EXHIBIT NUMBER " "
Environment Court & !O

Produced by Ms Wilkens

via Ms Anissen in X N

COURT REF:

## AMENDED ANNEXURE B OF SIIRI WILKENING'S FIRST SUPPLEMENTARY EVIDENCE OF 28 FEBRUARY 2011

## 11.13 Noise Mitigation Option Determination – Hierarchy of Mitigation Options

In the event that potential non-compliance with the construction noise criteria of Section 2 of this Plan have been determined, appropriate mitigation options will be determined following the hierarchy set out below. Each question shall be considered in sequence before moving onto the next option.

- 1. Is it imperative that night-time works are undertaken, or can works be rescheduled to daytime?
- 2. Have equipment and methodologies been chosen that reduce the overall noise from the activity? Can quieter alternative equipment or methodologies be practicably implemented?
- 3. Can temporary construction noise barriers or screens be erected within the designation that provide effective acoustic shielding of the equipment/activity?
- 4. Can the works be sequenced to avoid sensitive times for neighbouring residents/businesses, e.g. can works be scheduled for school holidays?
- 5. Have affected persons be contacted and implications be discussed/feedback been taken into consideration in the planning of this activity?
- 6. When appropriate, have residents been offered temporary relocation to suitable alterative accommodation, and have they accepted the offer?
- 7. Is the activity of long duration and likely to impact on the same group of residents for an extended time? Can affected houses be upgraded to provide a suitable internal noise environment during this activity, e.g. by installing alternative ventilation/improved glazing? (Advice from a suitably qualified acoustic engineer required)

## 11.14 Site Specific construction noise management plans

For any construction activities that have the potential to breach the noise limits criteria, as set out in Section 2, a noise assessment will be undertaken and a Site Specific Noise Management Plan (SSNMP) will be prepared and held with the CNVMP (CEMP).

Where the modelled/predicted noise levels are greater than the noise limits criteria in Section 2 by less than 10 dBA, all practicable measures will be implemented as per the CNVMP with an aim to achieve compliance with the construction noise criteria (this is provided for on the assumption that the noise levels of Section 2 will generally be able to be met with

implementation of mitigation). Monitoring of these works will be undertaken to confirm that the actual noise levels are less than or equal to the predicted levels. The SSNMP will be available for Auckland Council certification if requested.

If the actual measured noise levels are higher than the limit predicted noise levels plus 10 dBA and exceed the noise criteria in Section 2, those works shall cease and a Site Specific Construction Noise Management Plan (SSNMP) will be submitted to Auckland Council for certification.

Where the modelled/predicted noise levels are 10 dBA or more above the noise criteria in Section 2, a SSNMP will be submitted to Auckland Council for certification prior to works commencing.

Notwithstanding the requirement to submit a SSNMP, noise mitigation measures will continue to be implemented as per the CNVMP and reviewed/monitored to confirm compliance and effectiveness of the plan. This includes the overall aim to achieve compliance with the relevant project noise criteria.

The likelihood of exceedance shall be determined by utilising appropriate prediction tools, e.g. the calculation tools of NZTA, specifically the NZTA NZS 6803 Tool:

## http://acoustics.nzta.govt.nz/monitoring-prediction-assessment/construction-maintenance-noise

The SSENMP shall contain, to an appropriate detail:

- The activity and location proposed;
- Timing/duration;
- Equipment utilised;
- Predicted noise levels;
- Identified dwellings at which compliance cannot be achieved with conventional mitigation measures;
- Alternative management and mitigation measures proposed.

The SSNMP shall be submitted to the Council Noise Officer and Council Compliance Officer for review and certification at least 5 7 working days prior to the proposed works commencing. Certification or otherwise will be provided by the Council within 3 5 working days of receipt of the SSNMP. Works will not commence until certification is received from Auckland Council.

The above is not required for emergency works or similar circumstances where the potential non-compliance could not be foreseen.