



Noise and Vibration

Environment Effects Statement

An [Environment Effects Statement \(EES\)](#) is Victoria's most rigorous and transparent environmental impact assessment. It describes the project, its rationale, and potential environmental and social effects.

Scoping requirements

In February 2025, the Victorian Minister for Planning issued the final scoping requirements for the VNI West EES, setting out the proposed specific matters to be investigated and documented in the EES. While the scoping requirements are intended to cover all relevant matters, the EES can also address other significant matters that emerge during the EES investigations or through consultation.

Noise and vibration (community amenity) scoping requirements

Noise and vibration scoping requirements are categorised under community amenity. The requirements state that noise and vibration is considered medium priority for technical assessment due to the noise generated during construction and the potential for aeolian and corona noise from transmission lines. However, construction noise and vibration impacts are expected to be temporary, and aeolian and corona noise can be managed with appropriate separation distances.

Matters for investigation

- *Potential for adverse noise and vibration effects at sensitive receptors and on other sensitive land uses during construction of the project.*
- *Potential for adverse effects resulting from project-related noise or vibration on amenity and at sensitive receptors (residential, farming, commercial, and open space areas) during construction and operation, including addressing EPA Victoria's publication 1826: Noise limit and assessment protocol for the control of noise from commercial, industrial, and trade premises.*

Assessment overview

The noise and vibration assessment is looking into the potential adverse effects of project-related noise or vibration on amenity and at sensitive receptors including residential, farming, commercial, and open space areas during construction and operation. The assessment includes desktop research into the entire project area and noise monitoring to establish the background noise levels along the easement to inform permissible noise limits.

Study methodology

The noise and vibration assessment methodology includes:

- Desktop assessment to identify suitable noise monitoring locations along the project area where there would be potential for sensitive receptors to be affected by the construction and operation of the project.
- Measurement of baseline noise levels at suitable noise monitoring locations along the project area.
- Identification and risk-screening of potential noise and vibration impacts at each phase of the project.
- Identification of mitigation measures – where required – and assessment of the residual effect of each risk once the mitigation measures have been applied.
- Assessment of combined effects with other proposed developments in the region.

Scan this QR code to view the complete list of [scoping requirements](#) for the VNI West project





Baseline noise levels describe the existing noise environment throughout the project area. This helps explain current conditions including nearby industry or other environmental noise sources, supports the development of project-specific criteria consistent with Environment Protection Authority (EPA) guidelines, and assesses the potential effect on the noise environment if the project proceeds.

Existing conditions

The noise and vibration assessment is ongoing.

Noise and vibration generated during the construction and operation of large infrastructure projects can affect nearby sensitive receptors if not properly understood and managed in line with relevant legislation and guidelines. Noise can reduce human amenity when it reaches levels that are annoying, disruptive, or – in some cases – physically harmful.

Vibration can have similar effects on amenity but usually only poses a risk to sensitive receptors located much closer to the activity. In addition to amenity impacts, excessive or repetitive vibration can damage utilities such as gas, water, and electricity infrastructure, as well as buildings, including dwellings and heritage-listed structures.

The study area for this assessment was defined based on an offset from the project easement to capture sensitive receptors that may be affected during construction, decommissioning, and operation phases. Identified receptors are classified as rural residential. Within the Gannawarra Planning Scheme, receptors near the Tragowel Terminal Station are located within a Farming Zone (FZ).

Baseline noise monitoring was carried out across the project study area to understand existing conditions. This information helps explain the current noise environment, including any industrial or environmental sources, and supports the development of project criteria. It also informs the assessment of potential changes to the noise environment once the project is constructed.

Measured background noise levels were typical of rural areas. Average daytime levels were 36 LA90 dB, while evening and night levels averaged 31 LA90 dB and 30 LA90 dB, respectively. Ambient noise levels were influenced by local and distant traffic, wildlife, insects, and wind through trees. Daytime ambient noise averaged 49 LAeq dB, with lower averages of 42 LAeq dB in the evening and 41 LAeq dB at night.

Glossary

Aeolian noise

Aeolian noise is caused by wind blowing through conductors and structures.

Ambient noise

Ambient noise is an environment's background sound.

Corona Noise

Corona noise varies with weather and mostly occurs during wet conditions.

Next steps

The noise and vibration assessment is ongoing, with further noise monitoring of the existing environment to be undertaken as necessary. The impact assessment will identify any sensitive receptors (primarily dwellings) where noise levels may exceed EPA limits during construction and propose mitigation measures to reduce the noise levels to within acceptable limits.