this Act must—
(a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
(b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
(i) identifying other reasonably practicable options for achieving the objectives; and
(ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
(iii) summarising the reasons for deciding on the provisions; and
(c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.

(2) An assessment under subsection (1)(b)(ii) must—
(a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
(i) economic growth that are anticipated to be provided or reduced; and
(ii) employment that are anticipated to be provided or reduced; and
(b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
(c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

(3) If the proposal (an amending proposal) will amend a standard, statement, regulation, plan, or change that is already proposed or that already exists (an existing proposal), the examination under subsection (1)(b) must relate to—
(a) the provisions and objectives of the amending proposal; and
(b) the objectives of the existing proposal to the extent that those objectives—
(i) are relevant to the objectives of the amending proposal; and
(ii) would remain if the amending proposal were to take effect.

(4) If the proposal will impose a greater prohibition or restriction on an activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect.

(4A) If the proposal is a proposed policy statement, plan, or change prepared in accordance with any of the processes provided for in Schedule 1, the evaluation report must—
(a) summarise all advice concerning the proposal received from iwi authorities under the relevant provisions of Schedule 1; and
(b) summarise the response to the advice, including any provisions of the proposal that are intended to give effect to the advice.

2.2. Section 74

In accordance with Section 74(2A) of the Act, Council must take into account any relevant planning document recognised by an iwi authority that has been lodged with Council. None of the iwi/hapu management plans lodged with Council raise any issues of particular relevance to this Plan Change.

2.3. Clause 3 of Schedule 1 - Consultation

Clause 3(1) of Schedule 1 of the RMA requires the Council to consult the following during the preparation of a proposed plan:

a. The Minister for the Environment;
b. Other Ministers of the Crown who may be affected;
c. Local authorities who may be affected;
d. Tangata Whenua of the area who may be affected (through iwi authorities); and
e. Any customary marine title group in the area.

Information was provided to the Minister for the Environment on a range of proposed plan changes and feedback was requested. No feedback has been received.

No other Ministers of the Crown or marine title groups are considered affected by the proposed change. Consultation was undertaken with the Bay of Plenty Regional Council on a number of proposed plan changes and Regional Council staff have advised they have no concerns with the changes proposed to District Plan provisions associated with frost protection fans.

Under Clause 3B of Schedule 1, with respect to Tangata Whenua, the Council is treated as having consulted iwi authorities if it:

(a) considers ways in which it may foster the development of their capacity to respond to an invitation to consult; and
(b) establishes and maintains processes to provide opportunities for those iwi authorities to consult it; and
(c) consults with those iwi authorities; and
(d) enables those iwi authorities to identify resource management issues of concern to them; and
(e) indicates how those issues have been or are to be addressed.

Tangata Whenua have been consulted through the Tauranga Moana and Te Arawa ki Tai Partnership Forum on 14 March 2019 and 25 June 2019. No specific feedback was provided in relation to this proposed plan change.

In addition, the Council engaged with the public to request input prior to the writing of this report. This was done through notices in local newspapers and the Council's 'Have Your Say' website.

Two people who live next to properties with existing frost protection fans provided feedback outlining concerns associated with noise from these devices. One person specifically identified that noise generated affects their sleep and that this has flow on effects for their health and wellbeing. Another person thought the current rules for frost protection fans are about right, and neither person thought that permitted noise levels should be increased (as would be the case if the preferred option for the plan change proceeds).

Option 1 (as outlined below) is supported by one of the people providing feedback, as they consider it gives neighbours some protection and means that orchardists need to consider neighbours, and that Council can enforce the rules.

Council also engaged with the following groups and stakeholders on a range of proposed plan changes:

a. Representatives of the kiwifruit industry through NZKGI;
b. New Zealand Transport Agency ('the Agency');
c. Toi Te Ora Public Health.

The kiwifruit industry representatives supported the approach to provide for frost protection fans as a permitted activity based on current controlled activity standards (e.g. noise limits of 55dBA Leq and 65dBA Lmax, rather than current permitted noise limit of 40dBA Leq and 65dBA Lmax). The potential for reverse sensitivity effects was raised by representatives of the kiwifruit industry, and in particular the need to protect the on-going operation of existing frost protection fans from new residential development.

The need to operate frost protection fans was identified as being particularly important for areas where water is not available for frost protection, and the potential risk of disease (e.g. PSA) associated with using water for frost protection was also noted. Further to this, the need to operate frost protection fans for unforseen maintenance (e.g. as a result of a breakdown) was also identified.

The New Zealand Transport Agency indicated they had no particular interest in changes to District Plan provisions for frost protection fans.
Toi Te Ora Public Health wants to ensure that Council maintains control over noise emissions from frost protection fans and expressed the view that people’s physical health must be prioritised over economic benefit.

3.0 Analysis of Frost Protection Fan Provisions

3.1. Introduction

Rules in the District Plan relating to frost protection fans aim to recognise these features as legitimate activities within rural areas, while also managing adverse effects associated with noise and visual amenity.

3.2. Review of Western Bay District Plan Frost Protection Fan Provisions

Under the Western Bay’s District Plan, frost protection fans are provided for as a permitted activity in the Rural Zone and Post Harvest Zone, subject to the permitted activity standards associated with the zone (e.g. noise, building height and side yard requirements). Separate rules are also included in the Amenity section (Section 4C) of the District Plan, which control noise from frost protection fans.

It is the night time noise limits that are most relevant for the operation of frost protection fans as it is during this time that they operate (except for maintenance purposes). It is understood that the night time noise limits for the Rural Zone (40dBA Leq / 65 dBA Lmax) and Post Harvest Zone (45dBA Leq/ 65 dBA Lmax) are often unachievable for the operation of frost protection fans. As such, most require resource consent as a controlled or restricted discretionary activity. If the following standards are met, the frost protection fan is assessed as a controlled activity:

a. Noise from the operation of frost protection fans does not exceed 55dBA Leq and 65dBA Lmax at any point within the notional boundary of any dwelling in a Rural or Lifestyle Zone or at any point within the boundary of any property within a Residential, Rural-Residential or Future Urban Zone.

b. The frost protection fan must not start up until the air at canopy height drops to 2°C, and operation must cease when the rising temperature reaches 4°C at canopy height.

c. The frost protection fan may only operate for maintenance purposes from Monday to Friday, 8am to 5pm.

If the above standards cannot be met, resource consent is required for a restricted discretionary activity and any adversely affected persons would be notified (unless their written approval had been provided).

It is noted that the noise limits under the current rules relate to the notional boundary of existing dwellings in the Rural and Lifestyle Zones, and the property boundary of any site in the Residential, Rural-Residential or Future
Urban Zone. The term ‘notional boundary’ is defined within the District Plan as the line 20m from any side of a dwelling, or the legal boundary of the property on which the dwelling is located, whichever is the closer to the dwelling.

3.3. **Review of Resource Consents for Frost Protection Fans in Western Bay**

To assist in understanding the issues arising from resource consent applications and the value added by the resource consent process, a review of resource consent applications received since 2012 has been undertaken.

This review showed that there have been 43 applications made, out of which 40 applications were granted consent. Three were withdrawn and none of the applications were declined. The resource consents granted in recent years have tended to include consistent conditions which require:

a. Compliance with the controlled activity performance standards ((a) to (c) in section 3.2 above);

b. Use of the frost protection fan is limited to a maximum of 20 times/night per year;

c. Records are to be kept on the use of the frost protection fan;

d. Thermometers to be independently assessed and calibrated; and

e. An alarm is to be activated to inform the orchard manager when a frost fan commences operation so that they can ensure compliance with the temperature related-condition.

3.4. **Review of Frost Protection Fan Provisions for Other Councils**

To understand how other districts manage frost protection fans, a review was undertaken of district plan provisions for Marlborough, Tasman, Whakatane, Hastings, and Hurunui Districts. All of these districts (except for Marlborough) provide for frost protection fans as permitted activities, subject to compliance with a range of conditions. Marlborough District Council requires resource consent for a controlled activity if the standards are met.

All of the District Plans include similar standards to the Western Bay District Plan and the following are key observations from the review:

a. Most District Plans include a noise limit of 55dBA Leq at the notional boundary of a dwelling, or at 300m from the device (whichever is closer). The exception is Hastings District Council, which applies a limit of 65dBA Leq;

b. Marlborough, Tasman, and Hurunui Districts only allow use of frost protection fans between bud burst and the end of harvest (so that they are only used when crops are at risk from frost damage);
c. Most districts limit hours for operation associated with maintenance in a manner consistent with Western Bay;

d. Marlborough District requires frost protection fans to be located at least 500m from residential and township zones, and at least 300m from a rural residential zone.

e. Marlborough, Tasman and Hurunui District Plans include rules to require new dwellings in close proximity to existing frost protection fans to be designed and constructed to ensure bedrooms and other habitable areas within the dwelling are not unreasonably affected by the operation of frost protection fans that existed prior to the development of the dwelling. This approach is similar to that for new dwellings constructed within Western Bay that are within 200m of a Post Harvest Zone.

3.5. Summary

In summary, the Western Bay District Plan approach to frost protection fans is similar to other districts. However, there is scope to provide greater flexibility and protection for the establishment and on-going operation of frost protection fans in the District. Based on the review of resource consent applications processed by the Council, there is a fairly standard set of conditions that get applied.

Where noise limits have not been achieved, written approvals have been obtained from affected persons and provided with resource consent applications in most cases. It therefore appears that there may be some merit in allowing the operation of frost protection fans as permitted activities, subject to the need to comply with appropriate standards to ensure the amenity, and health and wellbeing of the community is protected.

Key issues that have arisen as a result of the review of frost protection fan provisions in the District Plan include:

a. The need to enable the establishment of frost protection fans in the rural environment, subject to appropriate noise and operational limits;

b. The need to protect established frost protection fans from reverse sensitivity effects associated with the establishment of new, more sensitive land use activities after the frost protection fan is established;

c. The need to ensure that the legitimate development rights of peoples’ properties are recognised;

d. The need to enable the operation of frost protection fans for testing outside the hours weekday hours, if required for urgent unforeseen maintenance; and
e. The need to ensure the rules for frost protection fans are well-linked and to avoid inconsistencies within different sections of the District Plan.

4.0 Issue 1 – Frost Protection Fans – Activity Status

4.1. Option 1 – Status Quo

This option is to retain the existing rules without change (as summarised in section 3.2 of this report). This means that frost protection fans are permitted if they meet the noise limits of the relevant zone (i.e. 40dBA Leq and 65 dBA Lmax in the Rural Zone, and 45dBA Leq and 65 dBA Lmax in the Post Harvest Zone), but otherwise require resource consent for a controlled or restricted discretionary activity.

<table>
<thead>
<tr>
<th>Costs</th>
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<tbody>
<tr>
<td>▪ For frost fan operators, in most situations, frost protection fans do not meet the night time noise limits for the Rural Zone and Post Harvest Zone and therefore resource consents are required most of the time.</td>
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<td>▪ For frost fan operators, the need for resource consent results in additional financial costs.</td>
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<tr>
<td>▪ If meeting the controlled activity noise limits, resource consent must be granted and, based on a review of resource consent applications processed for controlled activity frost protection fans, there appears to be limited value added through the resource consent process.</td>
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<tr>
<td>▪ For frost fan operators, the need for resource consent may be unnecessary if effects can be adequately managed through compliance with performance standards.</td>
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<thead>
<tr>
<th>Benefits</th>
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<tr>
<td>▪ The noise related effects of each frost protection fan that fails to meet the noise limits of the zone can be assessed on a case by case basis and conditions can be imposed, if required.</td>
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<table>
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<th>Effectiveness/ Efficiency</th>
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<tr>
<td>▪ Not effective or efficient in addressing the identified issue.</td>
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<tr>
<th>Risks of Acting/ Not Acting if there is uncertain or insufficient information about the subject matter</th>
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<tr>
<td>▪ N/A – Sufficient information is available.</td>
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4.2. Option 2 – Allow frost protection fans as permitted activities based on current controlled activity standards

This option is to allow frost protection fans as a permitted activity, subject to compliance with the performance standards that currently apply to the controlled activity rule. These are set out in section 3.2 of this report and relate to noise limits during operation (to protect residential dwellings), limitations on use based on temperature at canopy height, and times during which the frost protection fan can operate for maintenance purposes. Noise
limits under the current rules relate to the notional boundary of existing dwellings in the Rural and Lifestyle Zones, and the property boundary of any site in the Residential, Rural-Residential or Future Urban Zone.

If compliance is not achieved, the proposal would be assessed as a restricted discretionary activity, similar to the current approach of the District Plan, and matters of discretion would be included.

This option provides more flexibility for the operation of frost protection fans as, for example, the permitted noise limit would increase from 40dBA Leq and 65dBA Lmax to 55dBA Leq and 65dBA Lmax in the Rural Zone. Failure to comply with the standards would result in the need for resource consent for a restricted discretionary activity.

Minor consequential edits would also be required under this option to ensure consistency within the rules and to assist with usability of the District Plan.

| Costs | The existing controlled activity standards only address a limited number of matters. Other matters are dealt with through conditions of consent (e.g. limit on number of days per year). Converting the controlled standards into permitted standards would remove the requirement for resource consent and therefore the opportunity to address other matters through conditions of consent. |
|       | As a permitted activity, frost fan operators would be able to proceed without resource consent. Frost fan operators may not know whether their proposed frost protection fan would comply with noise limits. Therefore, there is potential that frost protection fans may be placed in positions that do not meet noise limits and this may affect neighbours. |
|       | If neighbours were to complain about frost fans, the Council staff would need to investigate whether noise limits had been exceeded (or not). This is considered to be an inefficient use of Council staff time. |
|       | This option does not recognise the potential effects on the owners of properties in the Rural and Lifestyle Zones that currently do not have a dwelling, but that have a legitimate right to develop that land with a dwelling in the future. This is because the current rules for noise produced by frost protection fans relate to the notional boundary of existing dwellings in the Rural and Lifestyle Zones and do not relate to vacant land. |

| Benefits | For frost fan operators, this option enables the use of frost protection fans with a higher noise limit than can currently occur, without the need for resource consent. |
|          | For frost fan operators, this option saves time and money associated with preparation and lodgement of resource consent applications. |

| Effectiveness/Efficiency | Effective in addressing the issue that greater flexibility is required for the establishment and operation of frost protection fans. This option also recognises the need and requirements of frost protection fans which are required for primary productive activities in the rural environment. |
4.3. Option 3 – Allow frost protection fans as permitted activities based on current controlled activity standards and:

a. Additional standards to recognise rights for owners of land in the Rural and Lifestyle Zones without an existing or consented dwelling;

b. An additional option for obtaining written approvals (where noise limits are to be exceeded) to avoid the need for resource consent;

c. A change to allow testing of frost protection fans outside specified maintenance hours, if required for urgent unforeseen maintenance purposes; and

d. Additional requirements for frost fan operators to provide information to Council regarding the location of frost protection fans and compliance with District Plan rules.

This option is to allow frost protection fans as a permitted activity, subject to compliance with the performance standards that currently apply for controlled activity frost protection fans and to include additional performance standards.

The existing controlled activity performance standards are set out in section 3.2 of this report and relate to noise limits during operation (to protect residential dwellings), limitations on use based on temperature at canopy height, and times during which the frost protection fan can operate for maintenance purposes. Noise limits under the current rules also relate to the notional boundary of existing dwellings in the Rural and Lifestyle Zones, and the property boundary of any site in the Residential, Rural-Residential or Future Urban Zone.

The additional standards proposed under this option include:
a. An exemption from having to meet noise limits (55dBA Leq and 65dBA Lmax) if affected persons have provided their written approval;

b. The requirement to comply with noise levels at the boundary of any property in the Rural or Lifestyle Zone that does not have an existing or consented dwelling at the time the frost protection fan is established;

c. An allowance for the operation of frost protection fans for testing outside the hours of Monday to Friday 8am to 5pm, if required for urgent unforeseen maintenance (e.g. as a result of a breakdown); and

d. The need to provide information on the compliance (or lack of compliance) and the location of the frost protection fan(s) to Council prior to installation.

Matters of discretion are also proposed under this option, along with any other necessary consequential changes.

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<th>Costs</th>
<th>Benefits</th>
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<tr>
<td>For frost fan operators, there is an additional requirement to</td>
<td>For frost fan operators, this option enables the use of frost protection</td>
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<td>provide information regarding the location and noise levels to be</td>
<td>fans with a higher noise limit than can currently occur, without the</td>
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<td>emitted from proposed frost protection fans.</td>
<td>need for resource consent.</td>
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<td>For frost fan operators, there is an additional requirement to</td>
<td>For frost fan operators, this option saves time and money</td>
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<td>consider the effects of noise on owners of properties in the</td>
<td>associated with preparation and lodgement of resource consent applications.</td>
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<td>Rural and Lifestyle Zone that are not occupied by a dwelling.</td>
<td>For frost fan operators, this option provides even greater flexibility</td>
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<td>(compared with Option 2) if noise levels are exceeded and affected</td>
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<td>persons have provided their written approval.</td>
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<td>For frost fan operators, this option recognises that frost protection</td>
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<td>fans may need to operate outside of the prescribed hours for</td>
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<td>maintenance in unforeseen circumstances (e.g. such as during a</td>
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<td>breakdown).</td>
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<td>For neighbours and Council, this option ensures that frost fan</td>
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<td>operators confirm that their frost protection fans comply with the</td>
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<td>relevant rules and any non-compliances are properly identified for the</td>
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<td>purposes of obtaining written approvals.</td>
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<td>For neighbours, this option ensures that both existing dwellings and</td>
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<td>vacant land in the Rural and Lifestyle Zones (with potential to be</td>
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<td>developed with a dwelling) are protected from the noise effects of</td>
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<td>frost protection fans. It also continues to protect people and property</td>
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<td>in the Residential, Rural-Residential, Medium Density Residential or</td>
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<td>Future Urban Zones.</td>
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<td>For Council, this option ensures that information on the location of</td>
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<td>frost protection fans is provided so that new rules proposed under</td>
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<td>section 5.0 of this report can be applied. This proposed rule requires</td>
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<td>new dwellings to be</td>
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designed and constructed so that they are protected from noise emitted by existing frost protection fans and, in turn protects the operation of frost protection fans from reverse sensitivity effects.

**Effectiveness/Efficiency**
- Effective in addressing the issue that greater flexibility is required for the establishment and operation of frost protection fans. This option also recognises the need and requirements of frost protection fans which are required for primary productive activities in the rural environment.
- Effective in achieving the objectives of the District Plan which seek to ensure noise is not unreasonable, having regard to the character and amenity of the zones where noise is generated and received.
- This option is considered to be an efficient method for addressing the identified issue and to achieve the objectives of the District Plan.

**Risks of Acting/Not Acting if there is uncertain or insufficient information about the subject matter**
- N/A – Sufficient information is available.

### 4.4. Option 4 – Permit frost protection fans without noise limits

This option is to exempt frost protection fans from the noise limits in the District Plan.

**Costs**
- For neighbours, unrestricted use of frost protection fans would mean that the effects of noise on them would not be managed and such effects have the potential to adversely affect the health and amenity of those in the surrounding environment (particularly given frost protection fans operate during normal sleeping hours).

**Benefits**
- For frost fan operators, the use of frost protection fans would be unrestricted, allowing them to protect crops as needed.
- For frost fan operators, this option saves time and money associated with preparation and lodgement of resource consent applications.

**Effectiveness/Efficiency**
- Exempting frost protection fans from any noise limits is not an effective or efficient method to achieve the objectives of the District Plan, particularly those which seek to achieve an environment free of unreasonable noise in accordance with the character and amenity of the relevant zone.

**Risks of Acting/Not Acting if there is uncertain or insufficient information**
- N/A – Sufficient information is available.
4.5. **Preferred Option**

The preferred option is Option 3:

a. Amend Rule 4C.1.3.6 to provide for frost protection fans as a permitted activity, subject to a number of permitted activity performance standards;

b. Amend Rule 4C.1.3.6 to require restricted discretionary resource consent for any frost protection fan that fails to comply with the permitted activity performance standards; and

c. Include matters of discretion for restricted discretionary frost protection fans (Rule 4C.1.4.2).

The changes proposed to the text are provided in Attachment A.

4.6. **Reasons**

Option 3 is the preferred option as it provides for better flexibility than the current rules and avoids the need for unnecessary resource consents. It also provides an appropriate level of protection against the actual and potential adverse effects associated with noise generated by frost protection fans, but also provides an opportunity to avoid the need for resource consent if affected persons provide their written approval.

In addition, the rule and matters of discretion recognise the potential for effects on people who own neighbouring properties that may not yet be developed with a dwelling. Further to this, the rule recognises that during an unforeseen breakdown, there may be the need to operate the frost protection fan for testing purposes and this is considered to be appropriate.

The requirement to provide certification of compliance with the noise levels specified in the rules and other information identifying the location of the frost protection fans will ensure that compliance with the standards can be proven. It also allows Council to record the location of the frost protection fans to enable reverse sensitivity to be addressed.

Option 3 is considered to be the most effective and efficient method to achieve the objectives of the District Plan.

5.0 **Issue 2 – Frost Protection Fans – Reverse Sensitivity**

5.1. **Introduction**

There is potential for dwellings to establish in locations that could be affected by noise from existing or consented (but not yet established) frost protection fans. This results in the potential for amenity and health related
effects for occupiers of the new dwellings as the result of noise emitted from frost protection fans, particularly given noise from frost protection fans is typically emitted during normal sleeping hours.

These potential effects also result in the potential for reverse sensitivity effects. Reverse sensitivity effects arise where a new and more sensitive activity establishes and has the potential to constrain the on-going operation of existing activities (e.g. a new dwelling developed near an existing frost protection fan).

The health and safety of people is integral to the sustainable management purpose of the RMA, and there is a general duty under section 16 of the RMA to ensure the best practicable option is adopted to ensure that the emission of noise does not exceed a reasonable level. It is therefore important to ensure that the effects of noise from the operation of frost protection fans is not unreasonable and that peoples’ health and safety is protected in accordance with the overall purpose of the Act.

In addition, to adequately protect the on-going operation of lawfully established frost protection fans, there is a need to avoid potential for reverse sensitivity effects.

5.2. Option 1 – Status Quo

This option is to retain the existing rules without change. Under this option, there are no requirements for new dwellings to be located and designed to avoid adverse noise effects associated with existing frost protection fans.

<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
<th>Effectiveness/Efficiency</th>
<th>Risks of Acting/Not Acting if there is uncertain or insufficient information about the subject matter</th>
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<tbody>
<tr>
<td>▪ For frost fan operators, there is the potential for new dwellings to constrain operation of existing frost protection fans.</td>
<td>▪ For neighbours, there will be no restrictions on where they can build a dwelling if they are willing to accept noise produced by frost protection fans, which occurs for a limited period of time each winter.</td>
<td>▪ Not effective or efficient in addressing the identified issue.</td>
<td>▪ N/A – Sufficient information is available.</td>
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</table>
5.3. Option 2 – Amend Rule 4C.1.3.2 to require new dwellings within 300m of existing or consented frost protection fans to be designed and constructed to protect occupants from noise effects associated with the operation of the frost protection fan

<table>
<thead>
<tr>
<th>Costs</th>
<th>For neighbours, there is the potential for additional costs associated with developing new dwellings within 300m of frost protection fans.</th>
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<tbody>
<tr>
<td>Benefits</td>
<td>For neighbours, this option protects their amenity and health from noise associated with the operation of existing frost protection fans. For frost fan operators, this option reduces potential for complaints from occupants of new dwellings established close to existing frost protection fans. For frost fan operators, this option protects the on-going operation of existing/consented frost protection fans and helps protect these from reverse sensitivity effects.</td>
</tr>
<tr>
<td>Effectiveness/Efficiency</td>
<td>Option 2 is an effective and efficient method to address the identified issue.</td>
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<tr>
<td>Risks of Acting/Not Acting if there is uncertain or insufficient information about the subject matter</td>
<td>N/A – Sufficient information is available.</td>
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5.4. Preferred Option

The preferred option is Option 2:

(a) Amend Rule 4C.1.3.2 as set out in Attachment A and as follows:

4C.1.3.2 Noise Limits

(a) Noise limits for activities in Residential, Rural-Residential, Future Urban, Rural and Lifestyle Zones

(iii) Any new dwelling to be erected, or the addition of habitable space to an existing dwelling, within 300m of any existing or consented frost protection fan located on a title separate to that of the subject site and in different ownership shall be designed and constructed so as to ensure that, with respect to noise emitted by any existing or consented frost protection fan, internal noise levels do not exceed LAeq(15min) 30dBA in any bedroom and LAeq(15min) 40dBA in other habitable room. Written certification of such compliance from a suitably qualified and experienced acoustic engineer shall be submitted with the building consent application for the dwelling concerned. Where the windows of the dwelling are required to be closed to achieve compliance with the
aforementioned noise limits, alternative means of ventilation shall be provided in compliance with clause G4 of the New Zealand Building Code or any subsequent equivalent clause.

For the purposes of this rule, “consented” means:

(a) any frost protection fan for which a resource consent has been granted; or
(b) any permitted frost protection fan for which certification has been provided to the Council in accordance with Rule 4C.1.3.6(b);

prior to lodgement of a building consent application for the dwelling concerned.

5.5. Reasons

Option 2 is the preferred option as it the most effective and efficient method to address the need to adequately protect the amenity and health of occupants of future dwellings from the adverse effects of noise generated by existing and consented frost protection fans. In addition, it is considered to be the most effective and efficient method to provide protection for the on-going operation of existing and consented frost protection fans from potential reverse sensitivity effects associated with the development of new dwellings that may be affected by noise.

6.0 Issue 3 – Frost Protection Fans – Height in Post-Harvest Zone

6.1. Introduction

As set out in section 3.1 of this report, it has been identified that there are some inconsistencies in the rules for frost protection fans. In particular, the height limit for frost fans in the Post Harvest Zone is not consistent with that for the Rural Zone.

The maximum permitted height for buildings and structures in the Rural Zone is 9.0m, except that frost protection fans are allowed up to a height of 15.0m as a permitted activity (Rule 18.4.1(a)). The reason frost fans are allowed up to a height of 15m is due to the actual height of these structures, and their technical and operational requirements.

Rule 22.4.1(a) states that the maximum permitted height for buildings and structures in the Post-Harvest Zone is 12.0m and there is no exclusion for frost protection fans.

This is an anomaly between the rules and it is understood the intention is that frost protection fan structures be permitted up to a height of 15.0m, regardless of whether they are located in the Rural Zone or Post-Harvest Zone.
6.2. **Option 1 – Status Quo**

This option is to retain the existing rules without change (frost fan height limit of 12m).

<table>
<thead>
<tr>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ District Plan rules (between Rural and Post Harvest Zones) would continue to be inconsistent.</td>
</tr>
<tr>
<td>▪ District Plan rules would not adequately provide for frost protection fans within the Post-Harvest Zones.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ No benefits identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effectiveness/ Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Not effective or efficient in addressing the identified issue.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risks of Acting/ Not Acting if there is uncertain or insufficient information about the subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ N/A – Sufficient information is available.</td>
</tr>
</tbody>
</table>

6.3. **Option 2 – Amend Rule 22.4.1(a) to allow for frost protection fans up to a height of 15.0m in the Post Harvest Zone**

This option is to amend Rule 22.4.1(a) to provide a 15.0m height limit for frost protection fans.

<table>
<thead>
<tr>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ No costs identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Height limits would be consistent between the Rural Zone and Post-Harvest Zone.</td>
</tr>
<tr>
<td>▪ District Plan rules would adequately provide for frost protection fans within the Post-Harvest Zones.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effectiveness/ Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Option 2 is an effective and efficient method to address the inconsistency in the District Plan.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risks of Acting/ Not Acting if there is uncertain or insufficient information about the subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ N/A – Sufficient information is available.</td>
</tr>
</tbody>
</table>

6.4. **Preferred Option**

The preferred option is Option 2:

(a) Amend Rule 22.4.1(a) as follows:
22.4.1 General

The following performance standards shall be met by all Permitted and Controlled Activities and shall be used as a guide for the assessment of all other activities. Any Permitted or Controlled activity that fails to comply with any of these standards will be a Restricted Discretionary Activity for the particular non-compliance.

(a) Height of buildings/structures

Maximum: 12m, excluding frost protection fans which shall be a maximum of 15m inclusive of blades.

6.5. Reasons

Option 2 is the preferred option as it the most effective and efficient method to address the anomaly in the District Plan that the Post-Harvest Zone does not identify the height requirement for frost protection fans.
4C.1 Noise and Vibration

Explanatory Statement

Council's aim is to maintain a reasonable balance between the objective of maintaining a high quality living environment free from unreasonable noise and the need to recognise that permitted and lawfully established activities in the Rural and Industrial Zones may have associated noise levels that are acceptable as part of the principal activity such as farming.

In some areas the loading/unloading of materials at night and the movement onsite of vehicles 24 hours a day is an issue for adjoining landowners. The noise levels of the District Plan are intended to control this type of adverse effect.

Vibration from activities has not been an issue in the District. In many cases Council can manage vibration effects through the management of noise emissions or through the provisions of the Health Act. Specific standards to manage vibration are therefore not proposed.

*Reverse sensitivity* is a matter that requires management throughout the District. This is done in a number of ways.

The Post Harvest Zone and the Tara Road Rural Residential Zone each have specific buffer provisions, as does the Cameron Quarry site which is located at Otamarakau within the Rural Zone. In the latter case, a *Quarry Effects Management Area (QEMA)* has been identified on the District Planning maps over land surrounding the site.

4C.1.1 Significant Issues

1. The potential for the operation of non-residential activities within residential areas to generate noise which detracts from existing amenity.

2. The potential for the operation of non-rural activities in rural and isolated natural environment areas to generate noise which detracts from existing amenity.

3. The potential for Permitted Activities within one zone to generate noise which detracts from the existing amenity of nearby zones.

4. The perception of the rural area as being a quiet environment does not reflect the realities of the Rural Zone as a productive working environment and increases the potential for reverse sensitivity issues.
4C.1.2 Objective and Policies

4C.1.2.1 Objective

An environment free of unreasonable noise in accordance with the character and amenity of the zone within which the noise is generated and received.

4C.1.2.2 Policies

1. Ensure activities do not generate noise levels inconsistent with the character and amenity of the zone in which the generated noise is received.

2. Exempt from the maximum permitted noise level requirements are those activities which are an integral part of accepted management practices of activities associated with production land in rural areas as well as other activities clearly of a temporary nature (e.g. construction works, military training exercises).

3. Have regard to any relevant New Zealand standards, guidelines, or codes of practice in the assessment of applications for resource consents.

4C.1.3 Activity Performance Standards

The following performance standards shall be met by all Permitted and Controlled Activities and shall be used as a guide for all other activities. Any Permitted Activity which fails to comply with any of these standards shall be deemed a Discretionary Activity for the particular non-compliance.

4C.1.3.1 Construction Noise

Construction noise shall not exceed the noise limits in, and shall be measured and assessed in accordance with the requirements of NZS 6803:1999 Acoustics – Construction Noise.

4C.1.3.2 Noise Limits

(a) Noise limits for activities in Residential, Rural-Residential, Future Urban, Rural and Lifestyle Zones

(i) All activities located within these zones shall be so conducted as to ensure that noise from the site shall not exceed the following noise limits within the stated timeframes at any point within the notional boundary of any dwelling in a Rural, Lifestyle or Rural-Residential Zone, or at any point within the boundary of any property within a Residential or Future Urban Zone (other than the site of the activity);
(ii) Any new dwelling to be erected or the addition of habitable space to an existing dwelling within 200m of a Post Harvest Zone boundary shall be designed and constructed so as to ensure that with respect to the night time noise levels permitted within the Post Harvest Zone, internal noise levels do not exceed LAeq(15min) 30dBA in bedroom and LAeq(15min) 40dBA in other habitable rooms. Written certification of such compliance from a suitably qualified and experienced acoustic engineer shall be submitted with the building consent application for the dwelling concerned. Where the windows of the dwelling are required to be closed to achieve compliance with the aforementioned noise limits, alternative means of ventilation shall be provided in compliance with clause G4 of the New Zealand Building Code or any subsequent equivalent clause.

(iii) Any new dwelling to be erected, or the addition of habitable space to an existing dwelling, within 300m of any existing or consented frost protection fan located on a title separate to that of the subject site and in different ownership shall be designed and constructed so as to ensure that, with respect to noise emitted by any existing or consented frost protection fan, internal noise levels do not exceed LAeq(15min) 30dBA in any bedroom and LAeq(15min) 40dBA in other habitable room. Written certification of such compliance from a suitably qualified and experienced acoustic engineer shall be submitted with the building consent application for the dwelling concerned. Where the windows of the dwelling are required to be closed to achieve compliance with the aforementioned noise limits, alternative means of ventilation shall be provided in compliance with clause G4 of the New Zealand Building Code or any subsequent equivalent clause.

For the purposes of this rule, “consented” means:

(a) any frost protection fan for which a resource consent has been granted; or
(b) any permitted frost protection fan for which certification has been provided to the Council in accordance with Rule 4C.1.3.6(b);

prior to lodgement of a building consent application for the dwelling concerned.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Sound Level Not to be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>Hours</td>
</tr>
<tr>
<td>Monday to Saturday</td>
<td>7am to 10pm</td>
</tr>
<tr>
<td>Sunday</td>
<td>7am to 6pm</td>
</tr>
<tr>
<td>At all other times and on public holidays</td>
<td>40dBA</td>
</tr>
</tbody>
</table>
(b) Noise limits for activities in Industrial and Commercial Zones

All activities located within Industrial and Commercial Zones shall be so conducted as to ensure that noise from the site shall not exceed the following noise limits within the stated timeframes at any point within the notional boundary of any dwelling in a Rural Zone or Rural-Residential Zone, nor at any point within the boundary of any property within a Residential or Future Urban Zone:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Sound Level Not to be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day and Hours</td>
<td>Leq</td>
</tr>
<tr>
<td>Monday to Saturday</td>
<td>6am to 10pm</td>
</tr>
<tr>
<td>Sunday and Public Holidays</td>
<td>9am to 6pm</td>
</tr>
<tr>
<td>At all other times</td>
<td>45dBA</td>
</tr>
</tbody>
</table>

(c) Noise sensitivity

(i) For potentially noise-sensitive activities such as commercial offices, places of assembly, medical, veterinary or scientific facilities and dwellings and accommodation facilities, an acoustic design certificate shall be provided at the time of building consent demonstrating the building has been designed so that the internal noise limits set out in the following table are not exceeded;

(ii) Where windows and doors must be closed in order to meet the internal noise standards, an alternative means of ventilation shall be provided which meets all relevant requirements of the Building Code.

<table>
<thead>
<tr>
<th>Sound Level Not to be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytime period</td>
</tr>
<tr>
<td>Leq</td>
</tr>
<tr>
<td>Offices not accessory to any industry, storage or warehousing</td>
</tr>
<tr>
<td>Residential units (habitable spaces)</td>
</tr>
</tbody>
</table>

(d) Acoustic certification

The following provisions shall apply to Industrial Zoned sites that are either:

(i) within 100m of a dwelling in the Rural Zone that existed as at December 2005; or
(ii) within 200m of a dwelling within the Rangiuru Business Park that existed as at December 2005;
(iii) those lots within the Te Puke West Industrial Zone that are within
50m of Manoeka Road as indicated on the Te Puke West Structure
Plan:

(iv) those lots within the Comvita Campus Structure Plan area that are
zoned Industrial and located within 50m of Wilson Road South as
indicated on the Comvita Campus Structure Plan.

Prior to commencement of activities on the site or building consent
being approved an acoustic design report prepared by a suitably
qualified and experienced acoustical engineer shall be required by
the Council.

The report shall outline the range of activities, their potential noise
levels and any noise mitigation/management measures which will be
implemented to ensure compliance with the relevant noise
performance standards.

(e) Noise limits for activities in the Post Harvest Zone

All activities located within the Post Harvest Zone shall be conducted
so as to ensure that noise from the zone shall not exceed the
following noise limits within the notional boundary of any dwelling in
a Rural Zone or at any point within the boundary of any property
within a Residential, Rural-Residential, or Future Urban Zone:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Sound Level Not To Be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leq</td>
</tr>
<tr>
<td>Daytime 7am – 10pm</td>
<td>55dBA</td>
</tr>
<tr>
<td>Night time 10pm – 7am</td>
<td>45dBA</td>
</tr>
</tbody>
</table>

Provided that:

(i) Night time levels may exceed LAeq 45dBA where it is demonstrated
that a noise level not exceeding LAeq (15min) 30dBA (‘the internal
level’) can be achieved within all bedroom and LAeq(15min) 40dBA
in other habitable rooms of any dwelling (existing as at 7 February
2009), located in any of the zones specified above. Before the
externally measured LAeq 45dBA noise limit can be exceeded, any
necessary mitigation measures shall be installed in the dwelling(s)
concerned and compliance with the internal level shall be certified by
a suitably qualified and experienced acoustic engineer;

(ii) Any new dwelling or any addition of habitable space to an existing
dwelling to be erected in a Rural, Lifestyle, Rural Residential,
Residential or Future Urban Zone within 200m of a Post Harvest Zone
boundary shall be designed and constructed so as to ensure that the
internal noise levels do not exceed LAeq(15min) 30dBA in bedrooms
and LAeq(15min) 40dBA in other habitable rooms. Written
certification of such compliance from a suitably qualified and
experienced acoustic engineer shall be submitted with the building consent application for the dwelling or alteration concerned. Where the windows of the dwelling are required to be closed to achieve compliance with the noise limits, alternative means of ventilation shall be provided in compliance with clause G4 of the New Zealand Building Code or any subsequent equivalent clause.

(f) Noise limits for activities in the All Terrain Park Zone

(i) All activities in the All Terrain Park (the Park) (except for those involving gunshot noise) shall be conducted so as to ensure that noise shall not exceed the following noise limits within the stated timeframes at any point within the notional boundary of any dwelling existing at 7 February 2009 located outside the zone.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Sound Level Not to be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$Leq$</td>
</tr>
<tr>
<td>Monday to Sunday</td>
<td>7am to 10pm</td>
</tr>
<tr>
<td>At all other times and Christmas Day, Good Friday and Easter Sunday</td>
<td>7am to 6pm</td>
</tr>
</tbody>
</table>

(ii) Firing from any shooting range shall be only within the hours of 7am to 10pm and shall be so conducted as to ensure that gunshot noise does not exceed a composite noise rating (CNR) of 90 at any point within the notional boundary of any dwelling in regard to the properties in private ownership to the east of the subject site in a Rural Zone:

$$\text{CNR} = Y - 25 + 10 \log (N) + 10 \log (R);$$

Where: CNR= composite noise rating;

$Y=$dB linear peak level of the burst;

$N=$number of single shots or bursts per day;

$R=$number of rounds, or detonations, (acoustic events) per burst.

(iii) Noise shall be measured and assessed in accordance with NZS6801:2008 and NZS6802:2008. Adjustments for special audible characteristics shall not apply to the assessment of gunshot noise.

(g) Written approval

(i) The noise levels set out in 4C.1.3.2 (a) – (f) above may be exceeded where the written approval is provided by all owners or occupiers of those properties or dwellings affected by the non-compliance.
4C.1.3.3 Exemptions from Noise Limits

(a) Exemptions from noise limits for short-term activities

Subject to Rule 4C.1.6, the noise limits in Rule 4C.1.3.2 shall not apply to temporary or short-term activities as listed below, provided that the best practicable option pursuant to Section 16 of the RMA and manufacturers specifications for machinery, shall be adopted to ensure noise received off-site is reasonable.

The exemptions do not apply to long-term activities, and in the case of residential activities apply to domestic activities rather than commercial or business activities carried out from residential premises.

(b) Exemptions for residential activities in all zones

(i) Warning Devices used by Emergency Services;

(ii) Short-term domestic activities e.g. lawn mowing.

(c) Exemptions for rural activities in Rural Zones

(i) Warning Devices used by Emergency Services;

(ii) Activities required for primary production activities, including agricultural and horticultural vehicles and equipment; aircraft used for agricultural and horticultural purposes; and portable equipment (excluding portable sawmills and frost protection fans and audible bird scaring devices) associated with agricultural and horticultural activities such as: spraying, harvesting, etc;

(iii) Livestock.

(d) Other exemptions

(i) Noise from construction, maintenance and demolition (see Rule 4C.1.3.1);

(ii) Temporary Military Training Activity;

(iii) Temporary Activities (see Rule 4A.2.3.1 (iv)).

(e) Noise from traffic on public roads that are legally formed and maintained is exempt from the zone rules of the District Plan.
Explanatory Note:
Some roads may have specific conditions imposed by resource consent or designation.

(f) Exemptions for roadside cabinets housing telecommunication equipment

Noise from roadside cabinets housing telecommunication equipment is subject to the requirements of the National Environmental Standard (NES) for Telecommunication Facilities. Such noise is not subject to rules in this District Plan.

4C.1.3.4 Noise Measurement and Assessment

(a) For the purposes of Rule 4C.1.3.2, subject to the express provisions of these rules, sound levels should be measured in accordance with the requirements of NZS 6801:2008 Measurement of Environmental Sound, and assessed in accordance with the requirements of NZS6802:2008 Assessment of Environmental Sound;

(b) The noise shall be measured with a sound level meter complying with the International Standard IEC 651 (1979): Sound Level Meters, Type 1.

Explanatory note:
Council may require any Discretionary or Non-Complying resource consent application in any zone to provide as part of the resource consent documentation evidence from an appropriately qualified independent person that the proposal shall comply with the District Plan noise levels for the site. Council shall consider the noise insulation methods associated with the use of generators, fans, blowers, refrigeration equipment, forklifts, outdoor loading operations, and any activity that operates between 7.00pm and 7.00am.

4C.1.3.5 Audible Bird Scaring Devices – Performance Standard for Permitted Activity

Audible bird scaring devices shall be a Permitted Activity subject to compliance with the following performance standards.

An audible bird scaring device:

(a) Shall only be operated from half an hour before sunrise to half an hour after sunset.

(b) Shall be set to operate at no greater frequency than 12 times in any period of one hour, that is 12 single discharges or four groups of three discharges.
(c) Shall not be operated for any continuous period exceeding two seconds.

(d) Shall only be operated when the horticultural crop is at risk from bird damage.

(e) Shall not exceed 65dB ASEL at the *notional boundary* of any Rural, Rural Residential, Future Urban or Lifestyle *dwelling* or at the boundary of any Residential Zone (excluding any *dwelling/s* located on the same site as the device is being operated).

(f) Where those persons who experience noise levels over 65dB ASEL as described in (e) above, have provided written approval to *Council* then the activity shall be permitted.

Use of any audible bird scaring device not in compliance with the above performance standards shall fall to be considered as a Restricted Discretionary Activity.

**4C.1.3.6 Frost Protection Fans – Performance Standard for Permitted Activity**

Frost protection fans (including portable non-fixed type) shall be a Permitted Activity subject to the relevant performance standards of the underlying zone. Should the fan not comply with the relevant noise standards the activity shall default to be considered as a Controlled or Restricted Discretionary Activity as detailed in 4C.1.3.7 and 4C.1.3.8.

Frost protection fans (including portable non-fixed type) shall be a Permitted Activity subject to compliance with the following performance standards:

(a) Noise from the operation of a frost protection fan shall not exceed 55dBA *Leq* or 65dBA *Lmax* when measured:

(i) At any point at or within the *notional boundary* of any *dwelling* in the Rural or Lifestyle Zone that:
   - is or will be located on a title separate to that of the subject site and in different ownership; and
   - was existing or consented on the date that certification is provided to the Council in accordance with (b), below;

(ii) At any point at or within the boundary of a property in the Rural or Lifestyle Zone that:
    - is located on a title separate to that of the subject site and in different ownership; and
    - did not have an existing or consented *dwelling* on the date that certification is provided to the Council in accordance with (b) below;
ATTACHMENT A

(iii) At any point at or within the boundary of any property within a Residential, Rural-Residential, Medium Density Residential or Future Urban Zone.

(b) Evidence of the ability to meet (a) above shall be provided to Council prior to the installation of the frost protection fan and shall include:

(i) Certification from an appropriately qualified and experienced acoustic engineer that the noise limits in (a) above will be met; and

(ii) A plan showing the location, and Global Positioning System co-ordinates, of the frost protection fan(s) to which the certification applies.

(c) When the frost protection fan is in operation for frost protection the frost protection fan must not start up until the air at canopy height drops to 2°C, and shall cease operation when the rising temperature reaches 4°C at canopy height.

(d) When the frost protection fan is operating for maintenance purposes the machine shall only be used from Monday to Friday 8am to 5pm. Testing outside these hours may only take place for urgent unforeseen maintenance purposes.

Except that:

(e) Noise from the operation of a frost protection fan may exceed the noise levels described in (a) above, if:

(i) The noise to be produced by the operation of the frost protection fan(s) is assessed and determined by an appropriately qualified and experienced acoustic engineer. The assessment shall include:
- the noise levels to be produced by the operation of the frost protection fan(s);
- identification of the non-compliances with the noise levels specified in (a) above;
- a plan showing the location, and the Global Positioning System co-ordinates, of the frost protection fan(s) to which the assessment applies;

AND

(ii) The written approval of the owners of the land, and owners and occupiers of the dwelling(s) to which the non-compliances apply have provided their written approval for the non-compliances identified in the assessment provided in (i) above.
AND

(iii) The information in (i) and (ii) above is provided to Council prior to the installation of the frost protection fan.

Any frost protection fan (including portable non-fixed type) that fails to meet the performance standards above shall be a Restricted Discretionary Activity.

**Explanatory Notes:**

Fan Type - The distance required to achieve 55dBA $L_{eq}$ and 65dBA $L_{max}$ will vary depending on the noise performance of the frost protection fan.

For portable frost protection fans, determination and/or certification of noise to be emitted must take into account the full range of possible operating locations for the device.

**4C.1.3.7 Frost Protection Fans—Performance Standard for Controlled Activity**

Where the following performance standards cannot be met then the activity shall fall to being assessed as a Restricted Discretionary Activity.

(a) Noise from the operation of frost protection fans shall not exceed 55dBA $L_{eq}$ and 65dBA $L_{max}$ at any point within the notional boundary of any dwelling in a Rural or Lifestyle Zone (excluding a residential dwelling on the same property upon which the fan is operating) nor at any point within the boundary of any property within a Residential, Rural-Residential or Future Urban Zone.

(b) When the frost protection fan is in operation for frost protection the frost protection fan must not start up until the air at canopy height drops to 2°C, and shall cease operation when the rising temperature reaches 4°C at canopy height.

(c) When the frost protection fan is operating for maintenance purposes the machine shall only be used from Monday to Friday 8am to 5pm.

**Explanatory Note:**

Fan Type - The distance required to achieve 55dBA will vary depending on the noise performance of the frost protection fan. Applications for resource consent must be supported with evidence identifying the noise performance of the fan to be used.

Where the written approvals of all affected persons have not been obtained then notice shall be served on those persons.

**Explanatory Note:**
For the purpose of identifying affected persons where the noise from the operation of the frost protection fan exceeds 55dBA $Leq$ at any point within the notional boundary of any dwelling in a Rural, Lifestyle or Future Urban Zone, (excluding a residential dwelling on the same property on which the fan is operating) or at any point within the boundary of any Residential or Rural-Residential zone, those occupiers/owners shall be deemed to be affected.

4C.1.4 — Matters of Control — Controlled Activities

4C.1.4.1 — Frost Protection Fans

(a) **Council** shall exercise control over the following;

(i) The noise level that is permitted to be emitted from the frost protection fan;
(ii) The operational requirements of the frost protection fan;
(iii) The operation of the frost protection fan for maintenance purposes;
(iv) The hours of operation and times when the fan is permitted to operate.

4C.1.54 — Matters of Discretion

4C.1.54.1 Restricted Discretionary Activity — Audible Bird Scaring Devices

*Council* shall restrict its discretion to the noise levels and the consequential affect on amenity of the neighbouring properties. Notification of the application is not required. For the purposes of identifying affected persons, written approval shall be required from persons who will experience noise levels above 65dBA $SEL$ (excluding a residential dwelling on the same property as the audible bird scaring device). Should any written approvals not be obtained from an affected person(s) notice will be served on those persons.

4C.1.54.2 Restricted Discretionary Activity - Frost Protection Fans

*Council* shall restrict its discretion to the following:

(a) The best practicable option, this should address as a minimum; alternative options for frost protection, effectiveness of those alternative options, affordability, cumulative effects of existing machines in the vicinity, and any effects on established land uses, and proposed mitigation.

(b) The effect of the increased noise level on those persons who will experience noise levels over 55dBA $Leq$ at their notional boundary or boundary.

*Council* shall restrict its discretion to the following:

(a) The level of noise that is to be emitted from the frost protection fan(s).
(b) The effect of noise on the owners of land, and owners and occupiers of dwellings who will be affected by noise levels over 55dBA $L_{eq}$ and/or 65dBA $L_{max}$.

(c) The hours of operation, duration and frequency of use of the frost protection fan.

(d) The best practicable option for preventing or minimising adverse effects associated noise emissions. This may include, but is not limited to consideration of alternative options for frost protection, effectiveness of those alternative options, affordability, cumulative effects of existing frost protection fans in the vicinity, effects on established land uses, and proposed mitigation.

(e) The operational requirements of the frost protection fan.

4C.1.6 Other Methods

(a) Application of other statutory powers

Notwithstanding the foregoing clauses the Council reserves the right to use its more general statutory and regulatory powers (e.g. under relevant resource management, environmental, and health legislation and Council's own bylaws) to exercise appropriate control over noise in the environment.

(b) Vibration

Where significant vibration effects are experienced Council may deal with the matter as a nuisance under the Health Act.