

# WIMMERA PROJECT UPDATE



ILUKA

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State of the art equipment collecting real-time baseline air quality data for environmental studies.

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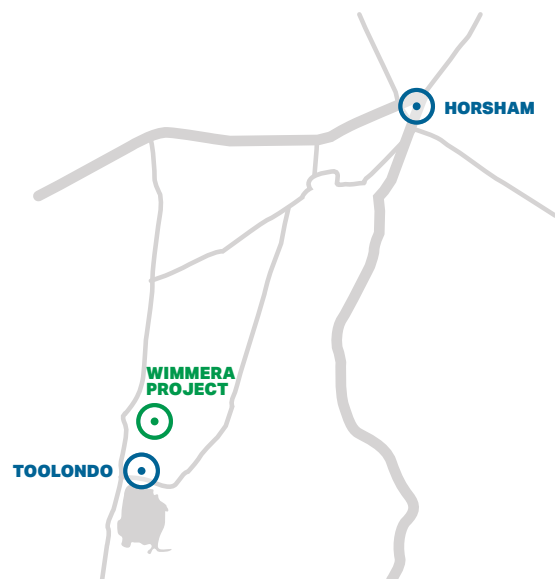
**PUBLIC  
ENGAGEMENT  
PUTS WATER  
FRONT AND  
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## PROJECT STATUS

The Wimmera Project is a proposed zircon and rare earth project in Western Victoria being investigated by Iluka. The project is centred on the WIM100 mineral sands deposit located approximately 40 kilometres south-west of Horsham and eight kilometres north of the locality of Toolondo.

The Wimmera Project is in 'Pre-Feasibility Study' (PFS), which is an early stage designed to inform decisions on whether and how to proceed with project development. PFS involves assessing geological, mining, processing, marketing, environmental and social aspects of the project. It examines different options, or scenarios, to work out the best way to develop the mine.

While progress has been satisfactory, due to the complexity of the Wimmera Project the PFS stage is taking a little longer than anticipated than when it started. The PFS will conclude when a preferred project plan has been selected and the Iluka Board decides that the Detailed Feasibility Study (DFS) should proceed. This is expected in Q2 2020. The DFS phase would conclude around mid-2021 with a Final Investment Decision (FID) by Iluka Board on whether to execute the project.



## ECONOMIC VIABILITY

The economic viability of the project is a key consideration by the Iluka Board when making decisions to progress to the DFS and execution stages of the project. The viability of the project is essentially determined by the cost to produce a product or suite of saleable products, and the demand and associated price for those products. To better understand these two aspects, a number of investigations have been undertaken during the PFS, including development of a test pit, a pilot for the minerals separation process, and a review of the economic case. These are discussed further below.

### Indicative Timeline



### WIM100 TEST PIT

In Q4 2018, Iluka excavated the WIM100 test pit primarily to bulk sample about 1500 tonnes of ore and enable a pilot project to be undertaken (see below for further details). The excavation of the test pit also gave us valuable information about soil and aquifer characteristics, geotechnical stability and groundwater that will inform the mining methods, mine design and associated costs of mining the WIM100 deposit.

This work was regulated under an approved Exploration Work Plan, in accordance with the Mineral Resources (Sustainable Development) Act 1990 (MRSDA) and Exploration Licence EL4282.

We are well advanced with rehabilitation of WIM100 test pit. We partially backfilled with overburden to a level above the regional water table in December 2018, as required by the Exploration Work Plan. We must finish backfilling the pit with overburden by January 2020 and preparations are currently underway for this work to occur.

The next step is the replacement of the subsoil and topsoil, which was removed and stored for reinstatement prior to test mining. Originally, this was to be finished by March 2020 under the Exploration Work Plan. However, we identified an opportunity to gain important knowledge about the project area soils by postponing the return of subsoil and topsoil across the backfilled test pit for a further 12 months.

Geotechnical assessments showed that the soils, overburden and aquifer materials within the Wimmera Project area have quite different characteristics to those at other previous Iluka mines in the region. Therefore, they are likely to behave in a different manner in terms of swelling, settling and compaction.

Postponing the placement of subsoil and topsoil for a year allows us to observe settlement and compaction, while avoiding the need to re-strip and re-shape the overburden surface, should it be required. The knowledge gained will enhance our approach to rehabilitation of the Wimmera mine.

Iluka was only prepared to vary the Exploration Work Plan with the affected land owner's consent. The land owner saw the merit in the plan, and Iluka is grateful to have that support.

In addition to the land owner's consent, the proposed change requires regulatory approval. If approved, final subsoil and topsoil placement will occur in Q1 2021.

Iluka will continue to collaborate with land owners on the Wimmera Project to achieve the best possible outcomes for mining and agriculture over time.

## PILOT PROJECT

A big challenge for the project is to demonstrate an economically viable mineral separation process. The very fine nature of the WIM100 deposit means traditional mineral separation techniques and processes are uneconomic.

Iluka developed an innovative mineral processing technique suitable for the fine mineral, based on technical development work undertaken since 2014.

Using the ore from the WIM100 test pit and our innovative mineral separation technique, Iluka conducted a pilot that successfully produced mineral sands products. The learnings from this pilot have informed the engineering design of the mineral processing infrastructure required for the full-scale project.

Samples of the mineral sands products produced by the pilot have been supplied to potential customers for assessment and classification, which will indicate economic viability. The time this process is taking is part of the reason completion of PFS has been re-scheduled.



## UPCOMING FIELD ACTIVITIES

Gathering field data is critical to studies that inform the project design and to remove uncertainties and risks. The gathering of data can cause some inconvenience for affected farmers, especially during cropping and harvesting periods. To reduce the impact on farmers, Iluka will undertake these activities outside typically busy periods for farmers.

Field work in 2020 is planned to fall outside the sowing period. Detailed planning is ongoing, and we will continue to liaise closely with those affected to minimise the impact of our activities on farmers.

Current plans for field work over the coming months include:

- Geological drilling to further improve the resource definition (early 2020);
- Geotechnical test pitting to further improve understanding of ground conditions (April 2020); and
- Ongoing field monitoring related to baseline environmental data collection, in preparation for impact assessment as required under the environmental regulations.

Other field work should occur towards the latter half of 2020. We will remain in contact with affected land owners about those, and include updates for the broader community in future newsletters.

## GOVERNMENT APPROVALS

**The Wimmera Project will need State and Federal government approvals to proceed, and for the Iluka Board to approve FID.**

### STATE GOVERNMENT APPROVAL

In Victoria, mining projects must be assessed for environmental impacts under the Environment Effects Act 1978 (EE Act).

The assessment provides information and recommendations needed by Ministers, local government and statutory authorities to decide whether a project should proceed and, if so, how its environmental impacts should be managed.

Iluka referred the project to the Victorian Minister for Planning in July for a decision on the level of environmental impact assessment. The Minister decided that an Environmental Effects Statement (EES) is required, which is the highest level of assessment.

Iluka has engaged planning and environmental consultancy EMM Consulting to prepare EES documentation, and several technical specialist consultancy firms to prepare the underpinning studies including for flora and fauna; surface water; groundwater; dust; noise; vibration; soil; traffic; landscape and visual; radiation; and meteorological assessments. An approved cultural heritage management plan is also required in accordance with the Aboriginal Heritage Act 2006. Data gathering, studies and assessments will be ongoing for at least the next six months.

Once the studies and impact assessments are complete and the EES documentation has been developed Iluka will submit the ESS and all supporting studies and assessments to the Minister. This is currently expected to be in Q3 2020. Once accepted the EES will be put on public exhibition. Interested members of the public and organisations can make written submissions in response. The Minister may also choose to appoint an inquiry that can include a conference or formal public hearing where submitters can present their views.

Following closure of the public comment period, the conclusion of any appointed inquiry and the process to address the comments received, the Minister will decide whether the project may proceed and, if so, recommendations in relation to what conditions should apply.

Further details on the EES process can be found online at <https://www.planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria>

## PUBLIC ENGAGEMENT

**Iluka sees public engagement as critical to the development of the Wimmera Project, and aims to go above the minimum standard required by the Victorian government under the EES process.**

Engagement activities already taken include:

- information centre at Horsham Real Estate Office, 15 Fibrace Street, Horsham, open Tuesdays and Fridays from 9:30am -2:30pm since February 2019;
- weekly presence at Natimuk Community Information Centre since June 2019 (discontinuing);
- community and stakeholder interviews and online surveys about project impacts, concerns, expectations and opportunities;
- direct discussions with affected land holders, Horsham Regional City Council representatives and other key stakeholders; and
- regular updates via project newsletter to people on Iluka's stakeholder database.

## FEDERAL GOVERNMENT APPROVAL

The Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the legal framework to protect a range of matters of national environmental significance. When a project impacts any of those matters, it is subject to assessment under the EPBC Act.

The Wimmera Project triggers assessment under the EPBC Act due to potential impacts on 'listed threatened species and communities', 'listed migratory species', and 'nuclear actions' (relating to mine waste storage).

In practice, the EPBC Act assessment is integrated into the Victorian EES assessment process under a bilateral agreement between the State and Federal Governments. In accordance with this agreement, following completion of the EES assessment process, the Minister for Planning's assessment of the project is forwarded to the Federal Minister for the Environment for a decision on whether to approve the project under the EPBC Act and, if so, under what conditions.

Further details on the EPBC Act process can be found at [www.environment.gov.au/epbc](http://www.environment.gov.au/epbc).

Iluka's regular presence at the Natimuk Community Information Centre has not been visited by community members for most of 2019. Therefore, we will divert resources committed to that activity to other engagement activities in 2020. We may re-establish the weekly presence in Natimuk at a later stage, if there is sufficient community interest.

Engagement so far has told us that water is among the biggest concerns for land owners and the public. Ground and surface water are increasingly scarce resources shared by multiple users for agriculture, recreation, conservation and other purposes. Consequently, water management will be a big focus of the Wimmera Project EES.

Iluka will participate in the Wimmera Machinery Field Days (3-5 March 2020) and looks forward to discussing the Wimmera Project with members of the community who attend.

We also plan to engage the public through forums and other activities over Q1 and Q2 2020. We previously flagged that some of these would occur in the second half of 2019, but have adjusted the timing to align with the economic case review and other adjustments to PFS timing.

In the meantime, if you would like more information or to discuss the Wimmera Project, please drop by one of Iluka's information centre in Horsham or Natimuk, or contact us by phone (T: 1800 201 113) or e-mail (E: [murraybasin@iluka.com](mailto:murraybasin@iluka.com)).



## FOR MORE INFORMATION:

Please contact Iluka by phone (T: 1800 305 993) or e-mail (E: [murraybasin@iluka.com](mailto:murraybasin@iluka.com)) to discuss the Wimmera Project or any of our activities.

[www.iluka.com](http://www.iluka.com)