



Iluka Resources  
Eneabba Rare Earths Refinery  
Pre-Referral Consultation  
Stakeholder Engagement Outcomes Report

Prepared by:  
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# 1. INTRODUCTION

## 1.1 PURPOSE

This report provides an overview of the feedback collected from consultation with a range of key stakeholders and members of the Eneabba community, about Iluka Resources proposed rare earths refinery to be located at their mine site, 7km from Eneabba in Western Australia's mid-west region.

Consultation was undertaken through a combined approach by Iluka's mid-west operations team, Communities Team and independent consultancy, 361 Degrees. The engagement program builds on stakeholder and community engagement undertaken by Iluka to support the state government approvals process for Iluka's Eneabba Phase 2 project in the second half of 2020.

This more recent phase of engagement included:

- internal briefings with Iluka employees across the mid-west region,
- briefings with key stakeholders including state and local government agencies and industry associations;
- meetings with Traditional Owners;
- interviews with representatives of community groups and businesses from Eneabba, and
- a community forum providing an open house opportunity for the project team to meet members of the Eneabba community and present the rare earths refinery proposal.

This phase of consultation contributes to Iluka's strategic approach to engaging with stakeholders both about the development of operations at the Eneabba mine site but also as part of Iluka's broader review and refinement of their Mid-West Social Strategy. Therefore, the organisation is also undertaking a Social Impact Assessment (SIA) across the region. The SIA is being undertaken by Umwelt Consulting Ltd and will establish baseline data from which to measure Iluka's impact across the region.

To avoid consultation fatigue yet enable the collection of valuable data and feedback from the community, the engagement approach for the rare earths refinery, has and will continue to take into consideration the engagement needs for the SIA and align the engagement requirements. In this way a seamless approach to strategy between project and broader organisational communication needs will be achieved.

## 1.2 CONTEXT

Iluka Resources has long extracted mineral resources from the historical Eneabba mine void. From Iluka's mineral separation plant processing facilities at Narngulu (10km from Geraldton), rare earth minerals, monazite and xenotime, are produced as a 'by-product'. For the last 30 years or so, Iluka has stored this material directly at the former mining void at Eneabba, on the basis that the rare earths contained in the monazite would one day be valuable. This strategic stockpile is now the highest grade operational rare earth deposit globally.

The Eneabba operation currently involves the extraction, processing and sale of a historical monazite-rich mineral stockpile. As outlined below, the project is being undertaken in a phased approach.

### **Eneabba Phase 1 (operational)**

Following Ministerial approval in 2019, Iluka commenced Phase 1 operations in April 2020. This involves the recovery/mining of the stockpiled monazite and processing through a small-scale washing plant. A 20% monazite and mineral sands concentrate is then exported via Geraldton Port.

### **Eneabba Phase 2 (EP2 - under construction)**

Building on the success of Phase 1, Iluka received Ministerial approval in April 2021 to commence an upgrade to the operation's processing facilities. Phase 2 is currently under construction, with commissioning scheduled for the first half of 2022.





This will involve construction and operation of new plant that will separate mineral sands heavy mineral concentrate, which will be further processed at Iluka's Narngulu site; and a rare earth heavy mineral product consisting mainly of monazite, which is suitable as a direct feed to a rare earths refinery.

As part of progressing the Phase 2 approvals through state government, between August and October 2020, Iluka adopted a staged approach to engaging the community about the project with the purpose of:

- engaging with key stakeholders and community members to identify key sentiments about the project;
- providing an opportunity for Iluka to have an open dialogue with stakeholders about the project and identify and discuss any of their concerns; and
- informing and validating future engagement opportunities.

The engagement program informed both the EP2 approvals assessment process as well as identified any social risks associated with the project. Feedback from the consultation process demonstrated that key stakeholders and the broader community had a high level of trust of Iluka Resources

### **Eneabba Phase 3 (EP3 feasibility stage)**

In January 2021, Iluka commenced a feasibility study for Phase 3, the development of a rare earths refinery at the current Eneabba mineral sands mine site. The plant will use monazite from Eneabba Phase 2, along with other sources of rare earth mineral concentrate, as feed material.

EP3, therefore raises a number of social risks and opportunities. There is the likelihood of increasing both the perceived and real risks amongst different stakeholder groups of managing the disposal of low level radio-

active waste on site as well as how Iluka will manage the increase in the workforce required to both construct and operate the project and the impacts and opportunities this could potentially bring to the town of Eneabba and broader Mid West region.

A proactive engagement program was developed to enable:

- full project disclosure;
- genuine dialogue across the range of stakeholders;
- a demonstrated process to satisfy regulators about the level of engagement; and
- evidence based stakeholder consent for the project.





## 2. ENGAGEMENT APPROACH

### 2.1 STAKEHOLDERS

To elicit quality and constructive feedback on the proposed rare earths refinery from a diversity of stakeholders, it was determined that an engagement program, comprising a range of engagement methods proportionate to the social risks identified in the consultation planning phase, would be designed and delivered to cater for a broad range of stakeholders including:

- The host community of Eneabba, who are located closest to the mine site and where Iluka's accommodation camp is situated.
- Local and state government agencies, including local members with a high level of interest in Iluka's operations and or as decision makers in their role as regulators.
- Traditional Owners – the recently established Yamatji Southern Regional Corporation.
- Iluka employees employed in the mid west region.

### 2.2 ENGAGEMENT DESIGN

Engagement was planned and facilitated to listen to stakeholders and seek feedback, providing opportunities for stakeholders to air concerns in a safe environment. It was also important to manage stakeholder expectations about their role and level of influence at this stage in Iluka's project planning phase. In designing the format and content of engagement material, important considerations included:

- recognising that not all stakeholders had participated in previous engagement and had any prior knowledge of Iluka's operations at Eneabba.

#### The following objectives were identified in guiding the engagement process:

- build on the Eneabba Phase 2 engagement process to further develop and maintain Iluka's relationships with key stakeholders across the host and broader community.
- proactively identify contentious issues - testing, validating and amending risk assumptions with stakeholders.
- satisfy or exceed regulators expectations in relation to stakeholder engagement (environmental, radiation management plan, heritage and other regulatory approvals).
- create a high level of satisfaction with the engagement process across all stakeholder groups.
- build internal capacity to recognise that genuine and credible consultation contributes significantly to project success, building trust and confidence, accessing fresh ideas and promoting the support necessary to minimise risk, reduce costs and meet project timelines.
- actively listen and monitor stakeholder feedback to understand community sentiment and their awareness and understanding of the project, its impacts and the required approvals process, in order to tailor the responsiveness of engagement.
- align the project's engagement objectives with Iluka's Mid-West Social Strategy to support the organization's broader approach to managing its social licence.





- delivering highly visual content, to keep participants engaged, as well as recognising and catering to different needs and preferences for giving feedback.
- ensuring resource materials supported focussed and clear discussion, as well as managed expectations about the purpose of the discussions.
- catering to a wide range and diversity of technical knowledge across stakeholders, breaking technical information into concise, jargon free information, to help some participants understand aspects of the project

To inform stakeholders about the project, a suite of communications material was prepared. Following a social risk assessment, content was developed to proactively address potential stakeholder issues and outline how Iluka would seek to mitigate and manage a number of social risks.

Project information was prepared, with consistent content that could be universally presented to all stakeholders. Presentation material was made available on Iluka’s website, along with a comprehensive set of Frequently Asked Questions. This content shaped the presentation material for key stakeholders and the material presented at Community Forum. In addition, a number of engagement activities were also prepared to collect information from attendees at the Community Forum to inform the SIA.

*Please refer to the appendices for a copy of the presentation material.*

### 2.3 ENGAGEMENT SCHEDULE

Engagement with stakeholders was undertaken by Iluka’s Mid West Operations team, Communities team and 361 Degrees over the timeframe outlined below.

Stakeholder Group	Date	No of Engagements/Participants
Briefings with key stakeholders – State and Local Government and Industry Bodies	11 <sup>th</sup> -13 <sup>th</sup> August	6 briefings
Interviews with community representatives	9 <sup>th</sup> -13 <sup>th</sup> August 2021	10 interviews (12 participants)
Community Forum	13 <sup>th</sup> August 2021	~ 55 people
Traditional Owners	June - Aug 2021	1 project presentation and 2 meetings Ongoing engagement is agreed
Internal Briefings Eneabba and Narngulu workforce	July – August 2021	6 briefings





### 3. ENGAGEMENT OUTCOMES

#### 3.1 STAKEHOLDER INTERVIEWS

The information below outlines key themes and discussions points captured across ten interviews conducted with representatives of the Eneabba community. 361 Degrees conducted interviews via telephone and face to face with community members representing the local primary school, medical and emergency services, long term business owners, community groups including the Eneabba Progress Association. Interviewees were sent information in advance to inform them about the proposed rare earths refinery. Please note the Iluka Communities Team met with the Yamatji Southern Regional Corporation Ltd to discuss the broad range of Traditional Owner interests as discussed below.

In addition, to better understand the community's sentiment for the project, interviewees were also asked to score their support for some elements of the project, using a scale of 1-5 where 1 equals 'fully opposed' and 5 fully supportive. The rating outlined below for some questions, is an average of the total scores provided by all stakeholders interviewed.

To support the interview process exploring the community's sentiment for the proposed rare earths refinery, the engagement opportunity also sought to collect further qualitative information to inform the SIA process. Consequently, Umwelt Consulting participated in the face to face discussions, mitigating future consultation fatigue and driving more qualitative discussions about Iluka's broader social performance in the Mid West more generally.

To demonstrate the range of sentiment demonstrated throughout the interviews, a selection of direct quotes from Eneabba community members has been included.

*Please refer to the appendices for a list of interviewees, a copy of the background information and the interview discussion guide.*

#### 3.1.1 How do you feel about mining and processing existing in your area/region generally?



*'That's a tricky one! This area wouldn't be here without mining.'*

**Stakeholders were generally supportive of mining and processing in the region.** Mining was seen as one of the two main industries that offered economic development opportunities locally and more broadly across the WA economy (the other being farming). Although stakeholders noted mining did not necessarily benefit the local economy as much as the community would like, due to their experience of a lack of mining continuity and it being a price based industry.

A couple of participants had previously been employed in the mining industry, employed locally by Iluka or Piacentini & Son (a supplier of mining industry equipment) or with family and friends who had been.

A number of stakeholders noted that mining was a double-edged sword, whilst on the one hand it had provided many opportunities to the local community, it was also acknowledged that FIFO had also 'killed the town'.

*'Whether its Iluka or its other mining companies, there is plenty of opportunity for growth however one issue is housing. We will need a housing strategy if the population increases.'*

Whilst stakeholders were generally supportive of mining in the area, there were some reservations related to finding a balance with managing issues that were a result of mining operations in the area.





These included:

- **The management of the environment** - mitigating impacts on the ground water – both maintaining water quality and security. Many farmers rely on groundwater to support the diversification of farming options such as growing crops and managing cattle. Equally farmers still directly access bores to provide drinking water to their families.
- **A growing tension between different land uses** - such as balancing the needs of both farming and mining, whilst at the same time acknowledging that it was important to maintain a range of industries to create and maintain jobs.
- **Legacy impacts** – lack of consistency and continuity from mining in providing benefits to a community. An example used was 'left over' infrastructure, that was never used again and required the Shire to maintain, resulting as an impost for rate payers.

*'Generally I'm supportive but have reservations about some elements such as environmental impact on ground water.'*

Some stakeholders acknowledged that there are expectations placed on mining companies to be part of the change management answer to improving small regional and rural towns. **Stakeholders recognised that employment models are changing the dynamics of communities.** Recognising that even the agricultural industry is changing, with an increase in smaller farms being purchased and amalgamated by larger corporate companies, which also do little to interact and encourage families to relocate or stay in regional areas.

*'They want the mining people to bring people – you can't force people to live in the region if it's not a family friendly location.'*

People suggested that there were opportunities for developing downstream small businesses to cater for both industries, particularly where their dual presence was located.

There was a level of cynicism from a couple of individuals regarding how much information mining companies release to the public and this theme is apparent in feedback provided to questions below.

What was unanimously clear, was that mining was a preferred method for extracting resources rather than other extraction methods, such as fracking. As someone put it – *'When asked to score my support of mining – it's a 5, with 0 against fracking.'*

*'Mining is all around us, it has been for many years.....It is a necessary evil – its more about how the companies behave.'*

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### 3.1.2 How familiar were you with Iluka's Eneabba Project prior to our contact?

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*'Didn't know anything about EP3 – we receive the occasional pamphlet and I don't go to meetings, as I'm unable to attend when they are on.'*

*'Not very familiar with what is being planned for EP3. Only hear what other locals tell me or via the odd newsletter from Iluka.'*

About 50% of interviewees had attended Iluka's community forum on Eneabba Phase 2, 12 months previously and as a result were aware of a proposal for a rare earths refinery. However, most stakeholders advised they weren't familiar with any details for the refinery and this was the first time they were hearing about it.

Generally, **stakeholders suggested Iluka could improve its communications with many reliant on the Eneabba grapevine** to find out what was happening on the mine site or through relationships with employees who volunteer their time on community groups. *(Refer to 3.1.6 for more info on Communications)*

*'There used to be an Iluka Open Day, which involved getting on a bus to the mine – would be good to do that again and learn more about what is happening.'*





### 3.1.3 How do you feel now about Eneabba Project Phase 3, including its proposed integrated rare earths refinery to be constructed and operated at Eneabba and management of waste from the refinery?



*'In principle I support the project but I can't say I'm fully supportive.'*

*'A great opportunity to increase the population. As long as the risks of the project are controlled and there are opportunities to benefit the town.'*

*'Good for WA and all the surrounding mid-west area. It should be dug here not in China.'*

**Across all stakeholders, there was in principle support for the development of a rare earths refinery and management of waste on the Eneabba site.** Only one stakeholder questioned why Iluka was placing a refinery at Eneabba and not at Narngulu closer to Geraldton.

There were some key themes as to why people weren't fully supportive. These included:

**A lack of information to make a fully informed decision** - stakeholders requested that more information be made available as Iluka moved through their investigations.

*'Initially the EP3 project sounds great however I don't think there is enough information about the potential side effects of dust or the radiation from the monazite.'*

*"When the Senior managers don't live in town you wonder what do they know that we don't?"*

A number of questions focused on the extent of Iluka's monitoring and whether widening the monitoring area for both shallow and deep water testing would provide more certainty for the community in regards to identifying if issues occurred. Again stakeholders are seeking more detail than had been provide to date.

*'I have reservations that are tied to environmental impacts and I don't understand the regulations and if they are robust enough.'*

**Safe guarding sensitive receptors** - Beekeepers Reserve, the ocean and the neighbouring agricultural industry were identified as areas of concern, reliant on quality and clean ground water. Also for the general population complying with health regulations to ensure there are no side effects from air and water quality impacts was important.

**Stakeholders were divided in their own opinions regarding support** - citing how important Iluka was to supporting the town and the sustainability of the school and other businesses however this was compromised by the potential impacts to the environment such as ground water.

**Impacts on groundwater** – much discussion and subsequent questions related to the potential impact on water. With questions about **how Iluka would manage their water usage within the context of growing pressure to mitigate climate change.**

There were some **perceptions that combined, EP2 and the rare earths refinery would use more water than Iluka's licenced allocation.** And querying why high quality water was required for the mining process.

There were lots of incorrect references to the project's high water usage, highlighting **the need for Iluka to proactively get information out into the community ahead of the 'local grapevine'** and/or improve its communications content in order to improve understanding of technical information.





Other concerns related to the rare earths processing and use of acids for separation and how this may impact ground water in the disposal phase.

There were no concerns highlighted about the impact on vegetation due to the refinery being designed within the existing mine footprint and recognising of Iluka’s efforts in rehabilitation.

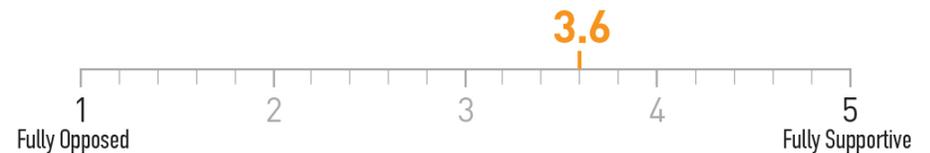
**Disposal of waste:** Most stakeholders agreed the waste needs to be stored somewhere and if the ore was extracted in Eneabba it should be disposed of on location too. Due to Iluka’s successful track record in appropriately managing impacts, stakeholders were hopeful that Iluka would keep up with technological advancements and would be able to adopt best practice waste management controls correctly and safely to manage any potential impacts. However, equally important was ensuring information regarding radiation management was made publicly available.

*‘It’s not the first time they have done it. They know what they are doing. Things can only get better as technology improves so does processes.’*

**Legacy issues** - stakeholders demonstrated a keen interest to better understand the regulations for managing waste and environmental impacts. Although stakeholders recognised that Iluka were proposing to manage the low level waste above the prescribed management standards, which they noted was consistent with Iluka’s previous operational approach to radiation management for EP2, stakeholders did question whether regulations are set at a high enough standard, particularly in regards to monitoring requirements beyond the life of the project.

*‘There is an end of life for mining, and the community are the ones left behind, my children and their children will be left with the legacy.’  
Management of the waste from the refinery – not a specialised in that area you don’t know what you don’t know’.*

### 3.1.4 How do you feel about the prospect of the rare earth refinery producing higher value and more concentrated products and by-products, which will need to be disposed of at Eneabba?



**Stakeholders largely requested more information to inform a better understanding of what the impacts were from both the waste disposal method and low level radioactive content.** This resulted in stakeholders providing the above average scoring.

Stakeholders were generally more cynical about the level of public disclosure across the mining industry. Particularly when engaging with smaller communities, which stakeholders perceived had less influence on mining impacts than larger populations.

However, **interviewees did express their support for the project, as long as proper due diligence was undertaken by Iluka, ‘again if managed safely and appropriately.....’** ensuring that the community remain safe against any radioactive elements. It was however acknowledged by one stakeholder that Iluka’s site is not that afar from an unmonitored landfill site where there is no separation of organics from other waste.

Stakeholders acknowledged that Iluka *‘looked after their employees through personal radiation monitors’*. However, safety was also a critical factor for stakeholders, with a number of references again to protecting the ground water from the potential of long term radiation risks, such as





from the potential break down of waste material and leakage through the disposal facility.

*'They need to tell people exactly what is happening, instead they tell us as little as possible. They think the more they tell the more we will be against the project.'*

*'Deal with the waste where it is processed rather than sending it off to somewhere else and dispose of it properly. The mine is in an isolated area so we see no issues with it being located there.'*

*'I have concerns about this – how by-products are stored and capped. What happens in 60 years time? Who's looking after them? What are the long term implications and who's responsibility is if for monitoring that long term storage?'*

There was recognition of the different 'rules' between mining and agriculture – *'We can't knock over a tree and we can't bury on private land but then miners can bury waste.....'*

The protection of remnant vegetation was highlighted by a number of stakeholders as being an important consideration in any operational expansion. But there were no concerns about Iluka's approach

### 3.1.5 Considering Iluka's present focus on Eneabba Project Phase 3, what issues are most important to you?

#### What are your expectations of Iluka in relation to these issues?

**The overwhelming response from all stakeholders was that the increase in Iluka's operational activity was only a good outcome for the town.** Appropriately addressing the community's expectations about how Iluka can continue to achieve better outcomes for Eneabba will need to be managed. Below is an overview of the opportunities and risks identified across a number of themes as well as stakeholder expectations of Iluka in relation to these issues and opportunities.

#### Community Infrastructure

**Utilising the capacity of existing community infrastructure in Eneabba was seen as an opportunity.** With stakeholders recognising that there is a good range of sporting facilities, noting that staffing was an ongoing issue, for a small town.

The primary school and the medical centre were also seen to have capacity but due to current population numbers, staffing was limited and services were under threat. With only 11 students currently enrolled in the school (down from 150 when School was operating at capacity).

Education transition options from Year 7 to high school is very limited in the region, with many families, including farmers, choosing to send their





children to boarding school in Perth. Resulting in many families splitting their time between Perth and the mid-west. However, all stakeholders saw an opportunity for a sustainable future for the school, if the population could be increased.

The ambulance service is not adequately resourced and this is seen as a major threat for the community and Iluka and its employees as the population ebbs and flows between a construction and operational workforce.

*We have the capacity and the infrastructure in place with both medical and primary education facilities coupled with a passionate community.”*

*‘Iluka is the only name you’d associate with the community – Iluka will support without asking – ‘war memorial, school historically, silver chain, and ambulance service. The footprint they have made, they have sustained as best as they can in a community they created.’*

There were a few comments that Iluka could better promote their support in the town.

### **Economic Development**

**Looking beyond mining, stakeholders suggested there are opportunities to identify supporting or complementary down-stream businesses without competing with existing businesses in town**, and encouraging industries that can generate training and employment options for the region and attract families to move to Eneabba.

There was mention of the Shire of Carnamah’s economic rejuvenation plans and assumptions that Iluka’s Eneabba mine site will be part of that. In addition to growing the renewables industry and wildflower tourism ventures.

To support any economic growth however, **improved power security and an improved and reliable internet service was mentioned by almost all stakeholders.**

There is an expectation that Iluka will support the local economy through a flow on effect from increasing the town’s population (both temporary and permanently). Encouraging employees to support local shops and employment opportunities and if employees for these businesses can be located locally, would be of a significant benefit to the town.

*‘Iluka has a long-term relationship with the community and they are accepted as part of the community. They’ve put a lot into the town and the school and from an employment perspective they do try and employ locals but that’s not always possible, as we don’t always have the technical expertise. These days we know people don’t want to live in Eneabba.’*

### **Housing and population growth**

All stakeholders acknowledged that Iluka’s plans provided an opportunity to support population growth in Eneabba, which would have flow on effects. However with an increase in population, housing would become an issue and many stakeholders suggested **Iluka will need a housing/accommodation strategy**. There were several references to empty blocks of land once home to Iluka’s workforce but now only accommodating weeds. However even if there were houses, could families be swayed to live in Eneabba? Stakeholders were divided in their opinions.

Employment and recreational options for the partners of Iluka employees was seen as a disincentive for families moving to Eneabba. And **stakeholders questioned whether there were opportunities for Iluka to review their workforce rosters to support employee lifestyles beyond DIDO or FIFO** but rather provide the opportunity for employees to have time to settle and live in the region.

Stakeholders explained that due to low priced housing stock in Eneabba demographics in the town were changing. Attracting an increase in a largely single and older population. This new co-hort was recognised by stakeholders as doing nothing to positively contribute or participate in the





community and was seen as a potential drain on the existing health services. There were expectations that a population growth driven by Iluka might alleviate this by improving the aspirations of the broader community.

*'Build a community – review your workforce arrangements to limit DIDO and encourage employees including senior managers to live in town.'*

*'I challenge Iluka - how do you bring back the family feel to Eneabba?'*

*These days we know people don't want to live in Eneabba".*

### **Banksia Village**

Iluka's camp accommodation drew quite a lot of feedback, with stakeholders suggesting that the current accommodation options precluded couples from joining Iluka's workforce, if opportunities became available. There were also **concerns about how the camp would be able to accommodate the construction workforce numbers and if an expansion was planned where the camp would be expanded too.**

**A number of business owners commented that the Camp competed directly with them** in providing alternate meal and accommodation options at discounted prices that they couldn't compete with. More frustrating was that Iluka didn't benefit directly from this, as the camp management was contracted to an external provider. As a consequence, one business owner hadn't considered investing in his accommodation facilities, located just out of town, as it was hard to compete with the Camp fees.

*'The camp has about 80 people in it at the moment and you never see anybody in town – not at the pool, not at the club, not joining in on community sport – do they even know about activities / what is going on in town? We need to get them involved.'*

### **Community Services - Health**

Whilst the medical centre was cited as providing a good service with limited resources, mental health is a growing issue (not just because of COVID), with a spate of suicides over the past few years of men under the age of 24 years. **The emergency management capacity, including paramedic support is stretched**, with currently 4 ambulance officers registered in town and they are not always available to respond in an emergency.

It was acknowledged that Iluka currently supports members of staff to volunteer with the St John's Ambulance however **with the population proposed to increase there were concerns that Iluka needed to look at the capacity of the local medical emergency services.** Along with another issue – that the ambulance is only 2WD and the mine roads are 4WD. Suggestions included working together with service providers to achieve outcomes that were mutually beneficial –such as providing time for staff to fill volunteer shifts to support St Johns' and the Bush Fire Brigade, which would support both the region but also the mine site if there was an incident.

### **Environmental**

**Air quality and impact on ground water, both quality and security were number one risks flagged by stakeholders**, particularly for famers as previously mentioned. A number of stakeholders asked whether Iluka could share the results of their environmental studies to support a more open and transparent disclosure of information and to better help people understand the impacts from Iluka's operations.

There were concerns about how robust the EPA's process was in monitoring mining companies, with stakeholder cynicism about how projects get passed through the EPA.





**Overall stakeholders were generally satisfied that there were no more risks than usual** and Iluka was working to mitigate them either within the compliance framework or going above and beyond to manage risks that may generate greater concern with stakeholders – such as the management of low level radioactive waste.

*‘There is also an expectation that Iluka will follow regulation, ‘but it would be good if they went above baseline regulations and recognise the long term impact beyond the mine’s lifecycle. They have a responsibility beyond that.’*

### **Traffic**

Only raised by one stakeholder and more from the perspective of seeking to understanding if there would be any impacts from the operations or increased workforce numbers. With questions asked including: *Will the new project increase traffic and will it be up to local government to maintain the roads to accommodate the extra traffic. Another impost on rate payers?*

There was only one comment on any current traffic issues and that related to the banking of truck convoys leaving the mine site for Geraldton Port.

*‘Information provided is comprehensive and honest. We can accept that Iluka can’t for see everything but what they do know they need to share.’*

### **3.1.6 Iluka states it will consult extensively with stakeholders and the community.**

**a) How would you personally like to be engaged through the different project phases?**

**b) What works best in your community, in terms of engagement**

*‘Sense of resignation in the community – that mining companies undertake consultation and it’s a tick in the box exercise.’*

A combination of communications channels were suggested by stakeholders as long as they aligned with Iluka’s purpose for communicating with the community. For keeping people informed with general updates about Iluka activities on the mine site or in the community, stakeholders recommended **using more traditional methods of communications such as the General Store’s noticeboard and letter box drops**. This would be particularly applicable to the aging population in Eneabba. Keeping language simple and non-technical.

Digital communications via email or the Eneabba Facebook Page wasn’t discouraged but it was highlighted that due to poor internet connection in Eneabba, **digital communications was not always the most reliable or preferred source of information by the local community**.

*‘I’ve lived in Eneabba for years and never had the opportunity to go to site. It would be great to look around, I’m much more of a visual learner’.*

For sharing more project specific information tied to milestones and major announcements, and **when Iluka was seeking to consult, stakeholders advised that the option of a community information session or a site tour was preferable**. Specifically, as Iluka had previously offered community bus tours to site (and through the School, for students) these had always proven popular. With such events, providing both information and opportunities for the community to provide





feedback and ask questions but also **an opportunity to build relationships between Iluka employees and community members.**

Other ways **to proactively engage with the community included targeting specific groups** such as sporting, school P&C, playgroup and other volunteer groups. In fact an invitation to an Iluka representative to attend Eneabba Progress Association meetings, 2-3 times per year was extended. With the purpose of raising awareness within Iluka about what is happening in the community and how they may be able to support more strategic projects.

**To extend Iluka's reach beyond Eneabba into the Shire of Carnamah, it was suggested that Iluka seek to use the local paper** – Eneabba on the Mat - which is distributed weekly and reaches stakeholders living outside the Eneabba townsite.

Generally, stakeholders commented that they wanted to be kept informed about Iluka's operations and actively participate in consultation opportunities. **Following this most recent round of consultation, there was almost unanimous support for being kept regularly updated.** Equally there was recognition that the community seldom hear from other industry so at least Iluka communicates.

*'Expect that they actually aren't just paying lip service but being genuine and authentic – I'm not saying they haven't been. We've had the oil and gas companies through and as a community we are a bit cynical.*



### 3.2 ENEABBA COMMUNITY FORUM

Iluka collaborated with the Eneabba Primary School P&C to host a forum on Friday 13<sup>th</sup> August, at a time that would be most accessible for a larger proportion of the Eneabba Community to attend. The P&C were sponsored to provide catering and kids activities.

The Community Forum was promoted via the following channels:

- Eneabba General Store noticeboard
- Eneabba Community Facebook
- Digital – via Iluka’s email database and website
- ABC Mid West radio Interview with Iluka’s Eneabba Project Director
- Third party channels including:
  - Shire of Carnamah website and Facebook page
  - Eneabba Primary School Newsletter
  - School P&C

Presentation material presented included the following:

- Overview of Iluka Resources
- Everyday uses of Mineral Sands and Rare Earths
- Update on Eneabba Phase 2
- An overview of the Eneabba Rare Earths Refinery project inc:
  - Refinery concept
  - Radiation controls in waste management
  - Regulatory framework (inc environmental approvals)
  - Eneabba Rehabilitation Program

**ILUKA** | Iluka Resources  
**COMMUNITY FORUM**  
Eneabba Phase 2 and Phase 3 Project Update

**WHEN:** Friday 13 August 2021  
**TIME:** 6pm to 9pm  
**WHERE:** Eneabba Recreation Club  
**RSVP:** for catering purposes by Monday 9 August 0407 400 952  
Mandy.Grieger@iluka.com

**ON THE NIGHT:**

- Kids activities will kick off at 6pm with a movie starting at 7pm
- Face painting
- Iluka’s project team will be available to answer questions from 6pm, with a brief presentation at 7pm
- Pizzas and refreshments will be served from 6:30pm

We welcome you to join conversations about the progress and development of the Eneabba mine site. Pizza and refreshments will be available, as will activities for kids.

Since we last met, Eneabba Phase 2 Government regulatory approval has been granted and construction is underway pathing the way for Eneabba Phase 3 planning to commence.

Iluka Resources is proud to support the Eneabba Primary School’s P&C Association and thank you for your time.

For more information about the Eneabba project and to subscribe to regular updates please visit:  
[iluka.com/engage/eneabba](http://iluka.com/engage/eneabba)

Eneabba Primary School P & C  
Eneabba Primary School  
Challenge and Create



Approximately 55 people attended the forum and the general sentiment was positive about the proposed refinery and the potential for increased activity to generate investment in the town.

Largely discussions centred around economic development and employment (inc down stream) opportunities, with the possibility to introduce new families to support population growth and an increase in student numbers at the school.



Questions included:

*‘What is Iluka proposing to do to make Eneabba a more desirable location for its employees and contractors, especially senior managers, to make the town their home?’*

*‘How will Iluka ensure it doesn’t ‘lose’ the location of radioactive material over time?’*

*‘What are the logistics / transportation methods of bringing feed from Wimmera?’*

*What sort of direct community support will happen for Eneabba? It’s usually very much DIDO from Perth. How will you make it more attractive for people to live in it. For example, the club has never been so full.’*

Any concerns raised regarding the project, were aligned with those raised by stakeholders through the interview process such as:

- the appropriate disposal and monitoring of waste products,
- town planning issues - where people would be accommodated temporarily or permanently housed. Were Iluka working with the Shire of Carnamah and/or the Mid West Development Commission to explore options?
- forward planning in training and skills development to build capacity of the local and regional community, supporting opportunities for employment at the mine.
- poor and unreliable access to the internet in Eneabba
- improvements in medical services mainly emergency - Staffing and fit for purpose equipment (evidence based need) should be undertaken as currently there is a limited range of services that don’t address emergency needs





Predominantly there appeared to be anticipation as to what level of investment Iluka would make to support the town both directly and indirectly as their operations grow at the Eneabba mine site.

Community members suggested Iluka needs to work with other key stakeholders to develop solutions for Eneabba. A suggestion was made for hosting a key stakeholder forum that meets once or twice a year, maybe supported by smaller workshops/events to address a broad range of issue, that would help to direct effort and resources into projects that address community and stakeholder needs.

In regards to how Iluka could support making Eneabba more desirable for employees to reside in town, the community suggested a number of solutions including:

- promotion of the school and local facilities including sporting clubs,
- enhancements to the Eneabba townsite to improve its appearance and amenity,
- Iluka providing access to site tradies to help with residents' electrical, building, gardening, plumbing and waste water issues (residents to pay the costs),
- upgrades to local housing to make them more liveable and desirable.

Other suggestions included:

- There needs to be an organised and managed community hub or similar to coordinate community information sharing and actions to address issues.
- In Moora, Iluka Cataby staff hosts community bbq's with local residents as one way to informally stay engaged with the local residents and to discuss issues and solutions across a range of stakeholders.
- There is no lifeguard at the swimming pool but Iluka funds its upkeep – pointless if you can't swim in it

- The kids, and some adults, would benefit from a community skate park and/or BMX track
- Eneabba kids should be able to apply for scholarships and other support from Iluka so they can return home after higher education.
- There should be an Iluka community grant scheme that has agreed areas for community grants/support.
- The Bush Brigade doesn't have the right appliances for the greatest need / type of fire events the community experiences



Most participants were familiar with Iluka's activities in general, as a result of their long history operating in the area. Therefore, there is a general trust and confidence that Iluka will put in place appropriate management plans to mitigate risks associated with health and safety from the disposal of waste as well as more general activities associated with processing operations. However, the size and scale of the existing and proposed Eneabba operations was not well understood.



The community suggested an opportunity to visit the site through an open day. The mine site was referred to as being “*hidden away*” with no public visibility, which meant there was no way for the community ‘*to keep an eye on what was going on back there.*’ This is different to Cataby, which is located by the highway and visible to a wide range of people.

Purposeful face to face engagement was the preferred option for keeping the community informed.





### 3.3 STAKEHOLDER BRIEFINGS

A series of stakeholder briefings was undertaken by Iluka’s Mid West Operations Team. All Stakeholders are regularly engaged by Iluka and were familiar with the proposed plans for the Eneabba mine site, including the proposed rare earths refinery. Below is a summary of the stakeholder feedback.

Stakeholder	Feedback – stakeholder feedback and questions
<p><b>Mid-West Ports Authority</b>            DATE: 13 August, 2021            Attendees: Damian Tully (Acting CEO), Sandra Pigdon (GM Trade &amp; Corporate Services), Vickie Williams (GM Sustainability, Culture &amp; People)            Iluka Attendees: C.Ackland, W.Moffat</p>	<p>Overall, very positive feedback.</p> <p>one question by Damian Tully to clarify the impact on throughput for the Geraldton Port associated with EP3. Response provided advising the current project assumption is that smaller volumes of final product will go through Fremantle Port rather than Geraldton Port, however we are planning to bring in other feedstock for the refinery, some of this from Iluka’s Wimmera deposit in Victoria, however potentially also third party feedstock from overseas pending approvals.</p>
<p><b>Shire of Carnamah</b>            DATE: 4 May 2021            Attendees: Vin Fordham Lamont (CEO),            Iluka attendees: W.Moffat</p>	<p>A brief update of the Eneabba Phase 2 project was provided and how well the project is progressing. Iluka outlined the intended engagement and communications approach for EP3.</p> <p>Iluka gave an overview of the EP3 project plans. The CEO was supportive of the project and expressed excitement that Iluka was intending to invest at Eneabba on a large scale. The Shire expressed its support for the project and had no objections to the proposed operation or transport route, or waste disposal. The CEO also expressed a view that this project potentially ties in well with the Shire’s own Eneabba revival project that they were contemplating. The CEO asked whether he could share the news with Councillors and other officers – Iluka consented.</p> <p>The Shire communicated that they were building a community gym at Eneabba, Iluka offered to support the new facility by donating funds to equip the gym.</p> <p>Iluka informed council of the forthcoming engagement activity in August. The CEO advised that he would publish the invitation on the Shire website and Facebook page. The Shire CEO advised that he would be coming to the event and would invite the Shire President and other councillors to attend as well.</p> <p>Iluka encouraged the Shire to bring any questions that may come up in the future to Geoff or Wicky Moffat. The meeting was very positive and encouraging.</p>





Stakeholder	Feedback – stakeholder feedback and questions
<p><b>Midwest Chamber of Commerce and Industry</b></p> <p>DATE: 13 August, 2021</p> <p>Attendee: Joanne Fabling (CEO)</p> <p>Iluka attendees: C.Ackland, W.Moffat</p>	<p>Overall very positive feedback</p> <p>One question from Joanne relating to what Iluka were doing, if anything, to offset / manage carbon emissions associated with the refinery. Response provided that the Iluka Project Team were already studying carbon emissions / footprint as part of the project and, in addition, reinforced the significant benefit this plant will provide to global Carbon emissions as a result of the rare earths being critical for permanent magnets, which are required to assist with electrifying the planet through electric vehicles, wind turbines etc.</p>
<p><b>City of Greater Geraldton</b></p> <p>DATE: 11 August, 2021</p> <p>Attendees: Ross McKimm (CEO) &amp; Chris Lee (Director of Infrastructure Services)</p> <p>Iluka attendees: C.Ackland, W.Moffat</p>	<p>Overall very positive feedback</p> <p>One question by Ross McKimm around final land use for the low-level radioactive waste storage facilities. Response provided reiterated that the waste will be stored in purpose built double lined storage facilities with leak detection systems and will be capped to required depths, in line with regulatory approvals, to ensure future exposure risk is mitigated. Associated with this, RESRAD modelling will be completed to assist with determining what final land uses would be suitable for the site. An example of a large solar farm was provided as one option that may be deemed an appropriate option, however this would again be subject to the RESRAD modelling and associated approvals.</p>
<p><b>Mid-West Development Commission</b></p> <p>DATE: 2 July 2021</p> <p>Attendees: Rebecca Davidson (Project manager), Alex MacKenzie (Project Manager)</p> <p>Iluka attendees : W.Moffat,</p>	<p>The meeting was very positive and encouraging.</p> <p>A brief update of the Eneabba Phase 2 project was provided and how well the project is progressing. Iluka outlined the intended engagement and communications approach.</p> <p>Iluka gave an overview of the EP3 project plans. The MWDC was supportive of the project and expressed excitement that Iluka was intending to invest at Eneabba on a large scale. The MWDC expressed its support for the project and had no objections to the proposed waste disposal. The MWDC asked questions about third party feed and how that would be imported to Eneabba – interest was centered around the plans to expand port capacity in Geraldton and how this fits in well with their plans.</p> <p>Iluka informed MWDC of all the stakeholder engagement plans, and the MWDC applauded Iluka for their approach.</p>





<b>Stakeholder</b>	<b>Feedback – stakeholder feedback and questions</b>
	Iluka encouraged the MWDC to bring any questions that may come up in the future to Courtney Ackland or Wicky Moffat.
<b>Local Members</b> DATE: 13th August, 2021 Attendees: Lara Dalton (MLA) & Sandra Carr (MLC) – combined meeting with MWCCI Iluka Attendees : C.Ackland, W.Moffat	Overall very positive feedback from both Lara and Sandra Sandra Carr had the same question as Joanne Fabling above in regards to what Iluka were doing in regards to carbon emission offsets / management (were in the same meeting together), highlighting it had been a common question for them as Members associated with other proposed projects in recent times. Above answer covered both hers and Joanne’s question.





### 3.4 TRADITIONAL OWNER ENGAGEMENT

The Yamatji Nation are the Traditional Owners whose Country the Eneabba mine site is located within. Iluka has had several exchanges with the Yamatji Southern Regional Corporation Ltd (the Regional Entity responsible for fulfilling the contractual obligations under the Indigenous Land Use Agreement and setting the strategic direction, in consultation with the community and on behalf of the Yamatji Nation) which includes their economic arm Yamatji Enterprises Board Ltd.

Iluka has met with the following Yamatji Nation representatives:

#### **Yamatji Southern Regional Corporation Ltd**

- Chief Executive Officer – Mr Jamie Strickland
- Heritage Advisor – Mr Allan Wedderburn

#### **Yamatji Enterprises Board Ltd**

- Board Member - Mr Fred Taylor
- Board Member - Mr Steven Lennon
- Advisor - Mr Paul Case

Initial exchanges have been positive and were introductory and explorative in nature. The items discussed included:

- Overview of Iluka operations in the Mid West – including the Eneabba rare earths refinery
- Identifying potential areas of interest for collaboration from which a mutually beneficial relationship could be established – with a focus on opportunities related to Iluka Mid West operations Eneabba, Narngulu and Cataby.

The areas of mutual interest identified regarding the Eneabba Project included:

- Employment – across the range of technical and operator roles within the Iluka Mid West group.
- Training – programmes with education and training providers to offer options for Yamatji people to enter the industry with a focus on rare earth minerals.
- Procurement of Yamatji businesses – construction, project management, cleaning, catering, rehabilitation, administrative, civil and other trades etc
- Joint Partnerships – green energy projects using lands located at Eneabba owned by Iluka and those by Yamatji. Also discussed was the potential for a joint facility to accommodate both Yamatji and Iluka contractors/employees in Eneabba and close by towns.
- Relationship arrangements - the shape and format for potential partnerships was also considered including the need for arrangements that were suitable for strategic, governance or commercial relationships. The options listed included Memorandum of Understanding, commercial contracts or joint venture equity partnerships.
- Eneabba Project Heritage
  - YSRC expressed a preference for Iluka to enter into a Yamatji Proponent Standard Heritage Agreement (YPSHA) to cover heritage issues associated with the Eneabba Project. Iluka has received legal advice on the YPSHA template and is working through that advice to develop a path forward for negotiation with YSRC. One of the options being considered is to seek an agreement for a regional heritage approach across relevant Iluka operations (Narngulu and Eneabba) and land holdings in the Mid West with YSRC.





The preference expressed by the YRSC is for Iluka to enter into a YPSHA to cover heritage issues associated with EP3 and a formalised relationship arrangement to cover all other areas of mutual interests. The Communities and Legal Teams are jointly developing the options for consideration by Iluka's Executive. The YRSC has agreed to keep progressing the options for a relationship between itself and Iluka to identify the potential for collaboration across social, environmental, cultural and economic development joint areas of interest





## 4. CONCLUSION

### 4.1 OBSERVATIONS

When stakeholders were asked to participate in this program of consultation, there was a keen willingness to participate. With a more recent proactive approach to engagement with key stakeholders, Iluka’s Mid West Operations Team have built relationships with stakeholders as they regularly engage with stakeholders outside of consulting around project milestones and /or if issues arise. Consultation with the community also built on the previous engagement regarding Eneabba Phase 2 project and demonstrates that Iluka are demonstrating that they are doing what they said they would do – ‘we will keep you informed as the project progresses’.

The opportunity to include questions related to SIA, within the interview discussion, lead to more detailed conversations. This was supported with the community’s familiarity of the interviewer, who had previously engaged community members for the EP2 project. As a consequence, the research outcomes collected for the rare earths refinery consultation were much more qualitative than for Eneabba Phase 2.

In regards to community sentiment, key take-aways included:

- Almost all stakeholders had some knowledge about Iluka’s Eneabba operations and that an increase in activity had been noted in and around town more recently so there was a level of positive anticipation that Phase 3 was being planned.
- Overall, stakeholders acknowledge that their relationship with Iluka is much more favourable than compared to other mining companies. Bringing a greater level of trust and confidence in Iluka’s communications process.
- There is an expectation by all stakeholder groups that Iluka will both design an extraction process, refinery and engage with stakeholders above and beyond compliance guidelines.

### 4.2 NEXT STEPS

Below is an overview of the key issues and or opportunities identified through the consultation program and how Iluka will respond to these. As it is still early in the project planning and approvals process, time frames for initiating strategies are under review.

Issue / Opportunity	Stakeholder Group	Iluka’s mitigation and management strategies	Issue Impact / Benefit Realisation
Regulatory approvals and standards	All stakeholders	<ul style="list-style-type: none"> <li>• Iluka demonstrates and provides regular updates on its activities to address regulatory standards to mitigate social risk</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigate and manage key social risks.</li> <li>• Demonstrates Iluka’s ongoing due diligence to ensure regulatory approvals and standards are met</li> </ul>





Groundwater impacts – legacy issues	Eneabba community	<ul style="list-style-type: none"> <li>• Develop a risk communications program specifically on groundwater take, use and impact from activities targeted at Iluka’s host communities to start with</li> </ul>	<ul style="list-style-type: none"> <li>• Improves understanding of groundwater management and other legacy issues associated with the ongoing monitoring and management of Iluka water take, use and discharge.</li> <li>• Mitigates social risks</li> <li>• Builds confidence amongst stakeholders in Iluka’s consultation approach and their social license to operate</li> </ul>
Radiation impacts	Eneabba community	<ul style="list-style-type: none"> <li>• Develop a risk communications program specifically on radiation management targeted at Iluka’s host communities to start with</li> </ul>	<ul style="list-style-type: none"> <li>• Improves understanding of radiation management and other legacy issues associated with the ongoing monitoring and management and disposal of low level waste</li> <li>• Mitigates social risks</li> <li>• Builds confidence amongst stakeholders in Iluka’s consultation approach and their social license to operate</li> </ul>
Managing climate change through design and management of operations	Community and key stakeholders	<p>Full disclosure about:</p> <ul style="list-style-type: none"> <li>• Iluka’s water usage within its water allocation / licence for Eneabba.</li> <li>• Refinery design options seek to mitigate carbon emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Improves understanding and demonstrates Iluka’s broader sustainability principles and approach to water management and managing of carbon emissions</li> </ul>
Retention of existing vegetation and rehabilitation	All stakeholders	<ul style="list-style-type: none"> <li>• Improved communications and opportunities to visit site</li> <li>• Refinery design mitigates concerns locating all new infrastructure in existing mine footprint</li> <li>• Opportunities for stakeholder and Iluka collaborations are identified to enhance rehabilitation works outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to build trust and demonstrate Iluka’s track record in rehabilitation</li> <li>• Opportunities for stakeholder collaborations are identified, assessed and implemented as appropriate</li> </ul>





<p>Review engagement and communication options with local community</p>	<p>Eneabba Residents</p>	<ul style="list-style-type: none"> <li>• Increase a local and active presence through regular (bi-annual) facilitation of a stakeholder forum hosted by Iluka</li> <li>• Explore other third party communications options both around town and digitally(Shire / Leverage existing community meetings – such as attending the Eneabba Progress Association meeting 2-3 times per year</li> <li>• Initiate a regular Mid West Newsletter to communicate more broadly about Iluka’s presence in the Mid West.</li> <li>• Explore options to host the local community on site as part of broader consultation activities</li> </ul>	<ul style="list-style-type: none"> <li>• Improve greater transparency in project planning and approvals process and proposed outcomes</li> <li>• Trust and confidence in Iluka continues to grow -providing foundation to confidently disclose information and engage stakeholders in dialogue regarding social risks</li> <li>• Provides stakeholder certainty that they are genuinely being listened too</li> <li>• Residents receive information to make informed decisions on responses to project issues i.e. differentiating between the level of radiation in the end products from Phase 2 and Phase 3 wasn’t clear to all stakeholders</li> <li>• Provides more reliable information and reduces misinformation via the local grapevine</li> <li>• Strengthens Iluka’s stakeholder relationships in the region</li> </ul>
<p>FIFO/DIDO</p>	<p>Eneabba residents Local Government</p>	<ul style="list-style-type: none"> <li>• Iluka contractual incentives or requirements for staff to be Eneabba residents or participate in the community</li> <li>• Development of an employee housing / accommodation strategy</li> <li>• Review of employment model</li> <li>• Better promotion of local facilities and services available to employees</li> </ul>	<ul style="list-style-type: none"> <li>• Explore integration or participation of employees within the community (in both short term staying at Camp and longer term living in Eneabba or surrounding region)</li> <li>• Improved employee well-being</li> </ul>
<p>Yamatji Nation</p>	<p>Traditional Owners</p>	<ul style="list-style-type: none"> <li>• Relationship agreement</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional Owners see this round of consultation as an initial phase of engagement – the start of a</li> </ul>





		<ul style="list-style-type: none"> <li>• Explore opportunities between YSRC economic strategy and Iluka's broader social strategy for the Mid West</li> <li>• A no surprises approach through regular stakeholder relationship management and communications</li> </ul>	<p>conversation about the rare earths refinery and building a mutually beneficial relationship with Iluka</p> <ul style="list-style-type: none"> <li>• There are significant expectations that Iluka will continue to provide regular updates on this project and broader social strategy both through the approvals stage and subsequent stages as the project progresses</li> <li>• Targeted initiatives that contribute to enhanced social, environmental and economic outcomes for local people are initiated</li> </ul>
Population growth	All stakeholders	<ul style="list-style-type: none"> <li>• Using baseline data through SIA to inform development of a Mid West social strategy to provide a combination of strategic and community based investment options including via a grants program.</li> <li>• Leverage Shire's Economic Development Program and explore partnership opportunities with key stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of sustainable benefits experienced in Eneabba and broader region through population growth including new or existing housing, community infrastructure, health, emergency and education services and economic development opportunities</li> </ul>
Economic development / Training and skills development	Eneabba and broader community Traditional Owners	<ul style="list-style-type: none"> <li>• Mid West Social Strategy identifies opportunities to build internal capacity as well as partner with other service providers and NGOs</li> </ul>	<ul style="list-style-type: none"> <li>• Build capacity through relevant education and training opportunities for both Iluka operations and down-stream businesses and services including emerging industries</li> </ul>
Power security and internet provision	Eneabba community Employees residing at the camp	<ul style="list-style-type: none"> <li>• Working with Telstra</li> </ul>	<ul style="list-style-type: none"> <li>• Improved internet access and reliability across Eneabba</li> <li>• Improved conditions (wellbeing) for employees</li> </ul>





Emergency Services	Employees Eneabba Community Broader Community including visitors to the region	<ul style="list-style-type: none"><li>• Review Emergency response requirements for Eneabba at full capacity(including fit for purpose emergency equipment)</li><li>• Review opportunities to support staff to train and serve as volunteers (including during shifts / business hours) more readily as part of workforce training.</li></ul>	<ul style="list-style-type: none"><li>• Improved emergency services capacity for the region</li><li>• Improved safety outcomes for Iluka</li><li>• Internal capacity building for employees</li></ul>
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## APPENDICES

### A: Frequently Asked Questions

#### Who is Iluka?

Iluka Resources (Iluka) is an international mineral sands company with expertise in exploration, development, mining, processing, marketing and rehabilitation.

With over 60 years of industry experience, Iluka is a leading global producer of zircon and the high grade titanium dioxide feedstocks rutile and synthetic rutile. Additionally, Iluka has an emerging portfolio in rare earth elements (rare earths).

Iluka's portfolio includes active mine sites and processing facilities in Australia and Sierra Leone.

#### What is the Eneabba project?

Iluka and its predecessor companies have, since the 1970s, carried out mineral sands mining at Eneabba, approximately 300km north of Perth. Mining and rehabilitation activities were granted under the Mineral Sands (Eneabba) Agreement 1975 (WA) (State Agreement).

From Iluka's mineral separation plant processing facilities at Narngulu (10km from Geraldton), rare earth minerals, monazite and xenotime, are produced as a 'by-product'. For the last 30 years or so, Iluka has stored this material directly at a former mining void at Eneabba, on the basis that the rare earths contained in the monazite would one day be valuable. This strategic stockpile is now the highest grade operational rare earth deposit globally.

The Eneabba operation currently involves the extraction, processing and sale of a historical monazite-rich mineral stockpile. As outlined below, the project is being undertaken in a phased approach.

#### Eneabba Phase 1 (operational)

Following Ministerial approval in 2019, Iluka commenced Phase 1 operations in April 2020. This involves the recovery/mining of the stockpiled monazite and processing through a small-scale washing plant. A 20% monazite and mineral sands concentrate is then exported via Geraldton Port.

#### Eneabba Phase 2 ( under construction)

Building on the success of Phase 1, Iluka received Ministerial approval in April 2021 to commence an upgrade to the operation's processing facilities. Phase 2 is currently under construction, with commissioning scheduled for the first half of 2022.

This will involve construction and operation of new plant that will separate mineral sands heavy mineral concentrate, which will be further processed at Iluka's Narngulu site; and a rare earth heavy mineral product consisting mainly of monazite, which is suitable as a direct feed to a rare earths refinery.

#### Eneabba Phase 3 (feasibility stage)

In January 2021, Iluka commenced a feasibility study for Phase 3, the development of a fully integrated rare earths refinery at the current Eneabba mineral sands mine site. The plant will use monazite from Eneabba Phase 2, along with other sources of rare earth mineral concentrate, as feed material.



## **What are monazite and rare earths?**

Monazite is a mineral containing Rare Earth Oxides (REO) including Neodymium, Praseodymium, Cerium, Lanthanum and other mineral elements. Rare earths are a subset of mineral sands.

The high value rare earth elements contained in Iluka's mineral products, particularly neodymium and praseodymium, are used to create powerful permanent magnets. Permanent magnets are used in clean energy and high-end technology solutions including wind turbines and electric vehicles.

Rare earths are also used in catalytic converters for vehicle emission control of hybrid and petrol-fuelled cars, in modern rechargeable batteries, and as an alloying agent to create high-strength metals in aircraft engines.

Permanent magnets and catalysts account for around half the demand of rare earths used globally.

## **What Phase is the project at?**

### **Phase 1 – Operational**

### **Phase 2 – under construction**

After receiving Ministerial approval in April 2021, Phase 2 is currently under construction, with commissioning scheduled for the first half of 2022.

### **Phase 3 - Feasibility study**

During this phase various options are considered and assessed, leading to a recommendation for approval by the Iluka Board of Directors. If approved, the project will progress to the construction, or execute, phase.

Concurrently, Iluka will start applying for the necessary government permits and approvals in the second half of 2021, extending into 2022.

## **Will Phase 3 be subject to government approvals?**

Yes. The project stages are subject to approvals and ongoing regulation under a number of different laws and regulations, these are:

- *Mineral Sands (Eneabba) Agreement Act 1975(DJTSI);*
- *Environmental Protection Act 1986(DWER);*
- *Environmental Protection and Biodiversity Conservation Act 1999 (DAWE, Cth);*
- *Radiation Safety Act 1975 (RCWA);*
- *The Aboriginal Heritage Act 1972;*
- *Radiation Safety (Transport of Radioactive Substances) Regulations 2002;*
- *ARPANSA Code of practice for the Safe Transportation of Radioactive Material (2008);*
- *Mines Safety and Inspection Act 1994 and Regulations 1995 (DMIRS);*and

The first step of approvals for Phase 3 is to consult with the WA Environmental Protection Authority (EPA) and Commonwealth Department of Agricultural, Water and Environment (DAWE) regarding the referral of the project during the second half of 2021. The EPA and DAWE will determine the levels of assessment proportionate to the project's potential impacts.



## **How big will Eneabba Phase 3 be, and where will it be located?**

The Eneabba Phase 3 refinery and solid waste disposal facilities will have a 600 hectare footprint within Iluka's existing mining lease.

The proposed refinery and waste disposal facilities will be located within the current eastern Eneabba mine site, adjacent to the Eneabba mine pit, approximately 7km south of the town of Eneabba.

## **What is the life of the project?**

It is anticipated that the current Eneabba stockpile has a life of approximately 10 years, with the potential for additional feed stock from Iluka's Wimmera deposit, which has a potential life of several decades.

The processing of additional third-party feed is also in consideration.

## **Is the product radioactive?**

### **Phase 1 and 2**

Yes. Mineral sands, as with other mineral ores, mineral products and soils, contain natural occurring radioactive material (NORM). This is associated with low levels of naturally occurring uranium and thorium contained within the grains of the minerals we recover and return to the mine void.

While the level of NORM in most natural substances is low, any operation in which material containing radiation is extracted from the earth and processed can concentrate NORM in the mineral sands products, by-products and residue materials. For this reason, stringent, internationally-recognised radiation management standards are adopted to protect human health and the environment.

### **Phase 3**

The rare earth products produced from Phase 3 will not be radioactive (under 1 Bq/g) and would therefore not require regulatory oversight for radiation safety.

## **How are rare earths extracted from the monazite rich mineral in Phase 3?**

### **Roasting and Leaching**

Acid is added to the heavy mineral concentrate, which is heated to around 300°C, to convert the rare earth minerals into a soluble form. The product from the kiln is dissolved in water.

### **Purification**

Impurities are precipitated and removed from the solution by neutralisation. The precipitate is the main waste stream, consisting of sulfates (mainly calcium) and phosphates (mainly iron). The majority of the radioactive components are captured in this stream.

### **Separation**

Rare earth elements are separated from one another using solvent extraction technology.

### **Product Finishing**

Separated rare earth products are precipitated from each stream, and in the case of the high value products, are heated and converted into oxides.



## **Is it safe?**

If managed correctly, yes.

Iluka has more than 60 years of experience mining and processing mineral sands in Australia. The company applies radiation management practices that align with international best practice as defined by the International Commission on Radiological Protection, the International Atomic Energy Agency, as well as the relevant jurisdiction's legislation. We identify, assess and control risks associated with NORM, radon gas and human activity through all phases of our activities – exploration, project development, operations, rehabilitation and closure. Iluka's Group Radiation Management Standard and site-specific radiation management plans ensure exposure to radiation meets the prescribed statutory limits and is as low as is reasonably achievable.

## **How will product be transported from Eneabba?**

### **Phase 1 and 2**

The High Mineral Concentrate (HMC) and monazite products will be transported by truck. The monazite will be packaged at Eneabba into two-tonne bulka bags, each wrapped with a plastic film to provide a seal, and then placed within 20-foot fully sealed, customised sea containers, providing three layers of protection. The transport route will use the Brand Highway from our site south of the Eneabba town, through Dongara, to our Narngulu operations near Geraldton.

### **Phase 3**

The final product will be bagged and transported by road train within sealed sea containers for export from Fremantle Port.

It is expected on average, up to five trucks per week will travel between Eneabba and Fremantle Port. 17,000tpa of rare earth materials will be exported to customers largely producing permanent magnets.

A transportation risk assessment is conducted at each Phase.

## **Where will the final product be processed?**

Both the monazite and HMC from Phases 1 and Phase 2 will be initially processed at Eneabba. The HMC, containing zircon and ilmenite, will be feedstock for Iluka's Narngulu operations near Geraldton and will be similar to material that is already processed there. The monazite will be packaged at Eneabba before being transported by road to Narngulu for interim storage before export via Geraldton Port.

## **What about waste products?**

Should Phase 3 proceed, solid waste material produced by the refinery will be disposed within engineered waste facilities. These facilities will be located within existing mine voids or previous mine voids within the Mining Lease.

The radiation content of the waste products is expected to be Very Low Level Waste (VLLW), as classified by Authorities and suitable for disposal in near surface, industrial or commercial, landfill type facilities.

VLLW needs a moderate level of containment and isolation. Once a waste facility is full, it will be appropriately capped and closed with benign material and prepared for its final land use.



### **How much water will the project use?**

Should Phase 3 proceed, water will be supplied from existing production bores located within Iluka's existing Mining Lease. Approximately 2GL per annum will be extracted for all the Eneabba project phases, utilising existing allocations under Iluka's Ground Water Licenses, which provide for up to 11 GL of water annually.

Where possible we will seek opportunities to recycle water through the plant during the processing.

### **Will there be any environmental impacts?**

Given the project is located on a highly disturbed brownfields mine site, environmental impacts are expected to be minimal and able to be addressed. If any environmental impacts are identified, they will be minimised and managed under Western Australia's stringent environmental and industry regulations. The regulatory obligations the project is likely to be subject to include ongoing environmental monitoring, management plans, reporting and auditing.

### **Will the project create jobs for locals?**

Where possible, Iluka aims to employ qualified people from the region.

Throughout Phase 2 construction, Iluka has awarded major and minor works to local Mid-West businesses including:

- civil construction and concreting;
- HV electrical installation;
- surveying;
- geotechnical (soil testing);
- repair and upgrades to roads;
- communication infrastructure;
- installation of offices and buildings;
- supply and installation of furniture;
- truck wash installation work, and more.

Phase 2: Once operational, it is expected more than 20 workers will be required per year for the life of the project.

Phase 3: Up to 250 permanent employees will be required for the Phase 3 plant operations, with up to 300 people required during construction works.

### **What will the socio-economic impacts and opportunities of the project be?**

Iluka has recently commenced the preparation of a Mid West regionally focused Social Impact Assessment (SIA) to support the development of a broader social strategy to underpin Iluka's current and future operations and projects in the Mid-West region of Western Australia. This process will also involve engagement with a wide range of stakeholders (including employees, contractors and suppliers), community and Traditional Owner groups to identify impacts and opportunities associated with Iluka's current activities in the Mid West.

### **What economic development opportunities does this project present?**

The strong demand for rare earths in permanent magnets, especially electric vehicles, supports the Australian Government's Critical Minerals Strategy, which is targeting investment and incentives to extract, produce and process rare earths as part of a modern manufacturing focus domestically.

With our history in processing mineral sands and actively exploring opportunities for further development at Eneabba, Iluka is uniquely positioned to optimise these opportunities and in doing so, develop the first fully integrated rare earths refinery in Australia.



### **Where will Iluka's workforce be accommodated?**

Iluka has an existing workers camp at Eneabba and is exploring the options on how best to accommodate a larger workforce of DIDO workers from the region and Perth. Iluka will seek to encourage personnel to make permanent residence in the region, either around Eneabba or nearby.

### **How will Iluka address Aboriginal cultural heritage across the development envelope and surrounds?**

Iluka acknowledges that sites of cultural significance provide Aboriginal people and all Australians with a crucial link to our shared past, present and future health and wellbeing. Sites of significance are of immense historical, cultural, scientific, educational, economic, conservation, environmental and social importance to us all and especially to Aboriginal people.

Aboriginal people who are the local Traditional Owners of those sites have a deep cultural and spiritual connection to Country that comes with a responsibility to act as protectors and custodians which Iluka respects. To ensure sites are protected and managed appropriately partnerships based on trust, integrity, respect and transparency are essential.

Iluka is committed to working with Traditional Owners to build mutually beneficial partnerships so that any potential impacts from our activities at Eneabba are identified and addressed appropriately. To achieve this Iluka has commenced discussions with local Traditional Owners, the Yamatji Nation, to commence developing a targeted package of protection and management options that enable their custodian responsibilities to be met and to fulfil any requirements under *Aboriginal Heritage Act 1972* including new provisions likely as part of the current review.

### **Will there be any opportunities for the stakeholders to provide feedback on the project?**

We value the relationships we have developed with stakeholders and the community and will continue to provide opportunities to have genuine input that informs our planning and decision making.

Following our engagement with key stakeholders and the community as part of the approvals process for Eneabba Phase 2, we will continue to provide a range of opportunities to engage with key stakeholders and the community as we progress with the Eneabba Phase 3 proposal and keep you informed throughout the approvals process.

### **How can we keep informed about the project?**

For more information about the project, or if you have any further questions, please visit the project webpage: [www.iluka.com/engage/eneabba](http://www.iluka.com/engage/eneabba) and register your details to keep up to date with the project.

Alternatively you can reach us by email at [communities.support@iluka.com](mailto:communities.support@iluka.com), online at [www.iluka.com/contact-us](http://www.iluka.com/contact-us), or by calling our 24-hour community line on 1800 305 993.



## B: PRESENTATION MATERIAL



## Appendix C: List of interviewees, background information and discussion guide

Name	Organisation	Format	Date	Time
Kate Heal	Eneabba Progress Association	Phone	10/8/21	9am
Clinton Rottveel	Owner Eneabba Local post Office / General Store	Phone	10/8/21	11:00
Jody Moreton	Eneabba Silver Chain	Phone	11/8/21	3:00
Merele Isbister	St John's Ambulance (Shire President)	F2F - Camp	12/8/21	12:45
Bill and Marg White	Eneabba Smash Repairs	F2F – ESR	12/8/21	2:15
Chloe Scott	Principal, Eneabba Primary School	F2F - School	12/8/21	3:30
Tammy Sandison	Eneabba P&C	F2F - Camp	13/8/21	9:00
Deanna Ashley / Phil Davison	Owners Eneabba Road House	F2F – ERH	13/8/21	10:30
Ron Webb	Western Flora Caravan Park	F2F – CP	13/8/21	12:30
Michael French	New Resident in town	F2F – CF	13/8/21	18:00





## Eneabba Rare Earths Refinery – Background Information

### Introducing Iluka Resources Eneabba Project

Iluka and its predecessor companies have, since the 1970s, carried out mineral sands mining at Eneabba, approximately 300km north of Perth.

Iluka is diversifying from traditional mineral sands markets into the growing market for rare earth elements, based on world class assets at Eneabba and Wimmera in Victoria.

From Iluka's mineral separation plant processing facilities at Narngulu (10km from Geraldton), rare earth minerals, monazite and xenotime, are produced as a 'by-product'. For the last 30 years or so, Iluka has stored this material directly at a former mining void at Eneabba, on the basis that the rare earths contained in the monazite would one day be valuable. This strategic stockpile is now the highest grade operational rare earth deposit globally. Rare earth minerals are used as part of everyday life in magnets, ceramics/tiles, electric vehicles, wind turbines, batteries, solar, paint, medical equipment to name a only a few of their applications.

The Eneabba operation currently involves the extraction, processing and sale of a historical monazite-rich mineral stockpile. As outlined below, the project is being undertaken in a phased approach.

### Eneabba Project Phase 1

Following Ministerial approval in 2019, Iluka commenced Phase 1 operations in April 2020. This involves the recovery/mining of the stockpiled monazite and processing through a small-scale washing plant. A 20% monazite and mineral sands concentrate is then exported via Geraldton Port.

### Eneabba Project Phase 2

Iluka Resources' Eneabba Project - Phase 2 reached a significant milestone in April 2021, with regulatory approvals being granted to support the construction of new plant at our Eneabba site. Approvals will enable the further processing and separation of existing mineral sands concentrate into two higher value products: a monazite concentrate; and a heavy mineral concentrate containing zircon and ilmenite.

### Eneabba Project Phase 3

With Phase 2 now having received major approvals, Iluka is now actively exploring the potential for the downstream processing of rare earths in Australia (Phase 3) and has commenced a feasibility study for a fully integrated rare earths refinery at Eneabba.

The plant will use monazite from Eneabba Phase 2, along with other sources of rare earth mineral concentrate, as feed material.

### Project Approvals

The project is subject to approvals and ongoing regulation under a number of different laws and regulations. Iluka has recently commenced the process for applying for the necessary government permits and approvals and this will, extend into 2022.

The first step of approvals for Phase 3 is to consult with the WA Environmental Protection Authority (EPA) and Commonwealth Department of Agriculture, Water and Environment (DAWE) regarding the referral of the project during the second half of 2021. The EPA and DAWE will determine the levels of assessment proportionate to the project's potential impacts.



## **Project Overview**

The Eneabba Phase 3 refinery and solid waste disposal facilities will have a 600 hectare footprint within Iluka's existing mining lease.

The proposed refinery and waste disposal facilities will be located within the current eastern Eneabba mine site, adjacent to the Eneabba mine pit, approximately 7km south of the town of Eneabba.

It is anticipated that the current Eneabba stockpile has a life of approximately 10 years, with the potential for additional feed stock from Iluka's Wimmera deposit, which has a potential life of several decades.

## **The Refinery Process**

### **Roasting and Leaching**

Acid is added to the heavy mineral concentrate, which is heated to around 300°C, to convert the rare earth minerals into a soluble form. The product from the kiln is dissolved in water.

### **Purification**

Impurities are precipitated and removed from the solution by neutralisation. The precipitate is the main waste stream, consisting of sulfates (mainly calcium) and phosphates (mainly iron). The majority of the radioactive components are captured in this stream.

### **Separation**

Rare earth elements are separated from one another using solvent extraction technology.

### **Product Finishing**

Separated rare earth products are precipitated from each stream, and in the case of the high value products, are heated and converted into oxides.

### **Waste Management**

Should Phase 3 proceed, solid waste material produced by the refinery will be disposed within engineered waste facilities. These facilities will be located within existing mine voids or previous mine voids within the Mining Lease.

The radiation content of the waste products is expected to be Very Low Level Waste (VLLW), as classified by Regulators\*, and suitable for disposal in near surface, industrial or commercial, landfill type facilities.

VLLW needs a moderate level of containment and isolation. Once a waste facility is full, it will be appropriately capped and closed with benign material and prepared for its final land use.

Iluka has more than 60 years of experience mining and processing mineral sands in Australia. The company applies radiation management practices that align with international best practice as defined by the International Commission on Radiological Protection, the International Atomic Energy Agency, as well as the relevant jurisdiction's legislation.

### **Environmental Impacts**

Given the project is located on a highly disturbed existing mine site, environmental impacts are expected to be minimal and able to be addressed. Iluka is currently conducting a range of studies to address potential impacts including:

- flora and vegetation assessment
- fauna and habitat assessment;
- targeted threatened species assessment
- groundwater and surface water modelling
- noise assessment
- air and dust assessment



If any environmental impacts are identified, they will be minimised and managed under Western Australia's stringent environmental and industry regulations. The regulatory obligations the project is likely to be subject to include ongoing environmental monitoring, management plans, reporting and auditing.

### **Heritage**

Iluka has commenced discussions with local Traditional Owners, the Yamatji Nation, to develop a targeted package of protection and management options that enable their custodian responsibilities to be met and to fulfil any requirements under *Aboriginal Heritage Act 1972* including new provisions likely as part of the current review.

### **Employment Opportunities**

Where possible, Iluka aims to employ qualified people from the region.

Throughout Phase 2 construction, Iluka has awarded major and minor works to local Mid-West businesses including:

- civil construction and concreting;
- HV electrical installation;
- surveying;
- geotechnical (soil testing);
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With our history in processing mineral sands and actively exploring opportunities for further development at Eneabba, Iluka is uniquely positioned to optimise these opportunities and in doing so, develop the first fully integrated rare earths refinery in Australia.

For more information about the project, or if you have any further questions, please visit the project webpage: [www.iluka.com/engage/eneabba](http://www.iluka.com/engage/eneabba) and register your details to keep up to date with the project as it progresses.

\* IAEA – International Atomic Energy Agency  
ARPANSA - Australian Radiation Protection and Nuclear Safety Agency  
ANSTO – Australian Nuclear Science and Technology Organisation



## Interview Discussion Guide

Stakeholder Name:

Member of which group (if relevant):

Contact details:

Date and Time:

1. How do you feel about mining and processing existing in your area/region generally?
  - a. On a scale of 1 to 5, where 1 = 'fully opposed' and 5 = 'fully supportive', what's your number?
  - b. Why that score?
2. How familiar were you with Iluka's Eneabba Project prior to our contact?
  - a. (If familiar ) -
    - i. How did you hear about it?
    - ii. Were you involved in Iluka's Consultation for EP2?
  - b. (If not familiar) What sources of local news would have reached you?
3. How do you feel now about Eneabba Project Phase 3, including its proposed integrated rare earths refinery to be constructed and operated at Eneabba and management of waste from the refinery?
  - a. On a scale of 1 to 5, where 1 = 'fully opposed' and 5 = 'fully supportive', what's your number?
  - b. Why that score?
4. How do you feel about the prospect of the rare earth refinery producing higher value and more concentrated products and by-products, which will need to be disposed of at Eneabba?
  - a. On a scale of 1 to 5, where 1 = 'fully opposed' and 5 = 'fully supportive', what's your number?
  - b. Why that score?
5. Considering Iluka's present focus on Eneabba Project Phase 3, what issues are most important to you?
  - a. Opportunities (local employment, general economic impacts, others)
  - b. Risk (environmental management, public safety, disposal and storage of waste)
6. What are your expectations of Iluka in relation to these issues?
7. Iluka states it will consult extensively with stakeholders and the community.
  - a. How would you personally like to be engaged through the different project phases?
  - b. What works best in your community, in terms of engagement

<ends>