

Noise and vibration Fact sheet

How is noise assessed?

A detailed noise and vibration assessment was carried out to evaluate and predict the potential noise impact from spoil haulage and spoil management for the project at the Hornsby Quarry site based on worse case scenario.

Assessment findings

Activities that would potentially generate noise and vibration include:

- Preparatory and site establishment work
- Pumping water out of the quarry void
- Construction of the conveyor
- Spoil haulage by heavy vehicles
- Spoil management (including stockpiling spoil, moving spoil from the stockpiles to the conveyor, transporting spoil along the conveyor so it can fall into the void and moving and compacting spoil on the quarry floor)
- Site demobilisation

Noise and vibration impact

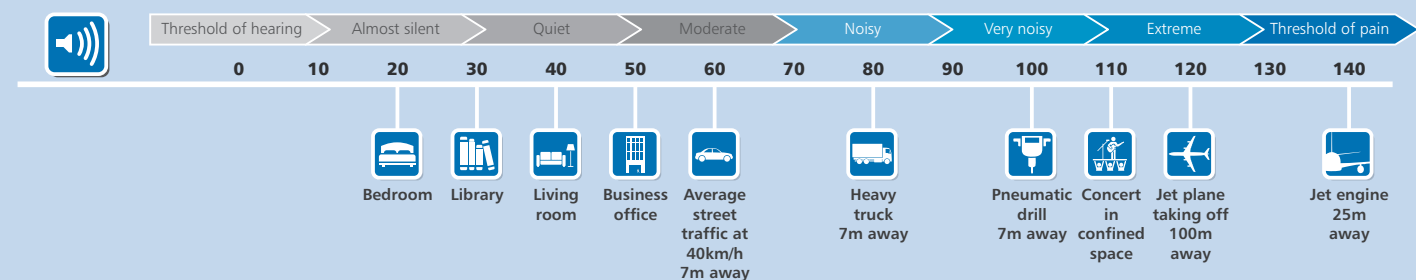
- Work on site including site establishment, conveyor construction and spoil stockpiling and emplacement would result in elevated noise levels around the quarry site, TAFE and along Bridge Road, with noise management levels exceeded for some receivers during standard working hours
- No sensitive receivers are predicted to be “highly noise affected” by the works (highly noise affected is defined in the ICNG as >75dB(A))
- Noisiest activities would be during site establishment and demobilisation
- Exceedances of the noise management levels for the project could be up to 23dB(A) for the closest residents
- The maximum number of project traffic movements has been reduced considerably through design optimisation, and as much as is considered reasonably practicable to make the proposal viable

- Traffic noise from spoil haulage on Bridge Road would increase noise levels by up to 10dB(A). Traffic noise from spoil haulage on Pacific Highway would remain compliant with the applicable noise criteria
- Due to the site layout and existing distances to sensitive receivers it is unlikely that the project would encroach safe working distances for vibration for most activities.

Mitigation measure

- Project activities (including deliveries) would be carried out during standard working hours unless it is in accordance with the conditions of approval and/or an Environment Protection Licence
- Particularly noisy activities associated with site establishment and demobilisation would be scheduled around times of high background noise to provide masking where practicable
- Further detailed consideration of feasible and reasonable noise mitigation and management measures for affected receivers on Bridge Road would be investigated by the Contractor and presented in the Construction Noise and Vibration Management Plan
- Truck drivers would be advised of designated vehicle routes, parking locations, acceptable delivery hours and other relevant practices (e.g. no extended periods of engine idling)
- The site would be arranged to limit the need for reversing to minimise the use of reversing alarms
- Noise mounds about five metres high would be provided surrounding the stockpiling area
- Trucks would not, under normal operating conditions, be required to queue outside of the Hornsby Quarry site
- Vibration intensive work would be carried out outside the specified safe working distances. If work is required within these areas, alternative equipment would be considered and vibration monitoring would be implemented .

Sound levels in decibels (approximate)



Hours of work



Work and haulage associated with spoil management at the Hornsby Quarry site would be carried out within standard working hours:

- 7am to 6pm Monday to Friday
- 8am to 1pm Saturdays
- No work on Sundays or public holidays

Where work is required outside these hours it would be carried out in accordance with the conditions of approval and/or an Environment Protection Licence.

Duration of activity



Activity	Approximate duration
Site establishment (including preparatory work)	3 months
Conveyor construction	3 months (2 month overlap with site establishment work)
Spoil management and haulage	28 months
Site demobilisation	2 months (1 month overlap with spoil management and haulage)
Total expected duration of the project	33 months



An example of a noise logger

Contact us

For more information, please contact the project team on:



1800 093 090 (free call)



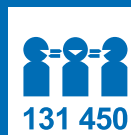
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