

SHEET 4 – AMENITY AND ENVIRONMENTAL QUALITY

The objective of this information sheet is to:

- summarise the status and the key findings of the amenity and environmental quality investigations to date; and
- invite feedback on the draft environment effects statement (EES) scoping requirements relating to amenity and environmental quality.

Status of study program

Study	Consultant	Status
Landscape and visual impact assessment	Urbis	Ongoing
Noise impact assessment	AECOM	Commencing
Vibration impact assessment	Yet to be awarded	Proposed
Air quality impact assessment	ERM	Ongoing
Energy and greenhouse gas assessment	Yet to be awarded	Proposed
Traffic and transport impact assessment	TrafficWorks	Commencing
Radiation impact assessment	Yet to be awarded	Ongoing
Hazard and risk assessment	Yet to be awarded	Ongoing
Socioeconomic impact assessment	EMM	Commencing

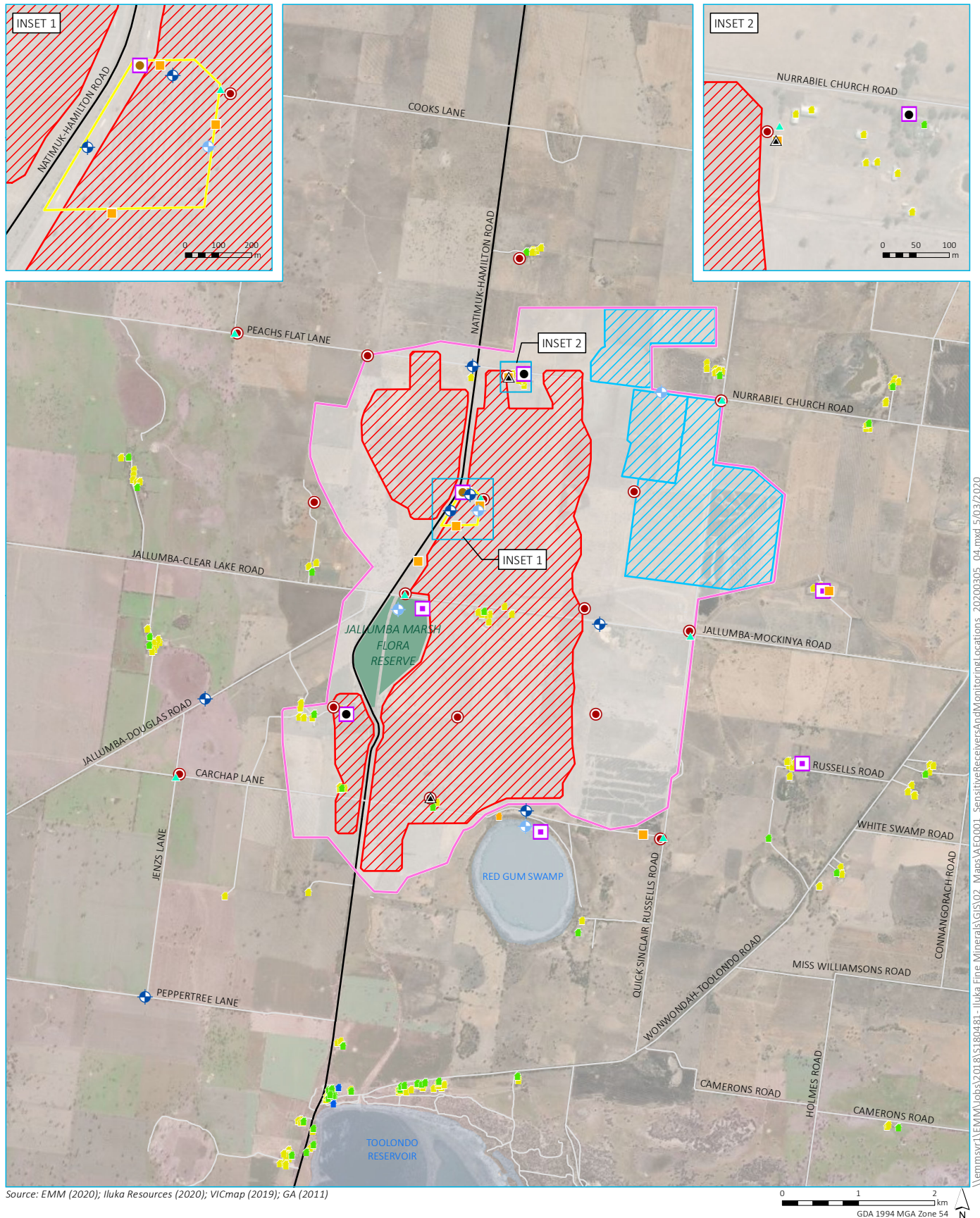
Key findings to date

The EES will assess Project-related impacts on amenity and environmental quality, including air quality, noise, vibration, radiation, socioeconomic, hazards and risks, traffic and transport. These assessments will be informed by the baseline monitoring results and will include a particular focus on potential impacts on the residences within the mine layout development envelope and the immediate vicinity.

Amenity and environmental quality baseline monitoring to date includes:

- **Meteorology:** Iluka installed three automatic weather stations in February 2019 to measure meteorological conditions for a one-month period. One station was installed within the proposed mine layout envelope (at the WIM100 test pit), one at the Bureau of Meteorology (BoM) Horsham Aerodrome automatic weather station (AWS) approximately 35 kilometres (km) north-east of the test pit, and a third at the BoM Kanagulk AWS approximately 25 km south-west of the test pit. The stations measured wind speed, wind direction, temperature, relative humidity and atmospheric pressure, with the data used to assess whether the existing BoM AWS locations are representative of weather conditions at the Project site. A continuous weather station was installed within the mine layout development envelope in July 2019 and measurement of temperature (2 m, 10 m), barometric pressure, solar radiation, rainfall, relative humidity, and wind direction and speed commenced in August 2019.





Source: EMM (2020); Iluka Resources (2020); VICmap (2019); GA (2011)

KEY

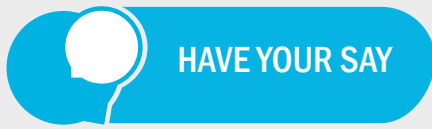
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|----------------------------------|---|------------------------------|
| Mine layout development envelope | Surfacewater monitoring location | Major road |
| Plant area development envelope | Groundwater monitoring location | Minor road |
| Indicative mine extent | Weather (meteorology) station | Waterbody |
| Test pit site | Air quality monitoring location | Natural conservation reserve |
| | Dust deposition monitoring location | Building type |
| | Radon monitoring location | Community |
| | Radiation monitoring location (one-off) | Holiday shack |
| | Vibration logger location (one-off) | Residence |
| | Noise logger location (one-off) | Shed |

Sensitive receivers and monitoring locations

Iluka Resources Limited
 Technical information sheet 4:
 Amenity and environmental quality
 Figure 1



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Public comments are invited on the draft scoping requirements in relation to matters that should be investigated and documented in the environment effects statement (EES) process for the proposed Wimmera Project.

The draft scoping requirements are open for public comment until midnight on 31 March 2020.

Any comments received will be considered by DELWP during the finalisation of the scoping requirements and will be treated as public documents. Your comments also will be considered by the proponent in the preparation of the EES. Personal details and identifying features (eg names, addresses and contact details) will be removed before your submission is shared with Iluka Resources Limited. You must provide written consent for DELWP to provide your name and address to Iluka Resources Limited.

Comments should be emailed to: environment.assessment@delwp.vic.gov.au

Written comments can also be posted to:

Impact Assessment Unit, Planning
Department of Environment, Land, Water
and Planning
PO Box 500, EAST MELBOURNE, VIC
8002

To discuss the draft EES scoping requirements with Iluka or for more information please contact Iluka:

Phone: 1800 305 993

Visit: www.iluka.com/engage/wimmera

Email: wimmeraproject@iluka.com

Drop in: Wimmera community drop-in centre at Horsham Real Estate office
Tuesdays and Fridays 9.30 am–2.30 pm
or by appointment

- **Noise:** baseline noise monitoring was undertaken between February and March 2019 at six locations considered representative of potential noise-sensitive receptors. The main noise sources in the area comprise local traffic, agricultural equipment, trees moving in the wind, birds, insects and aircraft.
- **Vibration:** baseline vibration monitoring was undertaken during March 2019 at two locations within the proposed mine layout development envelope considered representative of potential vibration-sensitive receptors. Results showed that the typical baseline vibration level is below the recommended human comfort vibration targets at residential premises and below the typical threshold of human perception.
- **Air quality:** baseline depositional dust monitoring commenced in December 2018 and is ongoing. Baseline airborne PM₁₀ monitoring using high volume air samplers commenced in April and May 2019 at two locations within the mine layout development envelope. Continuous PM_{2.5} and PM₁₀ dust monitoring commenced in August 2019. Based on existing land uses, existing sources of air emissions are likely to include agricultural activities (including use of equipment, fertilisers and pesticides, and stock movement), local traffic, dust storms, domestic wood heating, controlled burning and bushfires.
- **Radiation:** baseline radiation monitoring was undertaken in April 2019 at 15 locations in and near the mine layout development envelope. The monitoring assessed radionuclide activity concentrations in groundwater, surface water, soil, radon and thoron activity concentrations in air, and surface gamma dose rates. An assessment was also made of baseline dose to human and non-human biota.
- **Traffic:** in January 2019 GHD assessed the haulage route options for the Project. The preferred routes are:
 - to Portland via the Henty Highway;
 - to Melbourne via the Western Highway;
 - to Geelong via:
 - Western Highway and Princes Highway (A-Doubles only);
 - Western Highway and Midland Highway (all other traffic); and
 - to Adelaide via the Western Highway and Dukes Highway.

Baseline assessments of hydrology and water quality have also been undertaken; see information sheet 3: water, catchment values and hydrology. Similarly, the EES will include an assessment of the socioeconomic impacts, see information sheet 5: social, land use and infrastructure.

The monitoring locations are shown on Figure 1. The baseline results for the mine layout development envelope and the surrounding area are representative of typical rural, agricultural land-uses.

Draft EES scoping requirements

The Victorian Department of Environment, Land, Water and Planning (DELWP) has released the draft EES scoping requirements for the Wimmera Project and is seeking public comment. These scoping requirements will guide the technical assessments that will be undertaken as part of the preparation of the EES for the Wimmera Project.

The draft EES scoping requirements are available here: www.planning.vic.gov.au/environment-assessment/browse-projects/projects/wimmera-mineral-sands