

NOISE AND VIBRATION

Iluka Resources is preparing an Environment Effects Statement (EES) for the Wimmera Project, a proposed mineral sands mine located approximately 35km south-west of Horsham. The Wimmera Project will introduce mining infrastructure and activities into an agricultural landscape, and the EES process seeks to understand and manage the potential impacts of this change on people and the environment.

SPECIALIST STUDIES

As part of the EES for the project, a Noise and Vibration Impact Assessment (NVIA) is being prepared by consultants at AECOM. It characterises the local meteorology, baseline noise levels and sensitive receptors (like residences) in the existing environment, and considers how the project's noise emissions and vibration levels are likely to affect sensitive receptors based on a comparison of modelled noise and vibration levels to relevant criteria.

As part of this assessment, AECOM attended a Wimmera Project community information session to describe the study and listen to community feedback. Baseline data and stakeholder input are considered by both AECOM and Iluka to inform project design and management strategies.

EXISTING CONDITIONS

The existing background and ambient noise levels were established through baseline noise monitoring in and around the mine site and accommodation camp, and at locations along the proposed transport route for the project. The measured background noise levels at the mine site were typical of rural areas and included birds, livestock, local traffic and farming machinery noise. Background levels were typically between 27dB and 34dB during the day, and between 21dB and 32dB during the evening and night.

Continuous vibration monitoring was undertaken at two locations to the north and south of the mine site to establish the existing vibration environment. The results indicated that typical baseline vibration levels ranged from 0.063 to 0.150mm/s at both sites.



Baseline noise monitoring for the NVIA



IMPACTS AND MANAGEMENT

The project will generate noise and vibration during the construction, operations and closure phases due to activities such as site clearing and preparation, construction activities, mining, ore processing and product transport.

Iluka seeks to avoid impacts on the environment and people from the outset through careful design of the project. Where complete avoidance is not possible, Iluka will implement measures to minimise the duration, intensity and extent of impacts as far as practicable.

At the mine site, construction activities are expected to take place seven days a week from 7:00am to 6:00pm for approximately two years. At offsite areas, such as the proposed accommodation camp and infrastructure corridors, construction hours will be reduced and no works will take place on Sundays or public holidays. During the operational phase of the mine, activities will take place 24 hours a day, 365 days a year.

Noise modelling for the NVIA considered worst-case meteorological conditions, such as when the wind direction is from the source towards a sensitive receptor. During the two-year construction period, noise levels are expected to be elevated for some nearby residences due to bulk earthworks and the construction of infrastructure and other facilities. During the operations phase, noise will occur primarily from vehicle movements and the operation of mining equipment such as excavators, haul trucks and dozers.

As the ore will be mined progressively, the noise impacts will vary depending on the location of active mining in relation to the receptor.

Some roads used for project traffic will have increased noise levels as a result of light and heavy vehicle movements, particularly during the operations phase. With the exception of several small local roads surrounding the project site, the routes that are planned to be used for project traffic have relatively high levels of existing traffic (including heavy vehicle movements), and the noise impact from project traffic is considered in this context.

The NVIA determined that the vibration levels from construction and operations activities across the project area will be lower than the recommended criteria for human comfort. Both noise and vibration levels will continue to be monitored and controls will be in place to reduce impacts as far as reasonably practicable.

Noise and vibration impacts associated with the project will be managed by the application of a Noise and Vibration Management Plan (NVMP). Agreements will be negotiated between Iluka and landholders where there is the potential for exceedances of the regulatory noise criteria as a result of noise during the construction and operations phases. The NVMP will be subject to Iluka's finalised staging, equipment and hours, which will be refined during detailed design.

NEXT STEPS

The Noise and Vibration Impact Assessment is being finalised and will be available to view when the EES is submitted in mid-2026. If you would like to be kept informed about this process and future opportunities for engagement on the Wimmera Project, please email wimmera.project@iluka.com to be added to the project email list.

