

**BEFORE HEARING COMMISSIONERS
IN THE WESTERN BAY OF PLENTY DISTRICT**

UNDER THE Resource Management Act 1991 (“**Act**”)

IN THE MATTER OF an application for resource consent to authorise four existing industrial activities within part of the Te Puna Business Park structure plan area, for a term of two years

BETWEEN **TINEX GROUP LIMITED**
Applicant

AND **WESTERN BAY OF BAY OF PLENTY DISTRICT COUNCIL**
Consent authority

STATEMENT OF EVIDENCE OF JON STYLES

*Before a Hearing Panel: Rob van Voorthuysen (Chair),
James Whetu (Commissioner)*

INTRODUCTION

Background, qualifications and experience

1. My full name is Jon Robert Styles.
2. I am the Director and Principal at Styles Group Acoustics and Vibration, a specialist acoustics consulting company based in Auckland.
3. I hold a Bachelor of Applied Science majoring in Environmental Health, and I have completed the Ministry for the Environments’ Making Good Decisions Programme.
4. I have over 22 years’ experience in the industry, the first four as the Auckland City Council’s Environmental Health Specialist – Noise, and the latter eighteen as the director and principal of Styles Group.

5. My initial role in the project was to assist my colleague Kelly Leemeyer with the preparation of an acoustic assessment report and noise management plan for 245 Te Puna Station Road (“**Site**”). I assumed the lead consulting role at the time the Environment Court proceedings commenced as Ms Leemeyer was on maternity leave.

Expert witness code of conduct

6. I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court’s 2023 Practice Note. While this is not an Environment Court hearing, I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Purpose and scope of evidence

7. The purpose of this evidence is to:
- (a) confirm my assessment of the noise effects associated with the existing onsite activities occurring at the Site; and
 - (b) respond to the peer review of the Council/ Council’s s42A report.
8. Styles Group has prepared, as most relevant to this consent application:
- (a) an Assessment of Noise Effects dated 8 September 2022;
 - (b) a Noise Management Plan dated 8 September 2022;
 - (c) a specific letter of response to the s92 request dated 27 April 2023;
 - (d) an updated Assessment of Noise Effects dated 27 April 2023; and
 - (e) an updated Noise Management Plan dated 27 April 2023.
 - (f) an updated Noise Management Plan dated 22 September 2023.
9. The April updates to the Assessment of Noise Effects removed reference to the concrete crushing activities, which have been discontinued and are

not part of this application. The material did still refer to noise from future activities, despite the application only relating to the current activities. This was in part because the Council's s92 request had asked for information about cumulative effects into the future.

10. I have updated the Noise Management Plan to ensure that it focuses only on the current activities and includes a procedure for complaints management. The current Noise Management Plan is attached as **Attachment A** dated 22 September 2023.

Confirmation of Assessment

11. I confirm that onsite noise measurements and noise modelling undertaken by Styles Group have demonstrated that compliance with the relevant District Plan noise limits can be achieved.
12. My experience is that compliance with the noise standards for permitted activities is acceptable and reasonable for activities that generate noise at a level and character that is provided for in the zone.
13. The applicant has proposed conditions requiring compliance with the District Plan Noise limits, the implementation of the Noise Management Plan, and requiring that tenants be required to be provided with and comply with the Noise Management Plan. I consider these conditions are appropriate and sufficient.

Response to Mr Runcie's peer review and the s42A Report

14. Mr Runcie and I are generally in agreement and so I do not need to respond in detail to his peer review. I understand that the consent does not enable the establishment of new tenants/ activities and therefore any potential noise effects from new activities will not arise. The Noise Management Plan in Attachment A has been updated to remove any references that might suggest this could occur under this consent (rather than any wider consent).
15. Mr Runcie has recommended three additional consent conditions that would deliver the following outcomes:

1. To require the earth bunds to be maintained along the northern, eastern, and southern site boundaries. I agree with

this condition and had anticipated that the bunds would remain in place.

2. To require compliance with noise standards that are equivalent to those in the District Plan (essentially reformatted). I agree with this condition and have no issue with adopting this format.
 3. To ensure a Noise Management Plan is implemented at all times. The wording of the suggested condition provides for a general Noise Management Plan rather than the specific Noise Management Plan prepared by Styles Group. In my opinion, where a specific detailed plan has been prepared, submitted and is acceptable to the consent authority, it is preferable to specify compliance with that Plan. Notwithstanding, the Noise Management Plan in Attachment A meets the noise management plan objectives in Mr Runcie's proposed condition. I have updated the Plan to provide a framework for response and resolution of any noise complaints.
16. The Reporting Planner is satisfied that effects from noise are likely to be no more than minor. I note that the Reporting Planner has recommended changes to the third condition proposed by Mr Runcie (Ms Perring's condition 22). I agree with the changes to remove Mr's Runcie's reference to replacement activities.
17. Overall, I agree with Ms Perring that noise effects can be adequately managed though conditions of consent to an acceptable level.

25 September 2023

Jon Styles



NOISE MANAGEMENT PLAN

245 TE PUNA STATION ROAD, TE PUNA

PREPARED FOR

Barry Daniel

DATE

22 September 2023

Noise management plan prepared by Styles Group for Barry Daniel.

REVISION HISTORY

Rev:	Date:	Comment:	Version:	Prepared by:	Reviewed by:
1	10/12/20	Draft for client review	Draft	Kelly Leemeyer, MASNZ Consultant Styles Group	Jamie Exeter, MASNZ, Assoc. NZPI Senior Consultant Styles Group
2	8/9/22	Minor updates	Final Draft		
3	27/04/23	Updates following RFI and removal of concrete crushing on site	Final Draft 2.0	Kelly Leemeyer, MASNZ Consultant Styles Group	
4	22/09/23	Updates for resource consent	Final	Jon Styles Director and Principal Styles Group	

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1.0 Introduction

Styles Group has been engaged by Barry Daniel to prepare a Noise Management Plan (**NMP**) for the activities undertaken on the site at 245 Te Puna Station Road (the **Site**).

The activities covered by this NMP include:

- An outdoor pool storage yard occupying an area of 3000m²
- A relocatable homes storage yard / depot, occupying an area of 2100m²;
- An outdoor tyre storage yard occupying an area of 2600m²;
- A relocatable homes and goods storage yard / depot, occupying an area of 8000m².

The Site is near to the Rural Zone that is occupied by noise sensitive receivers (residential dwellings). The objective of this ONMP is to ensure that operational noise levels from all activities on the Site are managed to ensure compliance with the noise limits of the Western Bay of Plenty District Plan (**WBPDP**).

This NMP sets out the noise mitigation measures that must be adopted to ensure that the noise levels from the Site comply with the WBPDP noise limits at all receivers.

A glossary of the acoustical terms used in this document is provided as Appendix A.

2.0 Roles and responsibilities

This NMP shall be maintained by Barry Daniels as the consent holder. This document shall be adhered to the consent holder and all occupiers of the Site.

All permanent staff working on the site shall be familiar with and responsible for implementing this NMP. This NMP shall be made available to the Western Bay of Plenty District Council on request.

The contact for queries regarding this NMP is:

Barry Daniel

ph: 027 437 6270

The consultant engaged to provide noise advice is:

Styles Group Acoustics & Vibration Consultants

ph: 09 308 9015

The consent holder is responsible for:

1. Ensuring the ONMP is maintained throughout the exercise of the resource consent
2. Ensuring that the mitigation measures identified in this ONMP are integrated into the operation of all activities on the Site
3. Ensuring that all activities on the site are made aware of the requirements of the ONMP, the relevant aspects of the ONMP that apply to their activity, and

the need to conduct activities on site in a manner that will minimise noise emissions as far as practicable, and in a way that will ensure compliance with the noise limits.

3.0 WBPDP permitted noise limits

The Site and sites to the west are zoned *Industrial* and are identified in Appendix 7 of the District Plan as the *Te Puna Business Park*. The surrounding sites to the south and east are zoned *Rural*.

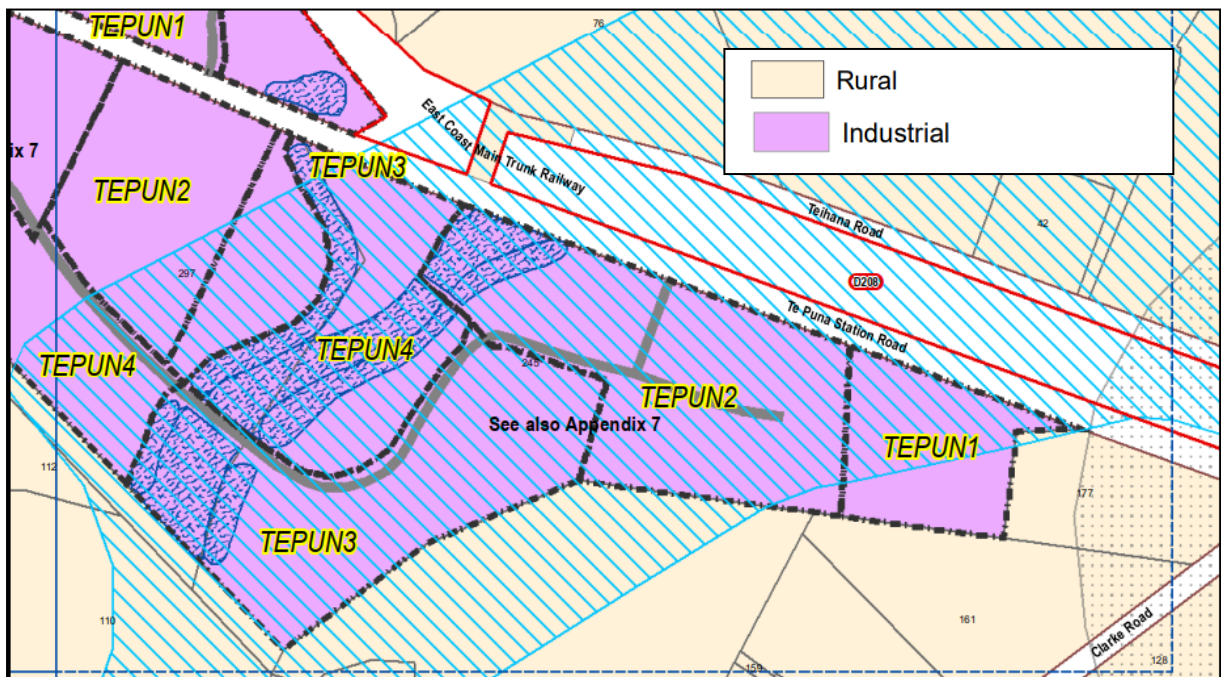


Figure 1: WBP District Plan zoning map of the site and surrounding sites

The permitted limits for noise generated from the Site and received at the surrounding *Rural Zone* and *Industrial Zone* sites are set out below.

4C.1.3.2 Noise Limits

(b) Noise limits for activities in Industrial and Commercial Zones

(i) 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:

Time period		Sound Level Not to be Exceeded	
Day	Hours	L _{Aeq}	L _{Amax}
Monday to Saturday	6am to 10pm	55dB	N/A
Sunday and Public Holidays	9am to 6pm	55dB	N/A

At all other times	45dB	70dB
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(ii) All activities located within Industrial Zones (excluding emergency service sirens) 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 boundary of any other property within an Industrial Zone:

Time period	Sound Level Not to be Exceeded	
	L _{Aeq}	L _{Amax}
Daytime 7am-10pm	65dB	N/A
Night time 10pm-7am	65dB	85dB

3.1 Summary of noise limits

The permitted noise limits for noise levels generated from the Site can be summarised as:

- 55 dB L_{Aeq} during the day and 45 dB L_{Aeq} and 70 dB L_{Amax} during the night for noise received at a notional boundary¹ of a dwelling in the Rural Zone (noting the shorter daytime period on Sundays)
- 65 dB L_{Aeq} during the day and 65 dB L_{Aeq} and 85 dB L_{Amax} during the night for noise received at other sites in the Industrial Zone.

Noise levels from the Site are controlled by the lower noise limits applying at the adjacent Rural Zone dwellings. The Rural Zone noise limits are designed to provide the receivers with an adequate level of noise amenity during the daytime and nighttime periods. The nighttime noise limits of 45 dB L_{Aeq} and 70 dB L_{Amax} are 10dB lower than the daytime noise limits and are designed to provide the receivers with adequate protection from sleep disturbance effects. The timing of activities on the Site should be carefully managed to avoid high noise generating activities during the night time period.

In accordance with WBPDP Rule 4C.1.3.4(a), all noise must be measured and assessed in accordance with NZS 6801:2008 *Acoustics – Measurement of environmental sound* and NZS 6802:2008 *Acoustics – Environmental noise*.

4.0 Noise mitigation measures

The consent holder and operators of the activities must take all practicable steps to implement the following noise mitigation measures to mitigate noise emissions.

¹ Notional boundary means a line 20m from any side of a *dwelling*, or the legal boundary of the property on which the *dwelling* is located, whichever point is closer to the *dwelling*.

- All plant and equipment with reverse alarms must utilise broadband reverse alarms in place of traditional pure tone ‘beepers’
- The quietest machinery and methods available should be used where practicable
- All machinery should be in good condition and maintained in good condition. For example, all tracked plant should be lubricated to reduce squeaking
- When vehicles, machinery or plant are not required to be running, they should be switched off and not left idling
- Noisy plant and machinery should be strategically positioned on the site to reduce the effects on neighbours where practicable. For example, if a building will be constructed on site this could be used to screen a noisy activity from a neighbouring lot or site
- Noise generating activities should be undertaken inside buildings where possible
- Noise generating activities should be undertaken away from the site boundary to increase the separation distance between the noise source and the receiver
- The tail gates of trucks should be closed with care and not slammed or allowed to fall closed causing unnecessary noise
- Horns should not be used unless in the case of an emergency
- Any radios or music played on site should not be audible at the nearest sites
- All personnel on site should be aware of this NMP and requirement to minimise the effects of noise on neighbouring lots and surrounding sites.

4.1 Specific noise mitigation measures for high noise activities

Table 1 provides a summary of the noise source levels for a number of noise generating activities undertaken on the site and mitigation options for reducing the noise levels.

Table 1: Mitigation options to reduce noise from high noise generating activities

Activity	Noise level at 10 m	Mitigation options to reduce noise
Grinder	86 dB LAeq	Operate inside building only or inside an acoustic enclosure or construct acoustic fencing
Loading trucks with excavator	75 dB LAeq	Avoid dropping material from height into empty truck. If possible, load trucks towards the centre of site rather than on a lot or Site boundary

Activity	Noise level at 10 m	Mitigation options to reduce noise
Lifting with crane	75 dB L _{Aeq}	If possible, position crane engine near to the centre of site rather than on a lot or Site boundary Use a building as screening
Rattle gun	73 dB L _{Aeq}	Operate inside building only or inside an acoustic enclosure or construct acoustic fencing
Water blaster	73 dB L _{Aeq}	Operate inside an acoustic enclosure or construct acoustic fencing
Forklift (diesel)	70 dB L _{Aeq}	Use of electric forklifts, switch tonal reversing alarm (beeper) to broadband alarm (squawker)
Bobcat / skidsteer loader	70 dB L _{Aeq}	Switch pure tone reversing alarm (beeper) to broadband reversing alarm (squawker)
Truck movements	64 dB L _{Aeq}	If possible, keep trucks towards the centre of site rather than on a lot or Site boundary Operate within daytime hours if trucks needs to operate near a Site boundary in proximity to a rural dwelling.
Handheld power tools	Ranges <60 dB – 85 dB L _{Aeq}	Operate inside building only or inside an acoustic enclosure or construct acoustic fencing

4.2 Acoustic screening

Earth bunds between 2.5 m and 3.5 m high have already been constructed around much of the site boundary. These are very effective where they block the line of sight between the noise source and the receiver. These must be retained.

If required, additional bunds or acoustic fencing can be constructed around the Site boundary or between lots. To serve as an effective acoustic barrier, the fence must be 2 m high and solid with no gaps. It must have a surface mass of no less than 10 kg/m² (e.g. 20 mm timber).

A building is a very effective acoustic barrier if it can be positioned between the noise generating activity and the receiving lot or site. Any localised screening should be located as close as practicable to the noise source, to improve its effectiveness.

If the noise levels from an activity near to a receiver cannot comply with the permitted or recommended noise limits, then a localised acoustic barrier can be used to reduce the noise emissions.

Where possible and appropriate, quiet machinery and structures should be positioned to provide as much screening as possible to noisy equipment working on the site e.g. storage units, containers, trucks.

5.0 Noise Complaint Procedure

The consent holder will be available via telephone/mobile phone (as far as practical) to receive any noise complaints or other concerns held by the neighbours.

If a complaint is received directly by the operator of an activity / tenant, the consent holder shall be advised that a complaint has been received.

Upon receiving a reasonable complaint, the consent holder and activity operator shall take necessary steps to modify to reduce or eliminate the sound of concern and the complainant shall be informed.

If the matter cannot be resolved immediately by modifying the activity then an investigation shall be carried out as soon as practicable. The investigation shall include the relevant parts of the following requirements:

- Identification of noise generating activities at the time of complaint;
- A review of any available and relevant noise monitoring results to determine whether an exceedance of the noise limits occurred
- Undertake attended measurements at an appropriate location in accordance with the requirements set out below.
- Determination of the best practicable mitigation options to reduce the noise.
- Measurement of noise levels following implementation of mitigation action(s) if required;
- Communication with the complainant.

The consent holder shall maintain a register of any noise complaints received in relation to the operation of the Site. The complaint record form is attached as Appendix D. The Complaint Register shall be made available to Western Bay of Plenty District Council upon reasonable request.

5.1 Noise monitoring

Noise measurements may be required following the receipt of any reasonable complaint that cannot be resolved by the adoption of other practicable noise management or mitigation measures and where noise monitoring would be useful to assist in the resolution of the complaint.

The results of the monitoring will be used to determine what, if any, further mitigation is required to ensure compliance with the conditions of the resource consent.

The results should be used to update and maintain this NMP to ensure that mitigation measures are specifically tailored to the equipment used on each lot. The results of all monitoring should be recorded in Appendix C and made available to Council at their reasonable request.

Noise measurements will be undertaken in accordance with this document and by observing the following requirements:

- i. All noise measurements shall be undertaken using a sound level meter conforming to at least IEC651 Type 2 criteria
- ii. All noise measurements and assessments shall be carried out in accordance with NZS 6801:2008 *Acoustics – Measurement of environmental sound* and NZS 6802:2008 *Acoustics – Environmental noise*
- iii. All noise monitoring and assessment shall be undertaken by a suitably qualified and experienced person.

6.0 Review of this NMP

This NMP should be reviewed and updated as necessary should any of the following events occur, or at any time by agreement between the consent holder and the Western Bay of Plenty District Plan.

1. Following any changes to the relevant resource consent conditions that necessitate an update to the NMP
2. Prior to any changes to the operation of the activity that may result in an appreciable increase to the noise levels
3. In response to any investigation following any noise complaint where changes to the operation of the activity are deemed necessary to meet the requirements of the resource consent.

Updates to the NMP shall be recorded in Appendix A.

7.0 Summary of NMP requirements

All activities on the Site must be undertaken in accordance with this NMP.

A copy of the latest version of this NMP shall be kept at each activity covered by this NMP.

All personnel working on the Site should be informed about the need to reduce noise to a minimum, the proximity of nearby noise sensitive dwellings, the need to comply with the District Plan noise limits during the day and night time and the need to avoid unreasonable noise at all times.

Special attention should be given to:

- i. Timing of high noise generating activities in proximity to residential dwellings
- ii. Proper selection, use and maintenance of tools and plant
- iii. Positioning of machinery on site

- iv. Avoidance of unnecessary noise, particularly between when the night time noise limits apply.
- v. Procedures for receiving, reporting and investigation of noise complaints.

Appendix A Glossary of terms

Noise	A sound which serves little or no purpose for the exposed persons and is commonly described as 'unwanted sound'. The definition of noise includes vibration under the Resource Management Act 1991.
dB (decibel)	The basic measurement unit of sound. The logarithmic unit used to describe the ratio between the measured sound pressure level and a reference level of 20 micropascals (0 dB).
$L_{Aeq(t)}$ (dB)	The A-weighted equivalent sound pressure level with the same energy content as the measured varying acoustic signal over a sample period (t). The preferred metric for sound levels that vary over time because it takes into account the total sound energy over the time period of interest.
NZS 6801:2008	N.Z. Standard NZS 6801:2008 Acoustics – Measurement of environmental sound.
NZS 6802:2008	N.Z. Standard NZS 6802:2008 Acoustics – Environmental noise.
NMP	Noise management plan. A document designed to help occupants of the Site mitigate and minimise noise emissions to other lots and the surrounding area

Appendix B Site layout

TE PUNA STATION ROAD ROADScape | LANDSCAPE MITIGATION PLAN



LANDSCAPE PROPOSAL | 245 TE PUNA STATION ROAD | 1 APRIL



Appendix C Noise monitoring results

Measurement results

#	Attach sketch of location	Sample start time	Duration of sample	L _{Aeq} (dB)	L _{AFmax} (dB)	Sound source controlling the measured levels	Adjustments required for distance, facade correction or barriers	Compliance achieved?	Noise mitigation options available
1									
2									
3									
4									
5									

Appendix D Noise complaint register

Date	Complainant name, address and contact number	Complaint received by	Nature of complaint	Outcome of investigation

