VNI West

Air quality

The Project is located within a rural area characterised by low population density and limited existing sources of air pollution. Background air quality is expected to be generally good, with the primary contributors to local dust levels being natural and agricultural activities. These include wind-driven dust from exposed surfaces, disturbance of soils associated with farming operations, and wheel-generated dust from vehicles travelling along unsealed roads. Occasional bushfire events may also contribute to short-term reductions in air quality within the study area.

All EES documents, chapters, technical appendices, and attachments are available to view and download on the VNI West website at **vniwproject.com.au/EES**

EES Chapter 16 and ***Technical Appendix I*** outline potential impacts from dust, emissions, and airborne hazards from the Project, and consider measures to minimise dust and emissions from equipment and handling of materials.

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Chapter 16: Air quality ↗

Technical Appendix I: Air quality ↗

The air quality assessment identifies sensitive receptors as locations where occupants or ecological values may be adversely affected by changes in air quality. This includes dwellings within 250 m of the construction footprint and ecological receptors within 50 m. When accounting for workforce accommodation, laydown areas and access roads that may be utilised during construction, an additional 86 sensitive receptors were identified.

During the construction phase, the primary air quality impacts would be associated with the generation of dust and emissions from construction plant and vehicles. Key dust sources would include demolition activities, earthworks, site clearing, infrastructure construction (such as foundations, drainage systems, buildings and electrical equipment), and the import and export of materials. Dust emissions from construction activities are well understood and can be effectively managed through industry standard controls.

Dust emissions along the transmission line are expected to be negligible due to the low magnitude of earthworks and limited nearby sensitive receptors such as houses. Impacts at the Tragowel Terminal Station, workforce accommodation and laydown areas are also expected to be negligible due to separation distances from houses and other sensitive land uses. The main source of potential dust generation is unsealed access roads which trucks and other vehicles would be utilising to access construction sites within the Proposed Easement.

Mitigation will be implemented in accordance with the EPRs and include minimising disturbed areas, stabilising exposed surfaces, revegetating completed areas, covering loads, applying dust suppression, and stabilising access tracks. An Air Quality Management Plan will be developed and implemented as a sub-plan to the Construction Environmental Management Plan to minimise air quality impacts during construction. Monitoring and adaptive management will be used to ensure controls remain effective. With mitigation in place, impacts at sensitive receptors are expected to remain negligible.

Emissions from construction plant and equipment are expected to be intermittent and transient, and therefore unlikely to significantly affect local air quality. With mitigation measures in place, residual impacts from exhaust emissions are anticipated to be negligible.

During operation, air quality impacts would be limited to those associated with periodic inspection and maintenance activities for the transmission line and the Tragowel Terminal Station. These activities would involve a small number of light vehicles, resulting in minimal dust and combustion emissions. Given the low frequency and limited scale of these activities, residual operational impacts on air quality are expected to be negligible.

Overall, with Environmental Performance Requirements (EPRs) in place, residual impacts on air quality are expected to be negligible across all Project phases.