

IN THE MATTER of the Resource Management  
Act 1991

AND

IN THE MATTER of a notice of requirement  
issued by WEL NETWORKS  
LIMITED pursuant to section  
168(2) of the Act for  
designations (3) to authorise  
the implementation of the  
Western Network Upgrade  
Project

#### **FURTHER STATEMENT OF EVIDENCE OF N I HEGLEY**

- 1 My name is NEVIL IAN HEGLEY. My qualifications and experience and involvement in this project are set out in my primary evidence. I also confirm that I have read and agree to comply with the Environmental Court's code of conduct for expert witnesses.
- 2 The following sets out some additional details of the noise effects from the proposed use of a helicopter to assist with the construction of the transmission line.
- 3 There are a number of helicopters that could be used to undertake the construction work such as the SA365 Dauphin with a maximum 1,400kg lift capacity through to the Russian built Mi8MTV-1 helicopter with a maximum lift capacity of 13,000kg as shown in Figure 1. I have measured the noise from this larger helicopter and adopted that data plus technical data available to undertake the noise predictions for this project.



**Figure 1. Mi8MTV-1 Helicopter**

- 4 There are two houses along the transmission line where any helicopter used for the construction work could come within approximately 200m of the house. The next closest house is over 1km away so will not experience any high levels of noise from the helicopter.
- 5 Based on a distance of 200m and the larger of the two helicopters being used the resulting noise exposure at these houses will be up to 71dBA  $L_{eq}$  based on the helicopter working for 10 – 15 minutes at any one time. This is well within the requirements of the 75dBA  $L_{eq}$  limit as set out in the District Plan, which is 5dBA more stringent than the requirements of NZS6803:1999 Acoustics – Construction Noise. As a guide, to increase the level by 3dBA would require the helicopter to be present for twice the time.
- 6 The maximum noise ( $L_{max}$ ) must comply with a level of 90dBA. The predicted maximum level from the helicopter is 81dBA, which is well within the 90dBA requirement.
- 7 The helicopter would be flown in accordance with the requirements of the *Fly Neighborly Guide*. Essentially, this guide sets out how to fly a helicopter to minimise the noise received. This includes avoiding flying over noise sensitive activities on the ground (such as houses), the effects of the noise with flyover height and the effects of turns and how to avoid blade slap when undertaking any turns.

- 8 The above noise predictions are based on standard helicopter flying and the implementation of the *Fly Neighborly Guide* provides a factor of safety to the noise received.
- 9 It is proposed to ensure the pilots adopt the *Fly Neighborly Guide* to minimise the noise for neighbours. This is a common requirement for pilots and to date has been successfully implemented.

Nevil Hegley  
March 2009